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Conference Theme
Business and Entrepreneurship Development in a Globalized Era

Hosted by the
Faculty of Industrial Management
University of Malaysia Pahang
Kuantan City, State of Pahang, Malaysia
November 16-19, 2015

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Preface

These Proceedings contain all papers presented accepted for the 12th Annual World Congress of the Academy for Global Business Advancement (AGBA) that is being hosted by the Faculty of Industrial Management, University of Malaysia Pahang, Kuantan City, State of Pahang, Malaysia, on November 16-19, 2015.

The main theme of the conference is "Business and Entrepreneurship Development in a Globalized Era". Papers selected for presentation at this conference have been double-blind peer-reviewed and explore the cutting edge of knowledge and theory in their respective research domains and disciplines.

These Proceedings have been prepared by Kishwar Joonas (Prairie View A&M University, Prairie View, Texas, USA), Klaus-Peter Wiedmann (Leibniz University, Hannover, Germany), Mohd Ridzuan Bin Darun (University of Malaysia Pahang, Kuantan City, State of Pahang, Malaysia), and Zafar U. Ahmed (Academy for Global Business Advancement, Fort Worth, Texas, USA), and assisted with patience, diligence, and professionalism by Syed Radzi Bin Rahamadulla (University of Malaysia Pahang, Kuantan City, State of Pahang, Malaysia).

AGBA would like to express its appreciation and gratitude to Prof. Dato' Dr. Daing Nasir Ibrahim, Vice Chancellor (University of Malaysia Pahang) and Patron of AGBA for his exemplary leadership in organizing this conference on the campus of University Malaysia Pahang.

AGBA also extends its heartfelt thanks to AGBA- University of Malaysia Pahang Conference Committee comprising of Mr. Syed Radzi Rahamadulla, Dr. Senthil Kumar, Mr. Hasahuddin; Puan Airin, Mr. Deen Hassan, and Ms. Safiynaz Binti Omar for organizing a great conference.

We place on record our sincere thanks for your participation and support, and look forward to having you with us next year at AGBA’s 13th Annual World Congress in Lucknow, India in 2016.

Sincerely,

Kishwar Joonas
Klaus-Peter Wiedmann
Mohd Ridzuan Bin Darun
Zafar U. Ahmed
2015 AGBA Conference Leadership-at-a-Glance
(Officers and Notables for the 12th Annual World Congress)

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AGBA Profile

Academy for Global Business Advancement (AGBA) is an association of professionals in the fields of business administration, commerce, economics, entrepreneurship, information technology, tourism, hospitality and recreational sectors.

AGBA is an independent, non-aligned and not-for-profit, charitable NGO registered in the state of Texas (USA) with a worldwide network of more than 1000 members based across more than 50 countries that include scholars from reputed academic institutions, corporate leaders, governmental officials, entrepreneurs and consultants hailing from both western and emerging countries.

AGBA, as a global organization, aims to help academics and scholars at business schools across emerging countries to connect with the western (developed) world for mutual benefit. Such collaboration would accelerate the process of globalization by furnishing ample opportunities to scholars in emerging countries to get recognition, disseminate new knowledge and assert themselves on the global stage.

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To be globally recognized as a leading "not-for-profit charitable NGO" dedicated to serve the academic, professional, government, corporate and entrepreneurial sectors worldwide.

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Building on the dynamics of the ongoing globalization process, AGBA is committed to provide a global platform aimed at assisting academics, scholars, professionals, officials, entrepreneurs and consultants of emerging countries to assert themselves on the global stage for recognition, networking and dissemination of knowledge.

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- Nurture globally competitive talents; expertise and skills in academics across the emerging countries;
- Arrange apprenticeships for academics, scholars, professionals, officials, entrepreneurs and consultant on the global stage;
- Provide advisory services to upcoming business schools across the emerging countries for accreditation by the US based Association to Advance Collegiate Schools of Business (AACSB);
- Provide advisory services to peers worldwide to obtain “Fulbright Grants” from the US government successfully;
- Offer customized training and professional development programs globally;
- Act as a platform for the advancement of “Global Entrepreneurship”, and
- Act as a platform for the publications of scholarship in globally respected and world-class journals.
Table of Contents

Preface .................................................................................................................................................. ii
2015 AGBA Conference Leadership-at-a-Glance ................................................................................. iii
AGBA Profile ........................................................................................................................................ iv
Table of Contents ................................................................................................................................. v
COMPETITIVE PAPERS ...................................................................................................................... x
International Entrepreneurship: The Case of Hispanic Latino Entrepreneurs in the USA .................. 1
Home Market Effect and Spatial Wages Disparity: An Empirical Reinvestigation of China ............... 8
An Examination of the Effect of Negative Mood Disorder on Compulsive Buying Behavior: A Meta-
Analysis .................................................................................................................................................. 21
The Link between Creativity and Credibility with Sustainable Growth of Entrepreneurial Firms: Evidence
from Sri Lanka ........................................................................................................................................ 30
Telework Regulatory and Legal Contingencies for Employers and Consultants ............................... 44
The Unpopularity of Sachet Marketing in China: Perspectives from Managers and Consumers .......... 60
Issues Concerning the Statutory Duties of Licensed Housing Developers under Section 7 of the Housing
Development (Control & Licensing) Act 1966 (Act 118) in Peninsular Malaysia ................................... 63
Issues Concerning the Housing Development Account (‘HDA’) in Peninsular Malaysia: A Case Study of
Abandoned Housing Projects .................................................................................................................. 73
The Influence of Organizational Commitment on Building Organizational Branding: Conceptual
Framework .............................................................................................................................................. 84
The Potential of Neuromarketing in Exploring Consumer Behavior: Proposed Model and Implications 98
Consumer Evaluations of Store Brands: The Case of an Emerging Country (Malaysia) ..................... 108
Managing Multinational Human Resources in a Volatile Region: An Exploratory Study of Kurdistan
Region, Iraq ............................................................................................................................................. 125
Shareholders’ Perception on Corporate Social Responsibility Reporting (CSRR) and Financial
Performance of Listed Companies in Sri Lanka ...................................................................................... 133
Competitiveness and Entrepreneurship: Analysis of Global Economy with Special Reference to India and
Malaysia ................................................................................................................................................... 142
The Effect of Performance Management System Implementation: The Case of A Malaysian Service
Organization from BSC Learning and Growth’s Perspective ................................................................ 154
Fit between Business Strategies and Management Control Systems and its Impact on Financial
Performance in Telecommunication Industry in Sri Lanka ..................................................................... 162
Adopting Building Information Modeling to Achieve Dynamic Capability ........................................... 174
Consumers’ Perceived Interactivity of Mobile Banking Usage: A Conceptual Review ...................... 184
Jordan Banks’ Perception of Customer Relationship Management: A TAM-Based Investigation ........ 196
A Framework for Social Media at Entry Mode of Indian Small Enterprises .......................................... 212
Colombo Stock Exchange, Sri Lanka ................................................................................................ ..... 229
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Destination Discontinuity for Sustainable Development of Tourist Destination</td>
<td>243</td>
</tr>
<tr>
<td>Abandoned Housing Projects in Malaysia: A Planning Law Perspective</td>
<td>256</td>
</tr>
<tr>
<td>On Investigating the Difference between Outcomes Obtained from Nominal Group Technique and Survey Method</td>
<td>265</td>
</tr>
<tr>
<td>Legal Aspect of Islamic Banking: A Case Study of Bahrain</td>
<td>278</td>
</tr>
<tr>
<td>Criminal Liability of Legal Entities for Polluting the Environment: Shariah and Law Perspectives</td>
<td>290</td>
</tr>
<tr>
<td>An Overview of Network Marketing in Indian Market</td>
<td>300</td>
</tr>
<tr>
<td>A Study on Factors Affecting Training Effectiveness in Banking Sector: A Study with Reference to the State Bank of India, Allahabad, Uttar Pradesh</td>
<td>309</td>
</tr>
<tr>
<td>Exploring the Scope of Multinational Firms of India in Overseas Market: An Analysis of OFDI</td>
<td>314</td>
</tr>
<tr>
<td>Obligation and Liability of the Carrier under the Rotterdam Rules: An Appraisal</td>
<td>320</td>
</tr>
<tr>
<td>Development of Network Marketing in Indian Telecom Sector</td>
<td>329</td>
</tr>
<tr>
<td>Financial Non-Neutrality: The Inextricable Link between Finance and Inequality</td>
<td>342</td>
</tr>
<tr>
<td>The Impact of Host Country Conditions on Market Entry Mode: A Case Study on the Lebanese Oil and Gas Industry</td>
<td>355</td>
</tr>
<tr>
<td>Technology Penetration and its Impact on Information Access by Customers: An Exploratory Study</td>
<td>361</td>
</tr>
<tr>
<td>Antecedents and Outcomes of Export Market Orientation: An Entrepreneurial Capability Perspective with Evidence from an Emerging Economy</td>
<td>375</td>
</tr>
<tr>
<td>The Malaysian Experience in Science and Technology: From Tin to High-Tech</td>
<td>391</td>
</tr>
<tr>
<td>An Exploratory Study of the Pygmalion Effect in an HBCU: Reflections of an Online Graduate Service-Learning Experience</td>
<td>400</td>
</tr>
<tr>
<td>Identifying the Factors for Reducing Turnover Rate in Aviation Business: Bangladesh Context</td>
<td>406</td>
</tr>
<tr>
<td>Impact of Personality on Workplace Spirituality</td>
<td>415</td>
</tr>
<tr>
<td>Conflict Management and Evaluation in Organizational Change – A Critical Systems Thinking Perspective</td>
<td>423</td>
</tr>
<tr>
<td>Influence of Personal Values on Generation Z’s Purchase Intention for Natural Beauty Products</td>
<td>436</td>
</tr>
<tr>
<td>The Interminable Surge in Internal Conflicts in Nigeria: The Legal and Socio-Economic Implications</td>
<td>446</td>
</tr>
<tr>
<td>Knowledge Spillovers via Patenting Activity and the Financial Performance of Malaysian Firms</td>
<td>453</td>
</tr>
<tr>
<td>Entrepreneurial Motivation and Intention of Undergraduates: Investigating the Moderating Role of Entrepreneurship Course</td>
<td>468</td>
</tr>
<tr>
<td>Motivational and Attitudinal Determinants of Entrepreneurial Intention: Application of Structural Equation Modeling</td>
<td>482</td>
</tr>
<tr>
<td>Factors Influencing the Satisfaction of Distributors of Network Marketing: A Study of Amway India and Hindustan Unilever Network Companies in India</td>
<td>496</td>
</tr>
<tr>
<td>Central Bank Intervention in Foreign Exchange Market: A Review of Literature</td>
<td>507</td>
</tr>
<tr>
<td>Muslim Consumers’ Perception on Halal Branding: An Exploratory Qualitative Study</td>
<td>522</td>
</tr>
<tr>
<td>Muslim Consumers’ Halal Consumption: The Role of Emotional and Religiosity Factors in Buying Intention</td>
<td>532</td>
</tr>
<tr>
<td>A Study on Students Employability Experience through Simulation Development Content for Logistics and Transportation Field in Malaysia</td>
<td>546</td>
</tr>
</tbody>
</table>
Intellectual Capital in Small and Medium Enterprises: Case study of Malaysian Manufacturing SMEs.

Management of Change, Lean Practice and Organisational Performance of Private Companies in Malaysia.

The Effect of Corporate Governance on Performance of Private Companies.


Assessment of the Impact of Computerized Accounting Information Systems on Efficiency of Human Resources in State Universities.

A Business Process Reengineering Case Study at AZAM Travel.


Success of Family Businesses and the Effectiveness of the Role of CEOs.

The Mediating Effect of IT Importance between IT Knowledge, IT Training and IT Utilization among External Auditors: Evidence from Yemen.

Network Marketing.

Fast and Furious to Social Media Success: The Effect of Social Media Unique Relevance Features in the Premium Cars Segment - The Case of Audi and YouTube.

Examining the Innovative New Design in Simulating Teaching Course on Entrepreneurship: Case Study of Polytechnic Approach in Learning.

Teaching and Learning Innovation in Entrepreneurship Education: A Systematic Review of the Evidence.

The Influence of Perceived System Quality and Perceived Information Quality towards Continuance Intention of Tax E-Filing System in Malaysia.

The Important Roles of Islamic Business Ethics towards Housing Project Performance in Malaysia.

Optimizing Performance Outcomes of Manufacturing Firms: Does Plural Sourcing Matter?

Innovativeness and Sustainability: Difference and Antecedent Relationship.

An Examination of Shari’ah Compliance in Takaful Window Operations.

E-Strategy Adoption and Implementation: Re-examining the Concept.

Gaining Sustainable Competitive Advantage through Human Capital: Does Firm Specific Human Capital or General Human Capital Matter?

Work Time Demand and Job Satisfaction of Geographically Dispersed Team: The Mediating Role of Organizational Support.


Equity Valuation Multiples of Listed Firms in Nigeria: Principal Component Analysis Approach.

Demographic Factors Consideration in Stress Level Determination in Tertiary Educational Institution in Nigeria.
The Roles Relationship Value and Trust in Franchising Relationship: The Evidence from Malaysia Franchise Sector ................................................................................................................................. 1082
Celebrity Endorsement and Consumers’ Attitude towards Advertisement ........................................ 1092
Exploring Best SHRM Practices-Trust Relationship: An Empirical Approach .................................. 1100
Acquisition of Experts’ Opinions to Explore the Drivers of Business Success in the Construction Industry ........................................................................................................................................... 1112
Customer Patronage Intention of Healthcare Insurance Products: Service Quality and Customers Satisfaction – An Embedded Model ........................................................................................................ 1127
A Critical Study on Motivational Factors Influencing Development of Women Entrepreneurs in SME’s in India .................................................................................................................................................. 1140
Knowledge Sharing and the Level of Innovation – A Field Study for Managers at the Palestinian Ministries in the Gaza Strip ........................................................................................................ 1149
Social Media Impact on Marketers ........................................................................................................ 1158
COMPETITIVE PAPERS
International Entrepreneurship: The Case of Hispanic Latino Entrepreneurs in the USA

Keywords: Entrepreneurship, Hispanic, Latino, Qualitative Research, U.S.A.

INTRODUCTION

The terms Hispanic and Latino can be interpreted in many ways. The terminology have been used separately as well as combined. In this article, the authors combine the terms for convenience. The term Hispanic does not necessarily refer to race, rather it defines a region of origin. It refers to individuals whose origins are Mexican, Puerto Rican, Cuban, Central or South American, or other locations that were under Spanish colonial rule. The term Latino (gender neutral) refers to individuals whose origins are countries or cultures once under the Roman rule such as Italy, France, Spain, and Brazil (Wolfe 2012). The Hispanic–Latino population comprises a large portion of the US population. Since 2010, the number of Hispanics in the United States exceeded 50 million making them the largest minority group in the country, with approximately 16 percent of the population (Porter 2011; A.C. Nielsen Report 2013). About two-thirds (64.6 percent) or 33.5 million are of Mexican origin (Pew Research Report 2013). The Hispanic population is projected to reach 102 million by 2050 (U.S. Census Bureau 2006). Hispanic women, known as Latinas, are estimated to constitute about 30 percent of the U.S. female population by 2060 (A.C. Nielsen Report 2013).

The Hispanic population in the US originates from diverse national origins. The fourteen largest Hispanic groups are: Mexicans (33,539,000), Puerto Ricans (4,916,000), Salvadorans (1,952,000), Cubans (1,889,000), Dominicans (1,528,000), Guatemalans (1,216,000), Colombians (989,000), Spaniards (707,000), Honduras (702,000), Ecuadorians (645,000), Peruvians (556,000), Nicaraguans (395,000), Venezuelans (259,000), and Argentineans (242,000) (Pew Research Report 2013). States across the US differ in Hispanic population sizes. In 2012, the states with the highest Hispanic population were: California (14.5 million), Texas (10 million), Florida (4.5 million), New York (3.6 million), and Illinois (2.1 million) (Krogstad and Lopez 2014).

While unique country attributes differentiate Hispanic Latinos from each other, there are also commonalities among them. For instance, compared to the general public, Latinos tend to hold more conservative viewpoints on social issues, but more liberal views in politics (Taylor et al. 2012). Hispanic culture tends to be traditional, have high regard for authority, and one that steers away from risk and uncertainty (Telles and Ortiz 2008). In a study of Latino social values, majority of respondents believed that: (1) working hard is the path toward getting ahead in life, (2) one has to be very careful in dealings with others and can’t be too trustful, and (3) religion is an important aspect of life (Taylor et al 2012). While Hispanic Latinos are growing in influence in the US and globally, much is to be desired with regard to the understanding of their business mindset. Limited studies have been made on Hispanic–Latino entrepreneurship (Shim and Eastlick 1998). A more extensive exploration on their entrepreneurial mindset and business approaches would be beneficial to Hispanic Latinos and the international business community.
RESEARCH APPROACH

With the objective of understanding the entrepreneurial psyche of the Hispanic-Latino entrepreneurs, the authors interviewed twenty (20) Hispanic Latino entrepreneurs from across the USA.

There were no criteria for selection of the Hispanic Latino entrepreneurs, other than the fact that they were of Hispanic Latino origin and are actively engaged in business. The respondent’s age range, income range, education range, and family situation were varied. They were identified through the author’s networks and through internet research. They lived in several states across the USA such as Illinois, Florida, California, and New York.

The interviews took place from August 2010 to September 2013. The interviews were conducted via email, phone interviews and face to face meetings. The authors took the lead in the interviews and in some cases were assisted by students at the Tabor School of Business at Millikin University.

In order to draw upon deep entrepreneurial insights from the Hispanic Latino interviewees, the authors developed a 15-point questionnaire. The list of questions and their rationale are presented in Table I below.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Rationale</th>
</tr>
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<tbody>
<tr>
<td>Kindly provide an overview of your family history. For example, was there an entrepreneur in your family? Did your family history influence your decision to start a business?</td>
<td>To uncover if the family influenced the entrepreneurial decision. Some studies seem to suggest this fact, the authors wanted to validate if this is the case with Hispanic–Latino entrepreneurs.</td>
</tr>
<tr>
<td>What was your educational background? Do you have specific views on formal versus informal education? What are your views on African–American entrepreneurial training programs? Has education contributed to your business success?</td>
<td>To understand the role education played in the entrepreneurial decision and success. The authors also wanted to gain insights whether formal or informal education is preferable.</td>
</tr>
<tr>
<td>Everyone has at least one role model, someone they aspire to be like. Do you have one that is an entrepreneur? How did the role model(s) influence your decision to start a business?</td>
<td>To understand who the entrepreneurial role models are and the role they played in stimulating business interest.</td>
</tr>
<tr>
<td>Starting a new business is not an easy process. What motivated you to start one? What steps did you take to start the business?</td>
<td>To uncover motivations behind the entrepreneurial start-up.</td>
</tr>
<tr>
<td>What challenges did you face when building your business, and how did you overcome them? Did you come across any unique circumstances as a result of your race?</td>
<td>To explore challenges faced when starting a business enterprise and approaches taken to deal with the challenges. The authors wanted to know whether there were racial barriers that the Hispanic–Latino entrepreneurs needed to overcome.</td>
</tr>
<tr>
<td>What types of support were most helpful to you when you were building your business? For example, did your local community play a role in shaping your business interests and development, or maybe it was a mentor? What or who was that one thing that made you believe, “Yes, I can do this!”</td>
<td>To learn about the types of business support most beneficial to Hispanic–Latinos when they build their business. The authors wanted to know whether mentors, organizations, or the local community contributed to business growth.</td>
</tr>
<tr>
<td>Question</td>
<td>Purpose</td>
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<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>What do you think are the essential skills needed for Hispanic–Latino entrepreneurs to succeed in America? Also, what personal attitudes do you think are essential?</td>
<td>To determine what skills and attributes are essential for Hispanic–Latino business success in America. The authors were hoping to identify attitudes and values that could be cultivated among the youth and future entrepreneurs.</td>
</tr>
<tr>
<td>If you had the chance to start over again, would you do anything differently? If so, what’s the reason?</td>
<td>To gain an understanding on entrepreneurial challenges and mistakes and what can be improved.</td>
</tr>
<tr>
<td>How would you characterize the state of Hispanic–Latino entrepreneurship in the United States? For instance, is it in the early stages, is it growing, or is it mature? Do you think it is open to all, or limited to certain individuals? Is it viable from anywhere in the country, or more favorable in certain states?</td>
<td>To gain an understanding of the overall status of Hispanic–Latino entrepreneurship in the United States. The authors wanted to know whether entrepreneurship is for a privileged few or open to everybody. The authors also wanted to gain insights whether certain states present entrepreneurial advantages.</td>
</tr>
<tr>
<td>Are you a member of business organizations? Are these organizations unique to Hispanic–Latinos or open to all races? Did they contribute to your business success?</td>
<td>To uncover the role business organizations play in the success of Hispanic–Latino entrepreneurs.</td>
</tr>
<tr>
<td>Do you think social networks and personal connections are important to business? Did you use networking when building your business, and are your social networks race based?</td>
<td>To uncover the role social networks and connections play in the success of Hispanic–Latino entrepreneurs. The authors also wanted to understand if race played a role in their networking activities.</td>
</tr>
<tr>
<td>If you could give advice to young Hispanic–Latino entrepreneurs or other young people thinking about starting a business, what would be the most important consideration and why?</td>
<td>To gain additional insights that may be helpful to the Hispanic–Latino youth and future entrepreneurs.</td>
</tr>
<tr>
<td>Have you been involved in sociocivic organizations or philanthropic work? If so, in which organizations, and what role did you play?</td>
<td>To understand the extent of sociocivic involvement and community outreach among Hispanic–Latino entrepreneurs.</td>
</tr>
<tr>
<td>What do you see happening to your business in the future? Do you have succession plans in place? Do you see your business being run by family members or professional managers, and why?</td>
<td>To examine the extent of forward thinking and succession planning among Hispanic–Latino entrepreneurs. The authors also wanted to determine whether the entrepreneurs tend to involve family members in their business and reasons behind their decisions.</td>
</tr>
<tr>
<td>Where do you see yourself 10 years from now? What do you think is your legacy to the business community?</td>
<td>To understand the dreams and aspirations of Hispanic–Latino entrepreneurs. The authors also wanted to see the kind of legacy the entrepreneurs wish to leave behind and how they want to be remembered.</td>
</tr>
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The interviewees were requested to type their answers or answer the questions verbally. A free flow of thoughts were encouraged and follow-up questions were typically asked by the authors to stimulate discussion.

The survey successfully captured qualitative data on the entrepreneurial mindset of Hispanic-Latino entrepreneurs in the USA in the period 2010-2013.
SUMMARY OF FINDINGS

A comprehensive set of interviews and findings are featured in the authors’ book “Hispanic-Latino Entrepreneurship: Viewpoints of Practitioners” published by Business Expert Press in 2015. In this article, five key findings are highlighted from the survey of Hispanic-Latino entrepreneurs:

Diverse viewpoints on the state of Hispanic-Latino entrepreneurship in the USA

Table 2: Interviewee’s viewpoints on the state of Hispanic Latino entrepreneurship

<table>
<thead>
<tr>
<th>Question</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of Hispanic–Latino entrepreneurship in the United States</td>
<td>Differs depending on the state High levels in coastal states Growing stage, able to start a business anywhere Early stages, growing as population increases Can be difficult depending on the type of business Open to everyone Matured but changing</td>
</tr>
</tbody>
</table>

The entrepreneurs presented a wide range of opinions on the state of Hispanic–Latino entrepreneurship in the United States. Several interviewees believed it to be in its mature stage, reaching the peak of expansion. They viewed different markets as crowded while others thought the level of entrepreneurship was growing at a rapid rate, especially in the coastal states. These entrepreneurs viewed different rates of expansion in different locations and in different industries. With the increase in population, more and more businesses are being developed with popular and innovative ideas to meet the growing demand. Other entrepreneurs believed Hispanic–Latino entrepreneurship to be in the beginning stages of its life cycle. The potential for success has barely been explored by business owners. As more companies emerge and entrepreneurship courses become popular, more individuals will become motivated to start their own businesses. Whether in the mature, growing, or early stages of entrepreneurship, these individuals believe the market to be open to anyone who has a dream to pursue business ventures.

Entrepreneurs faced significant, yet surmountable obstacles

Table 3: Interviewee’s viewpoints on obstacles faced

<table>
<thead>
<tr>
<th>Question</th>
<th>Responses</th>
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<tbody>
<tr>
<td>Challenges faced when starting the business</td>
<td>Single mother in a male centered Hispanic family Consistency in products and customer service from day to day Building a clientele of loyal consumers Communicating effectively with language barriers Race had little to no effect for entrepreneur Building a brand based on American standards Bridging the gap between blue collar and white collar businesses Marketing the company to target customers Trying to thrive despite the economy Finding the perfect location Overcoming gender roles and stereotypes Balancing work and family</td>
</tr>
</tbody>
</table>
Receiving payments in a timely manner.

Starting a venture is not an easy endeavor. Each entrepreneur faced multiple hurdles on the path towards success. Several entrepreneurs experienced difficulty in marketing their product or service to their respective target markets. Even though the businesses offered high-quality products, many consumers were focused on the price and on popular brands. By focusing on key markets and providing strong customer service, the entrepreneurs built a loyal clientele. A significant issue for many entrepreneurs was how to overcome gender roles and stereotypes. Their experiences, however, forced them to prove their expertise. Many of the entrepreneurs found the work-and-family mix difficult to balance, often spending long hours building their businesses instead of spending quality time with family. Surprisingly, the main issue related to race was overcoming the language barrier to establish effective communication with business professionals, customers, and industry partners.

**Business skills are essential for entrepreneurial success**

**Table 4: Interviewee’s viewpoints on attributes for success**

<table>
<thead>
<tr>
<th>Question</th>
<th>Responses</th>
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<tbody>
<tr>
<td>Essential skills and attitudes needed for business success in America</td>
<td>Dedication and discipline</td>
</tr>
<tr>
<td></td>
<td>Understand and be able to speak the language</td>
</tr>
<tr>
<td></td>
<td>Take advantage of all the opportunities</td>
</tr>
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<td></td>
<td>Have the mindset to succeed</td>
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<td></td>
<td>Understand the culture and adapt</td>
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<td></td>
<td>Strong work ethic</td>
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<td></td>
<td>Be able to effectively use a computer</td>
</tr>
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<td></td>
<td>Remain flexible</td>
</tr>
</tbody>
</table>

While industry knowledge and business expertise are essential, entrepreneurs need to expand their skills in order to be successful. With language as one of the greatest challenges, the entrepreneurs focused on developing their verbal and written communication skills. This provided a strong foundation for starting their business. Another essential step in pursuing a venture is to understand the culture that the business is tailored to, and adapting to meet the needs of the consumers. A strong work ethic, positive attitude, and self-discipline are critical to overcoming the challenges and tribulations that are experienced. Despite the risks faced, taking advantage of the opportunities presented would help the entrepreneur change the direction or expand the business.

**Networking is important**

**Table 5: Interviewee’s viewpoints on social networks**

<table>
<thead>
<tr>
<th>Question</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of social networks and networking for business success</td>
<td>Built the business.</td>
</tr>
<tr>
<td></td>
<td>Never know who you will meet.</td>
</tr>
<tr>
<td></td>
<td>Delivered business cards to everyone</td>
</tr>
<tr>
<td></td>
<td>Attended all possible networking events</td>
</tr>
<tr>
<td></td>
<td>Allows for segmentation</td>
</tr>
<tr>
<td></td>
<td>Word of mouth</td>
</tr>
<tr>
<td></td>
<td>Offers free advertising</td>
</tr>
<tr>
<td></td>
<td>Personal connections allows for one on one interactions</td>
</tr>
</tbody>
</table>
Social networks and personal connections played a key role in the development of a successful business. Because networking is available to everyone, the entrepreneurs took advantage of the opportunity, reaching a broad customer base. Inexpensive or free marketing approaches allow business owners to cultivate relationships with customers, create meaningful interactions, monitor their preferences, and create hype and excitement for their new products and services. The drawback, as seen by entrepreneurs, was the tendency for greater success and responses to come from larger businesses rather than the smaller start-ups. Despite the wide reach of social networking, word of mouth and personal references have proven to be a strong and reliable marketing strategy, creating repeat customers rather than one-time purchasers. No matter the medium, marketing to current and potential consumers helps create a successful enterprise.

**Optimism towards the future**

<table>
<thead>
<tr>
<th>Question</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future orientation, view of oneself 10 years onwards</td>
<td>Business viewed as one of top innovative leaders</td>
</tr>
<tr>
<td></td>
<td>National recognition</td>
</tr>
<tr>
<td></td>
<td>Broadening client base</td>
</tr>
<tr>
<td></td>
<td>Managing own business</td>
</tr>
<tr>
<td></td>
<td>Buying and flipping houses</td>
</tr>
<tr>
<td></td>
<td>Live in the present</td>
</tr>
<tr>
<td></td>
<td>Expanded in central Illinois and Kentucky</td>
</tr>
<tr>
<td></td>
<td>Slowing down the business for retirement</td>
</tr>
<tr>
<td></td>
<td>Opening up more chain restaurants</td>
</tr>
<tr>
<td></td>
<td>Retired and living in Mexico</td>
</tr>
</tbody>
</table>

Looking ten (10) years down the road can be difficult for some entrepreneurs, especially when opportunities can appear at any time and completely alter their planned paths. Many entrepreneurs look forward to having a stronger and larger business in a decade with national brand recognition and a greater client base. Several individuals hope to expand their businesses to other regions and states, hiring more employees to handle the increase in customers. A few entrepreneurs are not looking far ahead but are focusing on the present and growing their business at the moment. Some individuals aspire to become a highly successful business owner and being viewed as one of the top innovative leaders. Other than expansion and achieving recognition, some entrepreneurs hoped to be retired and relaxing at home with their families or in another country, enjoying the fruits of their hard work and success.

**CONCLUDING THOUGHTS**

Studying the entrepreneurial mindset of minority entrepreneurs is challenging. Gathering the data is one thing, interpreting them and attempting to draw conclusions from a limited pool of respondents is another. This research is a mere exploratory and qualitative study designed to enrich limited data on the subject. The authors hope that through this effort a heightened interest on the subject will ensue and help advance knowledge on minority and international entrepreneurship.

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INTRODUCTION

Spatial economics, also called New Trade Theory (NTT) and New Economic Geography (NEG) has made much progress in trade theory and economic geography over the past three decades. Following Krugman’s seminal papers (Krugman 1980; Krugman 1991) countless refinements and rapid progress (Helpman and Krugman 1985; Martin and Rogers 1995; Ottaviano et al. 2002; Forslid and Ottaviano 2003; Pflüger 2004) have been made in investigating space-economy in terms of trade pattern and the geographic location of economic activities. To a large extent, spatial economics has entered a mature phase. However, spatial economics still has some internal and external drawbacks and challenges. The striking feature is the paradox between the maturity of the theoretical model and the unsettled state of empirical research, which remains unsettled in both methodology and results. As argued in Head and Mayer (2004), there is no agreed regression to estimate, nor even a consensus dependent variable to explain.

Given the foregoing, the models of spatial economics mainly consist of NTT and NEG elements. It should be clear that these two models are closely related and share the same conceptual framework, that is the home market effect (HME). As a building block of spatial economics, HME is always considered the basis of NTT and NEG. Theoretical results (Krugman 1980; Behrens et al. 2009; Takahashi et al.2013; Zeng and Uchikawa 2014) also indicate that it is sound and robust. Unfortunately, researchers seldom investigate the workings of HME empirically. Among the reasons for the slow progress in testing HME is primarily the unsettled state of its basic definition. As noted by Takahashi et al. (2013), the theoretical basis of HME is still under construction. Krugman (1980) initiates the literature by demonstrating that a country with a relatively large local demand will run a trade surplus. Further, Helpman and Krugman (1985, section 10.4) show that the larger local demand attracts a more-than-proportionate share of firms. In terms of factor price, Krugman (1991, p.91) defines HME as the fact that, other things being equal, wages are higher in larger regions. The definition of HME can be interpreted from three different standpoints.

Definitions vary from one study to the next, but most empirical studies testing HME focus mainly on investigating firm shares and exports. As primary empirical writers on HME, Davis and Weinstein (1999 and 2003) investigate the existence of HME by simultaneously considering comparative advantage. The approach that they take in their work allows them to distinguish traditional trade theory from NTT. By employing data from Japan and OECD, they produce results which have the effect of supporting HME. Head and Ries (2001) study HME with data from North America and obtain their results through cross industry data and corresponding industry over time. Reviewing the related papers on testing HME, we find that these studies mainly set out to investigate the magnification effect between production, export and local demand. But so far there has been no entirely conclusive test of HME. Unlike tests of the effect of market potential on factor price (Hanson 2005; Redding and Venables 2004; Head and Mayer 2006; Hering and Poncet 2010), the results of testing HME are not always consistent with each other. In Davis and Weinstein (1999), the pooled results tell us that after controlling factors (comparative advantage), the coefficients of IDIODEM (HME) are all less than one. In line with the authors’ intentions, the results do
not imply that HME must exist. As argued by Head and Mayer (2004), the pooled results of Davis and Weinstein (1999) offer only confirmation of the presence or absence of HME. As another strand, the results of Head and Ries (2001) also vary in relation to their use of different data. The data in terms of cross-industry and over time finally give different coefficients in different dimensions. These related studies, then, have not given us unitary responses. The fundamental problem arise the HME still remains to be defined. In terms of testing HME, which considerations should be given?

First of all, transport costs as essential ingredients of spatial economics are always absent from the related empirical studies. Pure theoretical models tell us that HME is robust and sound, but transport costs should imperatively be included in these outcomes. Without trade costs, markets are not segmented, and without market segmentation firm location is irrelevant (Behrens and Robert-Nicoud 2009). If we consider HME as a magnification effect, it is closely related to transport costs. Through the empirics of HME, we find that some results even reverse the magnification effect. Head and Mayer (2004) also illustrate that a non-monotonic relationship between HME and trade barriers occurs when the elasticity of the labor supply changes. Indeed, HME itself is magnified by declining trade costs (Head and Ries 2001). To avoid confusion with the magnification effect, as suggested by Head and Mayer (2004), this kind of magnification can also be called the “secondary magnification effect” (SME).

Furthermore, SME does not always bring a positive effect. With further decreases in transport costs, the reverse situation even occurs. This means that there is a non-monotonic relationship between firm share (or factor price) and transport costs. The underlying intuition is that when transport costs fall, some firms will re-locate from the core to the periphery and industrial re-dispersion occurs. Whether NEG models or NTT theoretical models, they all reveal that agglomeration is not the final state of further trade liberalization. Some papers attempt to demonstrate this industrial re-dispersion by considering commuting costs (Tabuchi 1998), the housing sector (Suedekum 2006), heterogeneous preference (Tabuchi and Thisse 2002), agricultural trade costs (Picard and Zeng 2005), and comparative advantage (Picard and Zeng 2010).

It is worth clarifying that the related empirical studies in terms of HME mainly concentrate on investigating the relationship between firm share and local demand. It seems that little attention has been paid to investigating the dimension of factor price (wages). The reasons for ignoring wages are that the related theoretical models in terms of HME heavily rely on employing labor as the only production factor (Krugman 1980; Helpman and Krugman 1985; Behrens et al. 2009). Moreover, the agricultural sector is added to allow for the reaction of production to demand in the increasing return to scale. Since labor is employed by the agricultural sector as the only input, the factor price, wages (the price factor) are equalized between the two regions. Due to this specific assumption, the HME in terms of firm location can be observed but HME in terms of wages cannot be demonstrated. Additionally, as another strand of refinement for spatial economics, the quasi-linear preference is employed and an analytical result is successfully obtained in Ottaviano et al. (2002). Since it is assumed to be quasi-linear, the level of capital returns has no impact on the demand for the manufactured good, and none in turn on the interregional firm distribution. Obviating this problem, when the economy is assumed to have one sector, wages will differ between regions. It is worth mentioning that even with a CES utility, Takahashi et al. (2013) demonstrate the equivalence of a spatial disparity in firm share and in wages by revisiting the HME with the assumption of only one manufacturing sector. Moreover, it can be shown that these spatial inequalities are closely related to transport costs. When transport costs decrease further, an inverted U-shape pattern of industrial location and wages differential exists. However, this non-monotonic magnification effect is seldom investigated in the empirics of spatial economics. Based on the two-region scenario, Uchikawa and Zeng (2014) generalize the results of Takahashi et al. (2013) into an economic space of multiple regions. Even in multiple regions, wages inequality between any two regions also forms a non-monotonic curve in regions which are more integrated. To sum up, it is almost two decades since the birth of HME. Although many theoretical models claim the existence of various HMEs, these results rely heavily on
their specific assumptions. In addition, different empirical studies cannot reach a consensus either about any definition of or conclusion about HME. Specifically, most empirical works regard the primary magnification effect as the definition of the HME and the SME is always neglected. Zeng (2014) gives a detailed discussion of the HME and shows that when some specific assumptions are removed the primary magnification effect is not equivalent to HME in terms of firm share.

In this paper, we reinvestigate HME in terms of wages and study the evolution of spatial disparity during regional integration. Apart from Davis and Weinstein (1999), most papers choose to empirically examine HME in international cases. However, the sub-units of a country can also yield insight into HME and it is conceivable that HME influences the spatial disparity across regions within a country. Since the transport costs between regions are lower than those at the international level, regional integration could strengthen the effect of secondary magnification on the evolution of spatial economics. Nowadays, globalization has led to an increase of outsourcing in manufacturing, which has spread out from the developed to the developing world. Those who investigate the space-economy within these emerging countries, China in particular, find that the spatial economy is highly reminiscent of the space-economy of advanced countries around 1900 (Krugman 2011). Empirical evidence reveals that that the increasing regional disparity in China can be attributed to economic liberalization and globalization between 1985 and 1994 (Fujita and Hu 2001). The evolution of the space-economy in developing countries offers another opportunity to verify the framework of HME. Throughout this paper, we remain close to the theoretical framework and attempt to interpret a definition of HME. It is found that, over the past few decades, the larger coastal provinces of China have workers and staff in urban units who earn a higher average wages than their counterparts in the interior provinces. Moreover, when transport costs decline further the disparity in terms of relative wages between the coast and the interior presents a non-monotonic pattern.

The remainder of this paper is organized as follows. Section 2 presents the theoretical framework from which the econometric specifications used in the subsequent sections are derived. In section 3, we describe the stylized facts of HME in terms of wages in China. Section 4 discusses the related issues of empirical equations and investigates the SME by using data from the level of the Chinese provinces. Section 5 concludes the paper.

THEORETICAL FRAMEWORK

In this section, we present a theoretical model to show how the spatial distribution of regional demand affects wages in the model of monopolistic competition and trade. We derive our estimating equation following Takahashi et al. (2013). The spatial economy consists of 2 regions $\eta = 1, 2$, which have the same conditions except for their population size. Region $i$ is the larger of the two in terms of population. There are $L$ people in the whole country and the labor endowment in region $i$ is denoted by $\theta(1/2 \leq \theta \leq 1)$. There are $K$ units of capital equally owned by $L$ individuals in the space. Unlike the existing studies, this one assumes only one manufacturing sector, having a continuum of varieties. A consumer gains utility only from the manufacturing sector, whose production is under a technology of increasing returns to scale. The utility in the larger region $i$ is

$$U_i = \left[ \int_0^N d_n(v) \frac{\sigma - 1}{\sigma} \, dv \right]^{\frac{\sigma}{\sigma - 1}},$$

where $\sigma > 1$ means a constant elasticity of substitution between any two manufacturing varieties. $N$ is the number of varieties, and $d_n(v)$ is the demand for a manufacturing good $v$ in the larger region $i$.

Since the varieties are symmetrical, the name of the variety will be simplified $d_i$ to indicate the demand for each variety.
Under the assumption of having only one sector in our economy, the maximization of the consumer’s utility function gives the demand in region \( i \) for a manufactured good made in region \( \eta \) as follows:

\[
d_{\eta} = \frac{p_{i}^{\sigma}}{P_{i}^{\sigma}}Y_{\eta}, \eta = i, j, \tag{2}
\]

where \( Y_{i} \) is the income of region \( i \), and \( p_{\eta} \) is the price of a variety produced in region \( \eta \) and sold in region \( i \). Finally, \( P_{i} \) is the price index of manufactured goods in region \( i \) which can be written as

\[
P_{i} = \left[ \int_{0}^{N} p_{i}(v)^{1-\sigma} dv \right]^{\frac{1}{\sigma}}, \quad \text{where } p_{i}(v) \text{ is the price of variety } v \text{ sold in region } i.
\]

The iceberg transport costs assume that if one unit is shipped from a region only a fraction of it \((1/\tau)\) arrives. In addition, the capital share employed in region \( i \) is given by \( k_{i} \).

For the production side of the economy, each manufacturing firm has a unit fixed requirement of capital and a marginal input of labor equal to \((1-\sigma)/\sigma\). Since one firm employs one unit of capital, the total number of firms is equal to the total amount of capital. A firm chooses its optimal inputs so as to maximize its profit, denoted as follows:

\[
\pi_{s} = p_{i}d_{i} + p_{j}d_{j} - \frac{\sigma - 1}{\sigma} w_{i} \left( d_{i} + \tau d_{j} \right) - r_{i}, \tag{3}
\]

where \( r_{i} \) is the capital rent in region \( i \). When we choose the labor in region \( j \) as the numéraire, we denote \( w_{j} = 1 \) and \( w_{i} = w \). The first order condition to maximize (3) gives \( p_{i} = w \) and \( p_{j} = \tau w \).

Similarly, we have \( p_{ji} = 1 \) and \( p_{ij} = \tau \). The price index in two regions can then be written as

\[
P_{i} = \left[ \left( k w^{1-\sigma} + T(1-k)K \right) \right]^{\frac{1}{1-\sigma}}, \quad P_{j} = \left[ \left( Tw^{1-\sigma}k + (1-k)K \right) \right]^{\frac{1}{1-\sigma}}, \tag{4}
\]

where \( T = r^{1-\sigma} \in (0,1) \) is trade freeness. Since \( \sigma > 1 \), larger trade freeness corresponds to a small transport cost.

By the free-entry condition of firms, the zero profit implies that the capital rents in the two regions are as follows:

\[
r_{i} = \frac{1}{\sigma K} \left[ \frac{w^{1-\sigma}Y}{w^{1-\sigma}k + T(1-k)} + T \frac{w^{1-\sigma}Y}{Tw^{1-\sigma}k + 1-\sigma} \right], \quad r_{j} = \frac{1}{\sigma K} \left[ \frac{T}{w^{1-\sigma}k + T(1-k)} + T \frac{Y_{j}}{Tw^{1-\sigma}k + 1-\sigma} \right]. \tag{5}
\]

Then the nominal incomes in the two regions are

\[
Y_{i} = \theta K \left[ k_{i} + (1-k)r_{i} \right] + \theta wL, \quad Y_{j} = (1-\theta)K \left[ k_{j} + (1-k)r_{j} \right] + (1-\theta)L. \tag{6}
\]

Since capital is mobile, firms choose their location by a balance of market size and wages rate. We have only interior equilibrium, in which \( r_{i} = r_{j} = r \). Given this condition, we can obtain income and capital rent in these two regions

\[
Y_{i} = \frac{\theta L \left[ \sigma w + (1-\theta)(1-w) \right]}{\sigma - 1}, \quad Y_{j} = \frac{(1-\theta)L \left[ \sigma - \theta(1-w) \right]}{\sigma - 1}. \tag{7}
\]
In the labor markets, the labor demand in region \( i \) is equal to the total labor costs of firms there. According to the foregoing income equation, we can have:

\[
k \frac{\sigma - 1}{\sigma} (Y_i + Y_j) = k(\theta w + 1 - \theta)L.
\]

The labor balance of supply equaling demand gives the simple relationship between wages and firm share:

\[
k = \frac{\theta w}{\theta w + 1 - \theta}.
\]

In addition, we can endogenously obtain the wages. Since the production of each firm in region \( i \) is \( d_i + \tau d_j \) and the marginal cost in each firm is \( (\sigma - 1)/\sigma \), the market-clearing condition of labor in region \( i \) can be written as:

\[
\theta L = \frac{\sigma - 1}{\sigma} kK(d_i + \tau d_j).
\]

By using (2),(4),(7) and (10), (11) yields the following wages equation:

\[
\Psi(w) = \Phi_1(w) + \Phi_2(w)T + \Phi_3(w)T^2 = 0,
\]

where

\[
\Phi_1(w) = (w - 1)\theta(1 - \theta)
\]

\[
\Phi_2(w) = w^{2-\sigma} [(1 - \theta)w^{2\sigma - 3} - \theta]\sigma
\]

\[
\Phi_3(w) = \theta(\sigma - 1 + \theta)w - (1 - \theta)(\sigma - \theta)
\]

The preceding wages equation (12) has no analytical solution for an arbitrary \( \sigma \), but it offers much useful information. From (12), \( w(\cdot) \) is well defined, which demonstrates how the wages rate depends on trade integration. By using the implicit function theorem, we know that

\[
w(0) = w(1) = 1, \quad w'(0) = \frac{2\theta - 1}{\theta(1 - \theta)} \sigma > 0, \quad w'(1) = -\frac{2\theta - 1}{\sigma - 1} < 0.
\]

Moreover, Equation (12) is a quadratic function of \( T \). Therefore, for a given \( w \), there are, at most, two roots of \( T \) that satisfy the wages equation. These properties imply that \( w(T) \) has an inverted u-shape when \( T \) rises from 0 to 1. Furthermore, \( w(T) > 1 \) holds for all \( T \in (0,1) \). Since region \( j \) is assumed as the numeracies, \( w_j = 1 \), this can lead to the following conclusions:

**Proposition 1** For any positive and finite transport costs, the HME occurs in terms of wages. The wages in larger region exceed the wages in smaller regions.

Proposition 1 tells us that even without comparative advantage, nominal wages inequality still occurs. Additionally, we find that the wages rate closely depends on trade freeness. When \( \theta \) and \( \sigma \) are given a certain value (\( \theta = 0.7 \) and \( \sigma = 3 \)), a simulation example of \( w(T) \) can be plotted in the following figure (Fig. 1). The figure reveals some important features of wages in the large region. First, \( w^* > 1 \) holds for all \( T \in (0,1) \). Moreover, equilibrium wages rates have an inverted U-shape in \( T \). This means that, with any
increase in trade freedom, the relative wages between regions $i$ and $j$ experiences a process from rising to falling. This is called the SME. From this, another proposition can be obtained.

**Proposition 2** The curve of relative wages between regions $i$ and $j$ increases in $T$ when $T$ is small and decreases in $T$ when $T$ is large.

Through analysis of the theoretical framework, some interesting results can be obtained by a model with mobile capital as the production factor but without an agricultural sector. Equation (10) tells us that wages and HME in terms of firm share are equivalent. This means that HME in terms of wages and firm share can be observed simultaneously. Since capital and labor are both employed as input, mobile capital makes firms in the large region concentrate and brings them higher wages. Intuitively, more firms concentrated in the larger region can save transport costs, which also leads to a higher wages. More importantly, a non-monotonic relationship between wages and transport costs can be observed. This is also named the SME. The intuition that a higher concentration in a region increases wages implies that there are two opposing forces in the model. An increase in demand due to higher income encourages agglomeration. Simultaneously, higher wages increase the labor costs for a firm, which encourages it to relocate to some other region. However, this non-monotonic pattern in terms of wages and transport costs is seldom investigated in the related empirics.

It is noteworthy that, despite the close relationship between $k(T)$ (firm share) and $w(T)$ (wages) shown in (10), $k(T)$ has a more complicated pattern when it is considered in multiregional situations. Uchikawa and Zeng (2014) investigate the relation between firm share and transport costs in a multiregional space and find that the $k(T)$ presents a more complicated pattern response to $T$. This result implies that we have to be prudent when testing HME in multiple regions. It seems reasonable to choose to empirically investigate the U-pattern in terms of wages other than firm share.

Before implementing the empirical part, several points should be mentioned. Compared with Behrens et al. (2009), although multiple regions are considered in their model, it also uses the agricultural sector and costless goods. Since labor is the only input of the agricultural sector, the factor prices are equalized. In this way, HME in terms of wages is not amenable to observation. The free-trade agricultural good helps to simplify the general equilibrium analysis, but it is also criticized by some scholars (e.g. Davis 1998). With only the manufacturing sector and transport costs, HME in terms of both firm share and wages can be observed in the theoretical model. More importantly, it should be noted that SME is always ignored in the related literature. If we consider HME as a magnification effect, it is closely related to trade costs. Furthermore, SME does not always bring about a positive effect. With further decreases in transport costs, a non-monotonic relationship is created. As an exogenous variable, only a change in transport cost eventually leads to the magnification effect. SME could be considered the core element of HME. Moreover, a non-monotonic pattern of spatial inequality can be considered as a twinborn result to core periphery model. Taken together, our empirical strategy consists of two main components. First of all, some stylized facts employing data from China are given to demonstrate the primary magnification effect of HME. Then the non-monotonic pattern of SME in terms of wages is empirically reinvestigated.

**PRIMARY MAGNIFICATION EFFECT OF HME**

Head and Mayer (2004) clarify that, when taking the partial derivative of firm share ($k$) with respect to $\theta$, $dk/d\theta > 1$ means the primary magnification effect and it can be formulated as the definition of HME. This requires us prudently to define the magnification effect as a continuous function between firm share.
(k) and local demand (θ). As argued in Zeng (2014), \( dk/dθ > 1 \) is limited to some specific assumptions and it is neither a necessary nor a sufficient condition for \( k > θ \) to hold. In line with our theoretical framework, the magnification of HME may simply be understood as the wages (or firm share) in larger region being higher than in the small region. It can also explained as follows: for any \( T ∈ (0,1) \), if \( θ_i > θ_j \), then \( w_i > w_j \). In addition, as discussed in the foregoing section, since SME in terms of firm share presents a more complex pattern than an inverted U-shape curve, we focus on investigating wages disparity to verify the primary magnification effect of HME. In this section, some data from China will be employed to clarify the facts of the primary magnification effect in terms of wages inequality.

Over the past three decades, China has become one of the world’s fastest-growing economies by means of various reforms and its economic liberalization. However, alongside the economic development, China’s transition to a market-oriented economy has created some new challenges, among which is the regional disparity between coastal and interior regions. This disparity has aroused much concern and social unrest. To date, most research in terms of regional inequality has concentrated on the macro level in terms of GDP or national income. While some studies compare the agglomeration of manufacturing or population, few efforts have been made to study the disparity in terms of wages between the coast and the interior, specifically in the field of wages for urban units. Further, most studies focus on a limited period, but this paper prefers to investigate the long-term features and trend of spatial disparity in terms of wages between the coastal and interior regions of China.

We re-arrange all the provinces in China into two main parts, the larger coastal ones and the smaller interior one in line with a scale of the number of employed persons in urban units. To further reveal the difference within the interior regions, the interior is further divided into central and western parts according the criteria of National Bureau of Statistics of China. The trend of coast-interior disparity in terms of the average wages of workers and staff in urban units is demonstrated in Figure 2. From Figure 2, we find that both coastal and interior provinces experienced rapid growth after the reform and opening up of the economy in terms of the average wages of workers and staff in urban units. However, the larger coastal area grew much faster than the interior. As a consequence, the inequality between the coast and the interior steadily increased during this period. Specifically, the wages rates showed that during the 1990s and early years of the 2000s, the increase in the disparity accelerated and then gradually stabilized. The definition of HME tells us that, other things being equal, wages are higher in a large region. According to the curve of the wages ratio between the coastal and interior regions shown in Figure 2, the curve is consistently located above 1. This means that, in terms of the division based on the scale of the number of employed persons in urban units, the wages in the larger coastal region is always higher than in the smaller interior region. This finding also illustrates that the magnification effect could be observed throughout the regional integration during the study period. Moreover, the curve of the wages ratio shows that the trend of relative wages no longer presents a monotonic pattern. When regions are more integrated, a non-monotonic curve of wages inequality between the coast and the interior emerges. This magnification effect is strictly related to trade freeness between the coastal and interior regions. To avoid confusion with the primary magnification effect, it is called the SME.

Figure 2 omitted but would have been here

**SME AND THE INVERTED U-SHAPED CURVE**

**Empirical Specification**

It was demonstrated in the foregoing arguments that wages in large regions are higher than in small regions. But this primary magnification effect changes as trade freeness increases (the Secondary Magnification effect, SME). According to Proposition 2, we find that the relative wages between large
regions and small regions initially increase and then decrease in $T$. This means that the relationship between the spatial wages disparity and regional integration is not monotonic and the inverted U-shaped curve holds. The empirical specification of SME is taken from analytical equilibrium condition of Proposition 2. Then we can derive the following quadratic estimating equation to verify SME:

$$\frac{w_{it}}{w_{jt}} = \beta_0 + \beta_1 T_{it} + \beta_2 T_{it}^2 + \beta_3 CV_{it} + \gamma_{it}$$

(13)

where $w_{it}/w_{jt}$ is relative wages between the larger region $i$ and small region $j$ in year $t$, $T_{it}$ is trade freeness between region $i$ and region $j$ in year $t$, and $CV_{it}$ are controls for other things. $T_{it}$ can also be understood as the level of regional integration between the two regions. If $\beta_i > 0$ and $\beta_2 < 0$ by empirical analysis, this means that relative wages between larger and smaller regions evolve in an inverted U-shape during regional integration.

**Data and Measurements**

Our empirical study, using data from China, aims at evaluating the impacts of the increase of regional integration on the change in relative wages between the coastal and interior regions. As in the primary magnification effect, we take each of the provinces in China as the geographic unit of analysis. In line with the scale of employed persons in urban units, we divide the 29 provinces into two groups, the coast and the interior. Since our empirical study aims to investigate the inverted U-shape of spatial wages inequality during regional integration within a home country, we consider two typical regions, one from the coastal provinces and the other from the interior provinces, as a pair for the spatial unit. Every two regions are matched to the point where the sample size is great enough to examine the change of spatial wages inequality during the increase of trade freeness. Relative wages $w_{it}/w_{jt}$ as the dependent variable, is computed by the ratio of the average wages of workers and staff in urban units in the coastal provinces to those in the interior provinces.

Transport costs as a key element of spatial economics, broadly speaking, encompass distance and trade barriers, time and energy. It is well known that there is no perfect method of measuring them. In the related empirical studies (Redding and Venables, 2004; Ma, 2006), distances are the main proxies for measuring transport costs, for international trade in particular. As mentioned by Combes and Lafourcade (2005), great circle distance or real time limit the possibility of applying them in a time series analysis. Geographers and transport planners have already developed advanced and accurate methodology with which to calculate transport costs by using real travel time, freight costs or distance based on the Geographic Information System. Due to the scarcity of data sources, we here consider infrastructure, distance and road networks as representative of transport costs.

In our empirical analysis, we construct a new way to measure the transport costs by considering the distance as well as the level of infrastructure. One of the most obvious and powerful tools for representing the infrastructure level is a country’s highway and railway networks. Inspired by Zheng (2010), we sum the density of infrastructure in the originating province from the coast, of the destination province from the interior and of the provinces connecting them. Hence, the trade freeness between region $i$ and region $j$ is equal to the sum of the densities. That is,

$$T_{ij} = \sum_{p=1}^{J} Den_{pt}$$

(14)

$$Den_{pt} = \frac{\mu_p\bar{hw}_{pt} + \mu_r\bar{rw}_{pt}}{D_{pt}}$$

(15)
where $hw_p$ and $rw_u$ are the total length of highway and railways in operation within a province at time $t$, and $D_p$ is the provincial area of province $p$ in year $t$. $\mu_h$ and $\mu_r$ are the weight of highways and railroads in the total freight volume in year $t$.

The data on the infrastructure are from the National Bureau of Statistics of China and China’s transportation statistical yearbook. Equation (15) measures how easily people and firms can interact with each other within a province. In addition, since we sum the total density between the two provinces where the trade occurs, it can also represent the distance between the two provinces. In the last decade more than ever, the Chinese government has been investing a considerable amount in both the construction and maintenance of such a network. According to the theoretical model, the relationship between trade freeness and transport costs is described as $T = e^{\alpha}$. Since $\sigma > 1$, larger trade freeness corresponds to smaller transport costs and $T \in (0,1)$.

### Empirical Results

A series of preliminary estimates obtained from regressing Equation (13) are shown in Table 2. Columns 1, 4 and 7 are Feasible General Least Squares (FGLS) regression on trade freeness $T$ and $T^2$ derived from data on the Coastal-Interior, Coastal-Central and Coastal-West, respectively. In order to better investigate regional integration on regional inequality, trade freeness alone is considered in the benchmark results.

We are first very concerned to find whether an increase of trade freeness does indeed affect regional inequality in wages due to SME. It is obvious that the coefficient for $T$ is significantly positive at the 1% statistical level, and $T^2$, as we expected, is also significantly negative at the 1% statistical level. In Table 2 column 1, the coefficient of $T$ is 1.778 and the $T^2$ coefficient is -1.585. When we look at T’s quadratic model, we know from calculation that when $T$ is over 0.566, there will be a decline of relative wages with every increase of trade freeness. Since after normalization, the value of $T$ is located in the interval of $[0,1]$, when $T \in [0,0.566]$, relative wages between coastal and interior regions increase in $T$, while when $T \in [0.566,1]$, relative wages decrease in $T$.

To test the robustness of the results in different samples, FGLS estimations with both fixed effect (FE) and random effect (RE) are also used and shown in each group in Table 2. These empirical results indicate that the signs of $T$ and $T^2$ are all compatible with our theoretical model, which supports the theoretical predictions regarding the inverted U-shape of relative wages during regional integration. It confirms that the relative wages between larger coastal regions and smaller interior regions initially increase and then decrease when $T$ increases. After 1980, China’s open economic policy was initially adopted in the coastal regions, and the central and western regions were influenced in turn. The improvement of infrastructure conditions between the coastal and interior regions, greater than the share of manufacturing firms located in coastal areas, also raised wages in the coastal provinces. However, in the long run, with sustainable development and further regional economic integration within China, the inequality in wages between the coastal and interior areas has gradually fallen. It is also consistent with these findings to find a non-linear relationship between regional inequalities and national development in
the United States (Williamson 1965) and bell-shaped spatial inequality in the European Union (Barrios and Strobl 2009). Furthermore, the investigation of subunits in the interior, the Coastal-Central and Coastal-West areas, also supports the inverted U-pattern in terms of relative wages.

FGLS rather than OLS should be used, otherwise autocorrelation and heteroskedasticity may bias the estimates. Diagnostic tests of heteroskedasticity and autocorrelation were undertaken in the panel data of the analysis of the three groups in Table 2. The Breusch-Pagan/Cook-Weisberg test was employed for heteroskedasticity with \( H_0 : \text{var}(\varepsilon) = \sigma^2 < \infty \). The Wooldridge test was used to test for autocorrelation with \( H_0 : \) no first-order autocorrelation was found. Since both diagnostic test statistics are significant, AR (1) or heteroskedasticity exists within the panels, adopting the adjusted estimator in Table 2 corrected for heteroskedasticity and autocorrelation. In the Coastal-Interior and Coastal-West analysis in Table 2, the null hypothesis of Hausman tests was rejected, indicating that the fixed effects were consistent and efficient. In the ‘Coastal-Central’ group, however, the random effect was more consistent and efficient. However, the coefficients of both FE and RE in all groups are very similar.

Table 2 omitted but would have been here

In order to check the impact of productivity and education level difference between regions on relative wages, two control variables \( G_{pi} / G_{p} \) and \( H_{pi} / H_{p} \) were introduced in our estimations. Similar to Table 2, robustness tests were also used for comparison. The results shown in Table 3 reveal that even when considering other elements, the coefficients of \( T \) and \( T^2 \) are also significant at 1% and the signs are consistent with expectation. According to the FE results of column 3 in Table 3, we know that when \( T \) is over 0.539; there will be a decline of relative wages with every increase of trade freeness. This turning point is almost equal to the preliminary in Table 2. Moreover, we find that Table 3 shows that the coefficients of \( G_{pi} / G_{p} \) and \( H_{pi} / H_{p} \) are significant at the 1 percent level in the full sample group, indicating that relative wages were positively affected when the productivity of the eastern regions outstripped that of the interior. The FGLS (1) in Table 3 shows that when relative productivity between coastal and interior regions increases by 10%, then relative wages will rise by 1.32%. Similarly, when the density of higher education increases in the coastal regions, relative wages are significantly and positively affected. However, when the high density of education in the population was considered, the impact on relative wages of productivity differentiation grew slightly less.

Table 3 omitted but would have been here

In FGLS (2) in Table 3, we observe that when \( H_{pi} / H_{p} \) increase by 10%, relative wages increase by 0.17%. Meanwhile, the impact of productivity on wages changed from 0.132 in FGLS (1) to 0.101. This clarifies the case of China: the higher concentration of workers who have received higher education corresponds to the higher relative wages in this region. After controlling for autocorrelation and heteroskedasticity in the FGLS estimation, the coefficients of \( G_{pi} / G_{p} \) and \( H_{pi} / H_{p} \) become slightly higher than those in FE and RE estimates. In order to judge the impact of both control variables in different regions, we made two more sample tests in Table 4.

In Table 4, the coefficients of \( T^2 \) in terms of the ‘Coastal-West’ area became insignificant when the control variables were added, but the RE and FE results were still all significant, implying that the inverted U-shape in terms of the relative wages in the ‘Coastal-West’ area were not as stable as those of the full sample and the ‘Coastal-Central’ area. Comparing the results of this group with the group from the ‘Coastal-West’ area, the results of the ‘Coastal-Central’ are significant at 1%, even bearing in mind the control variables. The reason for this difference between central and west may be that the central
regions are much nearer to the coastal area and these regions are more integrated. As for the influence of relative productivity, when the control variables are considered, it seems that the magnitude of coefficient of relative productivity become larger in FGLS (1) in Table 4, indicating that the productivity difference has played a more important role in wages differentiation in Coastal-Central’ area.

Table 4 omitted but would have been here

Most significantly, we confirm that there was SME after checking the trade freeness and relative wages of the coastal and interior regions as well as of the coastal-central and coastal-west areas in the period 1980-2012. The analysis has also shown the impact of economic determinants on relative wages, the coastal regions of China attracted more well-educated workers after 1980 and most manufacturing production focused on these regions, which increased the relative wages there and also led to higher standards of living in the coastal region of China than in the central and western regions.

CONCLUSION

To a large extent, spatial economics has come into the scope of mainstream economics. However, spatial economics still has some internal and external drawbacks and challenges, specifically in terms of empirical studies. As a key component of spatial economics, HME in terms of conception and empirical strategy is still under construction. It is argued that regional size affects the spatial configuration of economic activities, a phenomenon also known as HME. Within a theoretical framework, the definition of HME is unpacked in our paper and is interpreted in terms of the wages in a larger region being higher than in a smaller one. It is noteworthy that this magnification also closely relates to the discrepancies in transport costs and relative wages between the larger and small regions, which evolve in a non-monotonic pattern when transport costs decline. To sum up, HME carries two implications, namely, the primary magnification effect and the secondary magnification effect.

Within a theoretical framework, we unpacked the definition of HME and reinvestigated it by using panel data on China in the period 1980-2012. The finding suggested that wages in the larger coastal area are higher than in the interior due to the size difference between the regions. During regional integration, moreover, regional inequality in wages between the coastal and interior regions seemed to evolve in an inverted U-shape curve. This non-monotonic pattern was also verified by employing data between the ‘Coast-West’ and ‘Coast-Central’ areas in China. The evolution of space economics in China during the past three decades supports the inverted U-shaped pattern predicted by the theoretical models of spatial economics.

As one contribution of this paper, the definition of HME was explicitly investigated and empirically examined using data from an emerging country, China. Consistent with Williamson (1965), and Barrios and Strobl (2009), regional inequality fluctuated over time. The empirical results from China indicated that the relative wages between the coastal and the interior regions initially increased and then decreased during regional integration. Our paper can be viewed as an attempt to investigate the non-monotonic relationship between wages and trade freeness. Compared with the core-periphery pattern in spatial economics, economic re-dispersion or decentralization could be considered another typical phenomenon in practice. Due to the limited data sources, it is imperative to estimate the HME with data from different industries. The other revision that should be considered is endogeneity issue and some other reasonable controlling variables should be added.
REFERENCES


All of the figures, tables, and footnotes cited in this paper are omitted due to space considerations. Interested parties are invited to contact the author for a complete copy of the paper.
An Examination of the Effect of Negative Mood Disorder on Compulsive Buying Behavior: A Meta-Analysis

Keywords: Compulsive Buying, Mood Disorder, Depression, Negative Mood

INTRODUCTION

A great number of people engage in excessive buying behaviors that can lead to regrettable consequences such as extensive debts and psychological disorders (Dittmar, 2005). As a result, the topic of compulsive consumption has received increasing attention from researchers during the last two decades. These scholars have also indicated that compulsive buying can lead to significant and serious interpersonal problems and financial difficulties such as bankruptcy, marital and family stress. Compulsive buying is also found to be associated with significant mood and personality disorders. In addition, several researchers have described it as involving a tempting urge to buy followed by brief tension relief (Christenson et al., 1994; McElroy, Keck, Pope, Smith, & Strakowski, 1994; Schlosser, Black, Repertinger, & Freet, 1994). O’Guinn and Faber (1989) also claim that there are two essential definitional criteria that must be present in this form of buying behavior. That is, the behavior must be repetitive and it must produce negative outcomes for the individual. Although, the individual might experience immediate relief from emotional stress after engaging in this form of compulsive behavior, this individual will eventually come to realize that this compulsive buying behavior can cause delayed negative outcomes. O’Guinn and Faber (1989) and Faber and O’Guinn (1992) formally define compulsive buying as a chronic, repetitive purchasing behavior, in response to negative events or feelings, that is difficult to stop and results in harmful consequences. On the other hand, other scholars have proposed a link between compulsive buying and obsessive-compulsive disorders (McElroy et al., 1994). McElroy et al. suggest that compulsive buying is a form of impulse-disorder that belongs to a compulsive-impulsive spectrum. Unlike O’Guinn, Faber, and McElroy who claim that compulsive buying leads to interpersonal problems such as negative mood disorders, others have argued that compulsive buying is aimed at inducing a pleasurable state (i.e., happiness and excitement) and therefore is fundamentally different than compulsion and more like an impulse-control disorder (Christenson et al., 1994).

Despite the considerable attention that compulsive buying researchers have provided for studying this behavioral phenomenon, its underlining causes are still poorly understood and characterized (Dittmar, 2005). Up till now, clinical diagnostics are the only approach that describes the compulsive buying behavior as a manifestation of underlining psychiatric disorders, but without agreement on this type of behavior (Black, 2004), i.e., whether it is caused by negative or positive disorders.

META-ANALYSIS

Research Questions

In order to improve our understanding of this troubling phenomenon, the present study looks at one type of mood disorders (i.e., negative mood disorders) as a factor that causes an individual to engage in compulsive buying behavior. The purpose of this meta-analysis is to examine the literature that has investigated the extent to which mood disorders can lead to compulsive buying. Specifically, those studies that address depression as a factor of compulsive buying are the focus of this meta-analysis. This
area represents a small proportion of studies in the compulsive buying literature. For example, 25 articles (out of 131 articles) are identified as studies that have described depression as being a factor that associates with compulsive buying behavior.

**Defining the Variables**

This meta-analysis will focus on compulsive buying tendency and depression as the main variables of concern. Compulsive buying can be measured by questionnaire-based screeners that have been validated in clinical samples. Although compulsive buying requires clinical assessment, questionnaire-based scales are ideally appropriate to measuring compulsive buying tendency in individuals (Dittmar, 2005). The two most extensively used scales are developed by Faber and O'Guinn (1992) and by Valence, Dastous, and Fortier (1988). The Valence’s et al. scale, although a separate scale, is based on findings from an earlier exploratory study performed by Faber, O'Guinn, and Krych (1987). Hence, these two scales are often reported to have comparable findings. On the other hand, a number of other researchers have used different psychiatric measures to evaluate compulsive buying tendency. For instance, McElroy et al. (1994) propose diagnostic criteria for distinguishing normal buyers from repetitive compulsive buyers based on a clinical diagnosis. In this research, buying was considered compulsive if the patient described it as “(1) uncontrollable; (2) significantly distressing, time consuming, or resulting in social or financial difficulties; (3) not occurring only in the context of hypomanic or manic symptoms” (McElroy et al., 1994, p.242). Whereas, other scholars have used a five-item subset of the psychasthenia (obsessive-compulsive syndrome) scale of the Minnesota Multiphasic Personality Inventory (MMPI) to measure compulsivity. This set of items is indicative of the presence of related personality characteristics common among compulsive disorders (e.g., abnormal fears, worrying, difficulties in concentrating, guilt feelings, and self critical feelings and attitudes). Overall, I choose these four scales as a base for representing the compulsive buying variable in this meta-analysis.

On the other hand, mood disorders are identified using a range of interviews and questionnaire-based screeners that recognizes the behavior as negative mood disorders such as depression. This range of methods include mini international neuropsychiatric interview (MINI), structure clinical interview for DSM-III-R (SCID), beck depression inventory (BDI), and emotional left measure. Those investigative methods are designed to assist clinicians, researchers, and trainees in making reliable psychiatric diagnoses for personality disorders. Therefore, this meta-analysis uses these measures as a base for referring to mood disorders.

**Defining the Studies to Be Included**

A computerized search on Science Citation Index was conducted, covering the published literature from 1980 to present. The key words used in those searches were compulsive buying/purchases, pathological buying/purchases, impulse buying/purchases, and unplanned buying/purchases. The searches resulted in a total of 131 entries dating from 1986. Although many of these articles make important contributions to the knowledge of compulsive buying, most are not relevant to the issue of interest here (i.e., the relation between negative mood disorders and compulsive buying). Thus, only studies examining negative mood disorders (i.e., depression) and compulsive buying have been included in this meta-analysis. The results of the search meeting this description accounted for 25 studies.

**Purifying the Relevant Studies**

A close examination of the 25 articles linking compulsive buying behavior to depression was conducted. To be included in the meta-analysis, a study needed to provide a test between the effects of depression on compulsive buying. In addition, all studies that did not compare an experimental group (i.e., compulsive buyers) with a control group (i.e., normal buyers) were eliminated from the analysis because the significant test reported was not based on a comparison between these two groups. The studies included in the analysis were also required to use at least one of the compulsive buying and mood disorder measures discussed earlier in this study. Most importantly, the measurement had to occur prior to
engaging in compulsive buying behavior since some of the articles reported the different moods between prior to and while shopping events, which had to be removed from the set of studies included in this analysis. In summary, 9 articles were identified for potential inclusion in the meta-analysis (see table 1), which met all criteria described earlier. Furthermore, with reference to problems of independence declared by Rosenthal (1991), all studies employed sampling units that did not also appear in other studies (i.e., the participants within each studies were independent from each other).

Coding the Studies
The next step involved selecting the unit of analysis and coding the individual studies. From examining the studies, it was determined that these studies reported the main effect of depression on compulsive buying tendency. Therefore, the main effect of depression was used as the unit of analysis in this meta-analysis.

Three general observations can be made regarding the 9 studies. First, the measurement of compulsive buying was found to be different in several of these studies; 3 studies used McElroy et al. (1994) criteria, 4 studies used Faber and O’Guinn’s (1992) compulsive buying scale, 1 study used Valence’s et al. (1988) compulsive buying scale, and 1 study used MMPI scale. Second, the measurement of depression in these studies was assessed based on four methods: mini international neuropsychiatric interview (MINI), structure clinical interview for DSM-III-R (SCID), Beck depression Inventory (BDI), and emotional left measure. Third, a number of these articles were published in clinical psychiatry journals, which could raise the concern that the researchers might have analyzed the subjects based on clinical observations instead of shopping behaviors. Therefore, the studies were coded based on the type of measurements used for the compulsive buying behavior and depression and the publication type.

META-ANALYSIS RESULTS

Generally, a meta-analysis will keep us from relying on the discrepant results of a single study in an attempt to understand the main cause of compulsive buying behavior by scrutinizing findings from different studies and compare their effect sizes with those of other studies. Also, a meta-analysis will provide the opportunity for even small and non-significant effects to contribute to the overall picture of the results of a research topic and identify moderator variables to explain the variation in the effect sizes.

Calculating of Effect Sizes

Studies in the psychological literature vary considerably in their reporting of $r$ or $d$ effect sizes (Rosenthal & DiMatteo, 2001). Rosenthal and DiMatteo claim that the effect size $r$ has several advantages over $d$. Therefore, for simplicity of interpretation, this meta-analysis employs $r$ effect. In addition, because each study reported different significance tests (e.g., $\chi^2$, $z$, $t$, and $F$) that compared compulsive buyers with normal buyers in terms of their level of depression, the effect size of each study was calculated using the appropriate equation that was derived from the general equation of significant test (Rosenthal, 1991). The general equation is:

$$Significance\ Test = Effect\ Size \times Study\ Size$$

For each study that provided sufficient data, an effect size in the form of $r$ was estimated. This effect size represents an estimation of the effect of the relation between depression and compulsive buying tendency (see table 1). Two of the studies reported a non-significant effect, which implied that there was no relation between depression and compulsive buying tendency (Christenson et al., 1994; Lejoyeux, Arbaretaz, McLoughlin, & Ades, 2002). On the other hand, seven of the studies reported a moderate to strong effect linking depression to compulsive buying behavior (Black, Repertinger, Gaffney, & Gabel, 1998; Faber & Christenson, 1996; Faber & O’Guinn, 1992; Frost, Kim, Morris, Bloss, Murray-Close,

Over the past 20 years, three methods of meta-analysis have remained popular: the methods devised by Hedges, Olkin, and colleagues; and by Rosenthal and Rubin (see Rosenthal, 1991); and by Hunter and Schmidt. Hedges and colleagues (Hedges, 1992; Hedges & Olkin, 1985; Hedges & Vevea, 1998) have developed both fixed- and random-effects models for combining effect sizes; whereas, Rosenthal (1991) presented a fixed-effects model. On the other hand, Hunter and Schmidt (1990) presented a random-effect model. For the purpose of this meta-analysis, the author is going to use both models to demonstrate the differences in their findings.

**Fixed-Effects Model**

For cases in which correlation coefficients are used as the effect-size measure, Hedges and Olkin (1985) and Rosenthal (1991) advocate converting these effect sizes into a standard normal metric (using Fisher’s \( r \) to \( Z \) transformation) and then calculating a weighted average of these transformed scores. Hedges and Vevea (1998) note that effect sizes based on large samples will be more precise than those based on small samples and so the weights should reflect the increased precision of large studies. Therefore, the optimal weights that minimize the variance are the inverse variances of each study. The weighted average of these transformed scores was then used to calculate the mean effect size (Fishers). The mean effect size (Fishers) was then transformed into the mean effect size (\( r \)) for the 9 studies, which yielded an estimate of 0.333 and its estimated standard error was 0.028. A \( Z \) score of the mean effect size was calculated using Hedges and Olkin’s (1985) and Hedges and Vevea’s (1998) approach. The result showed that the mean effect size was significant (\( p < 0.05 \)). In addition, an approximate 95% confidence interval for the average effect size was estimated as 0.278 to 0.388 after accounting for the sampling error variance (Hunter & Schmidt, 1990). Therefore, since zero did not lie within the confidence interval, it was concluded that the effect size was significant (i.e., there is an association between depression and compulsive buying) (for detailed results see table 1).

**File-Drawer Problem for the Fixed-Effect Model**

One limitation of meta-analysis is that academic journals tend to publish only those studies with statistically significant results. Therefore, the fundamental idea of coping with the file drawer problem is to calculate the number of studies (i.e., fail-safe N) averaging null results that must be in the file drawers before the overall probability of a type I error can be just brought to a significant level (i.e., \( p = 0.05 \)). Then, the number of studies is evaluated for whether such a tolerance level is small enough to undermine the overall effect size (Rosenthal, 1991). To undermine the conclusion of this meta-analysis that depression is related to compulsive buying behavior, 204 studies reporting zero-effect (\( Z = 0 \)) must exist.

Based on the studies that were included in this meta-analysis, 2 out of nine studies (i.e., 22% of the studies) reported zero-effect and both of these studies were published, indicating that the rate of publishing null results in the compulsive buying literature is actually higher compared to other literatures. Therefore, since the number of studies in the file drawer is large and it is also unlikely that there are many unpublished studies with null results given that 22% of the studies used in this meta-analysis are with null results, it is determined that the conclusion of this meta-analysis cannot possibly be undermined.

**Homogeneity of Effect Size Test for the Fixed-Effect Model**

One of the most frequent criticisms of meta-analysis is that “bad studies are thrown in with good” (Rosenthal, 1991). In order to account for this problem, homogeneity of effect sizes was tested as suggested by Rosenthal (1991, p.74). This involves calculating:
\[ Q = \sum (n_i - 3)(z_i - \bar{z})^2 \]

where \( \bar{z} \) is the weighted mean of Fisher \( z_i \). The \( Q \) statistic has an approximate chi-square distribution with \( k-1 \) degrees of freedom, where \( k \) is the number of studies included in the meta-analysis (\( k = 9 \)). A non-significant \( Q \) indicates homogeneous effect sizes. If homogeneity is not achieved, this suggests the potential presence of moderator variables. For this study, homogeneity across all 9 studies of this meta-analysis was not achieved (\( Q(8) = 29.5, p < 0.05 \)) (see table 1). Therefore, moderator analyses were needed to determine the moderator variables.

**Random-Effect Model**

Hunter-Schmidt technique differs from Rosenthal-Robin technique in calculation the weighted mean effect size. As such, central tendency is measured with the average correlation coefficient in which untransformed correlations are weighted by the sample size on which they are based. Then, the significance of the mean effect size is obtained by calculation a \( Z \) score by dividing the mean by its standard error. The best estimate of the standard error is to divide the standard deviation of the observed correlation coefficients by the square root of the number of studies being compared (Osburn & Callender, 1992; Schmidt, Hunter, & Raju, 1988).

The mean effect size (\( \bar{r} \)) estimated to be 0.326 and its estimated standard deviation (\( SD \)) was 0.141 and estimated standard error (\( SE \)) was 0.047. Then, a \( Z \) score of the mean effect size was calculated using Schmidt and Hunter (1999) and Hedges. The result showed that the mean effect size was significant (\( p < 0.05 \)). In addition, an approximate 95% confidence interval for the average effect size was estimated as 0.234 to 0.418 after accounting for the sampling standard error (Hunter & Schmidt, 1990). Again, since zero did not lie within the confidence interval, it was concluded that the effect size was significant (i.e., there is an association between depression and compulsive buying). Similar to the fixed-effect model, the fail-safe \( N \) was calculated for the random-effect model. It was determined that in order to undermine the conclusion of this meta-analysis that depression is related to compulsive buying behavior, 183 studies reporting zero-effect must exist. Therefore, similar to the fixed-effect model’s conclusion, it is determined that the conclusion of this meta-analysis cannot be undermined because the number of studies in the file drawer is large (for detailed results see table 2).

Next a homogeneity test of the effect size was carried as suggested by Hunter and Schmidt (1990, pp. 110-112). This involved calculating a chi-square statistic on the basis of the sum of squared errors of the mean effect size:

\[ \chi^2 = \frac{\sum(n_i - 1)(r_i - \bar{r})^2}{(1-r^2)^2} \]

where \( \bar{r} \) is the mean effect-size, \( r_i \) is the effect size of each study, and \( n_i \) is the sample size of each study. The \( \chi^2 \) statistic has an approximate chi-square distribution with \( k-1 \) degrees of freedom, where \( k \) is the number of studies included in the meta-analysis (\( k = 9 \)). A non-significant \( \chi^2 \) indicates homogeneous effect sizes. If homogeneity is not achieved, this suggests the potential presence of moderator variables. For this study, homogeneity across all 9 studies of this meta-analysis again was not achieved using the random-effect model (\( \chi^2(8) = 32.23, p < 0.05 \)) (see table 2). Therefore, using both the fixed- and random-effect models, the author determined that the moderator analyses were needed to determine the moderator variables.
Factors Contributing to the Heterogeneity
A meta-analysis usually includes studies that vary in their sampling units, methods of measuring and operationalizing independent and dependent variables, and statistical findings (Rosenthal & DiMatteo, 2001). Such variation can increase the generalizability of results when the findings are clear, but when they are not, varying theoretical and methodological approaches can be confusing and non-interpretable. Moreover, one of the main critiques of meta-analysis is the problem of mixing good and bad studies (i.e., garbage in and garbage out). According to Hedges and Olkin (1985), if the fail-safe N is large (which is true in this meta-analysis), one can carry out the moderator analysis. Therefore, the author continued with the moderator analysis to explain the differences in the effect sizes of the 9 studies. The studies were first categorized according to the measurement used to evaluate the subjects’ compulsive buying tendency, the measurement used to evaluate the subject’s depression, and the publication type.

Based on an earlier discussion, a number of researchers have used different measures to evaluate compulsive buying tendency. As reported earlier, three studies used McElroy et al. (1994) criteria, four studies used Faber and O’Guinn’s (1992) compulsive buying scale, one study used Valence’s et al. (1988) compulsive buying scale, and one study used MMPI scale. Hence, there is a possibility that these different measures may have contributed to the heterogeneity of the studies. Moreover, since Valence’s et al. (1988) compulsive buying scale is based on exploratory findings of Faber and O’Guinn (1992), these studies (5 studies) that used one of these two scales were categorized in one subgroup and the rest of the studies (4 studies) in another subgroup. A separate test of homogeneity of the new subgroup of studies that used McElroy’s et al. scale and Faber and O’Guinn’s scale was first conducted. The result indicated that homogeneity was not achieved ($Q(4) = 10.71, p < 0.05$). Another homogeneity test was carried on to determine whether the other subgroup of studies that used McElroy criteria and MMPI scale was homogeneous. The test indicated that this subgroup was not homogeneous either ($Q(3) = 18.71, p < 0.05$). Therefore, it was concluded based on the significant difference test that the different measurements of the compulsive buying behavior did not contribute to the heterogeneity of the general set of studies ($Q_w(7) = 29.46, p < 0.05$; $Q_B(1) = 0.068, p > 0.05$).

Separate homogeneity tests for studies that used different types of depression measure were then obtained to determine whether the measurement of depression would moderate the effect sizes (after testing for homogeneity of each subgroup). Homogeneity was achieved for those studies that used the SCID measure ($Q(2) = 2.81, p > 0.05$), those studies that used the MINI scale ($Q(1) = 3.34, p > 0.05$), those studies that used the BDI scale ($Q(1) = 1.22, p > 0.05$), and those studies that used the emotional left measure ($Q(1) = 1.88, p > 0.05$). Therefore, the different type of depression measures contributed to the heterogeneity for the general set of studies ($Q_w(5) = 9.26, p > 0.05$; $Q_B(2) = 20.27, p < 0.05$) and the type of depression measures was a moderator.

Last, another set of homogeneity test and contrast test was conducted to determine whether the publication type would moderate the effect sizes. The results showed that the marketing journal studies were homogeneous ($Q(2) = 2.14, p > 0.05$) and the medical/clinical journal studies were not homogeneous ($Q(5) = 21.2, p < 0.05$) and the contrast test was not significant ($p > 0.972$). Since, the medical/clinical journal studies were not homogeneous, the author was not able to continue the moderator analysis for the publication type; hence the publication type was not a moderator ($Q_w(7) = 23.34, p < 0.05$; $Q_B(1) = 6.186, p < 0.05$).
In summary, the general set of studies was found to be heterogeneous and as a result a moderator analysis was needed. The moderator analysis indicated that the compulsive buying measures and the publication types were not moderators; however, the type of depression measures was found to be a potential moderator in the set of 9 studies included in this meta-analysis.

CONCLUSION AND DISCUSSION

In this study, the author has explored some of the issues of concern regarding the relationship between negative mood disorders (i.e., depression) and compulsive buying behavior. Previous research has shown mixed findings of the main causes of compulsive buying behavior. Some scholars have attributed negative mood disorders (e.g., depression and sadness) to the main reason that causes consumers to engage in compulsive activities in their lives; whereas, others have shown that positive mood disorders (e.g., happiness and excitement) are the major motive for participating in those undesirable activities. Therefore, this meta-analysis was conducted to cope with the contradicting findings of these studies. For the purpose of this meta-analysis, the author chose to analyze the relationship between negative mood disorders and compulsive buying behavior. Out of 131 studies in the compulsive buying literature, 9 studies were chosen as the focus of this meta-analysis. The 9 studies that were examined individually and collectively through meta-analysis led to several conclusions. First, the effect of negative mood disorders (i.e., depression) was found to be significant in 7 of the studies and insignificant in 2 of the studies. Overall, the average effect-size for the 9 studies had an estimate of 0.333 using a fixed-effect model and 0.326 using a random-effect model. Also, an approximate 95% confidence interval for the effect size was estimated as 0.278 to 0.388 using a fixed-effect model and 0.234 to 0.418 using a random-effect model; after accounting for the sampling error variance for both models. Since zero did not lie within the confidence intervals, it was concluded that the effect size was significant (i.e., depression is related to compulsive buying behavior). Second, the file-drawer analysis indicated that in order to undermine the conclusion of this study, 204 studies using a fixed-effect model and 183 studies using a random-effect model must exist. Therefore, it is unlikely that there is this number of unpublished studies with null results, which in turn supports the conclusion that depression is one of the main causes of compulsive buying. Finally, the moderator analysis indicated that the type of depression measures used in these 9 studies moderated the effect sizes of the studies.

REFERENCES


Home Market Effect and Spatial Wages Disparity: An Empirical Reinvestigation of China


The Link between Creativity and Credibility with Sustainable Growth of Entrepreneurial Firms: Evidence from Sri Lanka

Keywords: Creativity, Credibility, Entrepreneurial Firm Performance, Survival Strategies, Emerging Markets

INTRODUCTION

Literature provides evidence that creativity and credibility of firms are extremely important ingredients for performance and growth of business firms, and therefore, help them to be in competitive edge in the market. Hence, performance can be influenced by creativity (Eaton et. al. 2006; Manseau, 2005; Panuwatwanich et al.) and credibility (Mishra, 1996, Sculley 1987, Gompers et al, 2008) in many cases of organizational successes. The innovative ideas to run and manage a business have association with continuing supply of creative ideas a well (Panuwatwanich et. al., 1998; Roffe, 1999; Rowley, 2011).

On the other hand, corporate credibility could also enhance the possibility of achieving organization’s long-term success and survival especially in a more dynamic but uncertain and competitive environments (Jin and Yeo, 2011; Mishra, 1996; Winn B. et al, 2012). Gompers et al. (2008) highlighted that competence based credibility brings success to entrepreneurs. They further asserted that the competence of management is a key element of trust building among different stakeholders when doing businesses. Credibility has further contributed towards the successes of entrepreneurs even at start-up stages (Abimbola and Kocak, 2007). Sichtmann (2007) highlighted that competence and credibility are key stones in building corporate trust.

Evidence is found with respect to the importance of the role of creditability in achieving corporate successes and growth in many cases (Eikebrokk and Olsen, 2007; Prahalad and Hamel, 1990; Preston, 1997; Rose, et al, 2006; Watson, et al, 1998). Despite the fact that such positive relation between corporate successes and the significance of credibility and creativity was found in developed countries, only limited evidence is available in emerging markets. Therefore, this research attempts to explore the nature and significance of creativity and credibility in relation to sustainable growth of firms operating in Sri Lanka, which is an emerging market.

Some evidence shows that the key to achieving success was the credibility of the management (Lawton et al, 2011; Panuwatwanich, et al. 2008; Rowley, 2011; Roffe, 1999) and the creativity has become influential for innovation in most of the time (Baron and Tang, 2009; Gielnik et al, 2011; Goldsmith and Mechling, 2008; Harrington et al, 2005; Rose et al., 2006). Another study suggests that teaming together could create more value and that is the only way for surviving at crisis times (Dharmasiri, 2008). Similarly, Jayamaha (2008) showed that good corporate governance, better risk management and compliance to regulations are key pillars or imperatives of managing businesses in turbulent times. The creativity may come from many sources and bases and have influences on corporate success and growth.
Innovations are expected to make things better or improve the performance (Rowley (2011) and it is the process of creating and applying new knowledge Gurteen (1998) in achieving organizational success. Deiss (2004) and Damanpour (1996) on the other hand argue and show that innovation is essential for business firms to have needed changes over time in order to create value. Entrepreneurial Firms try to promote creativity connected with their strategies. Ohmae (1987) argued that many Japanese firms’ considered creativity in strategizing among other factors. It has been further found that creativity was a necessary condition to emerge new products and processes successfully with reference to major commercial breakthroughs (Nayak and Ketteringham, 1987; Roffe, 1999). The impact of innovation is argued to be commonly influential on performance of any organization irrespective of its nature and size (Panuwatwanich et. al., 2008).

Credibility has also been cited as a key success factor (Preston, 1997; Watson et al. 1998; Rose et al., 2006; Abimbola and Kocak, 2007; Eikebrokk and Olsen, 2007) that helps new businesses to survive and sustain growth. When an entrepreneurial firm attains corporate credibility as a business, and when its employees and management are perceived to be credible, it has a positive impact on the firms’ performance (Gompers et al., 2008; Jin and Yeo, 2011; Moon, 2011), and in turns it becomes a fundamental asset though it cannot be reliably measured in terms of finance, in achieving organizational goals (Maathuis et al., 2004). As in the case of creativity, the impact of credibility has not been well studied in emerging markets (Lawton et al., 2011). However, it has been found that credibility positively correlates with trust, embedded with brand loyalty of a product, positively affects the buying decisions of customers (Sichtmann, 2007; Mishra, 1996, Sculley 1987; Gompers et al, 2008). General trust, which in turns builds the overall credibility of an organization, is critical in shaping positive organizational behavior and survival as it greatly affects on consumer behaviour and the influences on other stakeholders (Sichtmann, 2007).

The overall credibility can be argued to be influenced by many factors including the reputation of the owners, the organization and the other stakeholders. Hence, the perception of good performance, persistence and ethical business conduct and good image of the entrepreneurs will have a higher chance of attracting needed investments (Gompers, 2008; Rauyruen and Miller, 2007). This attribute of credibility could further help creates the brand loyalty to attract more customers as well. Higher the level of brand loyalty and credibility, greater the possibility of reducing risks thus increasing the trust of customers in the firm (Matzler, et al, 2008).

Emerging markets in developing countries tend to experience more turbulent business environments, which make the survival and growth of entrepreneurial firms more challenging than in the mature markets of developed economies. Hostile markets typically consist of hostilities such as precarious industry settings, intense competition, harsh business climates, and a relative lack of exploitable opportunities (Casillas et al. 2011). In such operating environments entrepreneurs are exposed to high risks and uncertainties. This makes potential investors cautious and often means that fewer resources are available for business operations. This means that entrepreneurs trying to conduct business in hostile emerging markets are severely restricted by threatening conditions (Lawton et al., 2011). These conditions include rapid inflation, wide swings in business cycles, changes in social values and a multitude of other dynamic forces that radically alter the industry’s operating environment and discourage entrepreneurs from investing in new ventures (Ward and Lewandowska, 2005).

Sri Lanka is an emerging market in Southeast Asia that endured economic threats first, from a 26-year-long civil war that ended only in 2009, coinciding with the Great Recession, and then from other internal political crises between 2000 and 2004. Inflation rose from 4.69 percent in 1999, to 14.15 percent in 2001 and then to 18 percent in 2008 (http://www.worldbank.org/en/country/srilanka). GDP recorded negative growth in 2001 for the first time since independence in 1948. And industries suffered from the credit crunch that resulted from tough policies imposed by the Central Bank. Rapidly rising prime lending rates
and bank interest rates were regarded as the highest in the region and exports began to decline in 2007. These challenges were exacerbated by the rising cost of imported war-related goods, and trade deficits that increased demand for foreign exchange and depreciated the local currency. Industries suffered from diverse hostilities and when the country’s bad debts accumulated to an unprecedented 5.3 percent of the GDP in 2008 (Central Bank of Sri Lanka, 2011). The proportion of non-performing loans in 2009 was as high as half of the total loans granted (Daily Mirror, 2012), so it was extremely difficult for entrepreneurs to source investment funds for business development.

Growth of an organization is important for its long-term survival and sustainability. Among other variables, the revenue growth shows how best its operations are in action to generate value and cash flows. The revenue growth in turn will have a positive impact on profitability. Growth of entrepreneurs is crucial for the growth of national economy as well. Therefore, organizational sustainability and growth have high significance on overall economic stability in the country.

RESEARCH DESIGN AND METHODOLOGY

As suggested by Molina-Azorín et al. (2012), mixed (quantitative and qualitative) methods of research, which are heavily used in social research (Johnson and Onwuegbuzie, 2004; Hanson et al., 2005; Johnson, Onwuegbuzie, and Turner, 2007), were used in this study in order to give a better understanding from both quantitative and qualitative perspectives. It is also argued that the use of a qualitative approach permits us to understand the specific context well and the development or extension of theory that can be tested with the quantitative approach later (Molina-Azorín et al., 2012). Thus, we have conducted a qualitative case research approach pertaining to 12 entrepreneurs who were interviewed in connection with the research issue whereas the data from 146 respondents were analysed by using statistical applications. Theoretical support was obtained through an adequate literature survey, to unearth the findings of other scholarly studies showing how creativity and credibility have impacted the growth of entrepreneurial firms.

The mode of explorative and descriptive-interpretive inquiry was adopted with regard to the first part of the research. The interviews conducted were semi-structured and recorded on magnetic tape and transcribed for descriptive coding. It was explored what strategic actions and activities had been carried out by these companies to promote creativity and credibility. These actions and activities were then categorized appropriately under grounded theory norms in order to understand the different dimensions of creativity and credibility, which were in effect at their firms. Identified dimensions of creativity and credibility were then used to develop hypothetical models describing the possible relationships and the linkage between creativity, credibility and the growth of entrepreneurial firms.

Twelve companies studied are leading firms in Sri Lanka that survived and have been growing over time even by facing difficult times where the country happened to wage a civil war and economic instability, and global economic recession prevailed. Subjective personal experiences and perceptions of the 12 respondents were also reconciled with secondary information gathered from public information available. Detailed discussions were held with them to gather information on strategic actions that had been taken and how the creativity and credibility supported their growth drives.

For the quantitative aspects of the research, data was collected from 146 firms through a questionnaire. All the respondent firms had started their businesses prior to 2009 so that each has a reasonable experience in the market place. Convenient sample was set consisting seven out of nine administrative provinces in Sri Lanka where by at least 15 firms from each province was included in the sample. Two provinces, the Northern and Eastern, which were the most affected by the civil war, were excluded on the ground that there were no significant businesses established in those war-torn provinces yet.
Data on perception pertaining to creativity was obtained on a 5 scale by referring to six dimensions; product development, customer service, product/service delivery, market development, internal management systems and overall creativity whereas the perception on credibility was obtained on another six dimensions namely: credibility of the Owner/ Directors, the Corporate Management, Technical Service Staff, Sales & Customer Relations Staff, Products and Service offerings and overall credibility of the organization(Brand Credibility). Data was analysed by using SPSS statistical application package to see whether the sustainable growth is influenced by credibility and creativity.

**DATA ANALYSIS AND INTERPRETATION REFERRING TO INTERVIEWS**

All 12 respondent entrepreneurs who were extensively interviewed provided satisfactory evidence that creativity and credibility have helped them to grow in the hostile market conditions and were in the view that they agree on the same facts in general. Further it was noted that, there were other factors too that contributed for maintaining a sustainable growth. Among them, 10 respondents mentioned that the capability of and investment in competent human resources that possess creative and innovative skills were very significant in strategizing and achieving sustainable growth. The competencies of human resources have further helped them to identify and engage various business opportunities availed from time to time in turbulent market conditions. One of the strategies, commonly used by those respondents was to shift to niche markets when the business contexts were disturbed by uncontrollable environmental factors and changes in the business environment. Therefore, entrepreneurs were able to gain significant profits with high margins but less competition. The creativity of human resources played a key role in identifying such niche markets and catering to them by diversifying both products and markets while sticking on core competencies of the firms.

With respect to credibility, the opinion of most respondents was that the credibility, which was gradually built over time through brand loyalty, is well connected with their growth and sustainability in hostile market conditions. Most agreed that brand loyalty based on credibility is an important ingredient to retain customers and get their continuous patronage as well.

Further, it was found that, creativity and credibility have also been considered pertaining to survival and the growth relation decisions. Different dimensions of both creativity and credibility described before were said to have been used in strategic decision at varying degrees. A summary of some identified strategic decisions, which aimed growth and sustainability and also blended with credibility and creativity is given in Table 1 below.

<table>
<thead>
<tr>
<th>Strategic decisions incorporated with Creativity</th>
<th>Strategic decisions incorporated with Credibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Diversified in to new market domains with more business and less competition</td>
<td>• Used Brand Strength of multi-national principals to reach decision makers and convince to buy using Brand Credibility as an influencing factor</td>
</tr>
<tr>
<td>• Created new and premium markets by developing innovative products, and invested to exploit new opportunities</td>
<td>• Used personal credibility and trust of the owner and the top management to win new businesses through relationships</td>
</tr>
<tr>
<td>• Converted crisis in to opportunities by showing and educating struggling customers how they can secure new business by diversification and differentiation using affordable technology</td>
<td>• Utilized the credibility built in the market as a trustworthy service provider to reach potential customers and win new business</td>
</tr>
<tr>
<td>• Offered new and superior product designs to differentiate products in the market and to win</td>
<td>• Used the credibility and trust of the sales team to win new businesses</td>
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</table>
more customers and business

- Increased revenue channels through diversifying in to new niche markets and market expansion (but within the core business area)
- Offered creative products and service delivery channels for easy customer experience as a strategy to increase sales
- Implemented creative customer service programs to increase customer satisfaction as a mean to increase sales
- Increased multiple product offerings to cater to larger and differentiated markets so that more sales could be assured
- Developed innovative products and creatively differentiated them from other competitors in order to secure more business
- Made more efforts on developing creative products with higher quality to attract more customers by offering quality as a differentiator
- Used creative skills to design specific need-oriented products and design production processes to produce them cost effectively
- Encouraged employees to be more innovative by offering rewards and incentives
- Implemented creative internal management and control systems that motivated utilization of innovative ideas of employees for process innovations, and to improve the quality while reducing cost
- Started new business ventures with new products that could use existing products as input raw materials/resources to ensure business opportunities

- Positioned as a superior product (higher quality) compared to competitors’ products through publicity, promotions and word of mouth
- Increased brand building and promotion activities
- Used the reputation and the goodwill of the top managers and the staff to convince customers and win business
- Increased product awareness through publicity, promotions and word of mouth

It was further found, based on the outcome of qualitative data once they were coded, conceptualized and categorized in line case research data analysis techniques, that entrepreneurs have used their resources and skills in connection with creativity and credibility. Table 2 gives the details of such resources and skills related to creativity and credibility used by the entrepreneurs to drive their firms to success amidst diverse hostilities existed in the market. Hence it is evident that firms have used creativity and credibility as strategic factors to sustain in the emerging market.
Table 2: Resources and Skills used by the 12 entrepreneurs that denoted utilization of creativity and credibility as strategy to sustain

<table>
<thead>
<tr>
<th>Coded Skill / Resource</th>
<th>Concept of Resources and Skills</th>
<th>Category</th>
<th>Weight (available at least 1 factor)</th>
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</thead>
<tbody>
<tr>
<td>Resources:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>• Creativity in product and market development</td>
<td>• Creativity and innovativeness in product development</td>
<td>Creativity</td>
<td>92% (11)</td>
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<tr>
<td>• Innovativeness in products and solutions designs</td>
<td>• Creativity and innovativeness in market development</td>
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<tr>
<td>• Business innovation for customer experience</td>
<td>• Creativity of employees</td>
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<tr>
<td>• Creativity in product development</td>
<td>• Opportunity creation</td>
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<tr>
<td>• Creativity in market development</td>
<td>• Business Innovation</td>
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<tr>
<td>• Creative designing with latest technology</td>
<td>• Resources to support creativity and product innovativeness</td>
<td></td>
<td></td>
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<tr>
<td>• Creativity in management systems and practices</td>
<td>• Market/Customer orientation</td>
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<tr>
<td>Skills:</td>
<td>• Creativity and innovativeness in product development</td>
<td>Creativity</td>
<td>92% (11)</td>
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<tr>
<td>• Creative skills/thinking of the employees</td>
<td>• Creativity and innovativeness in market development</td>
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<tr>
<td>• Superior and creative designing skills</td>
<td>• Creativity of employees</td>
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<tr>
<td>• Developing customer/market-centric pricing propositions</td>
<td>• Opportunity creation</td>
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<tr>
<td>• Ability to design creative systems for customer service</td>
<td>• Business Innovation</td>
<td></td>
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<tr>
<td>• Ability to create new market opportunities</td>
<td>• Resources to support creativity and product innovativeness</td>
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<tr>
<td>• Ability to identify new niche markets</td>
<td>• Market/Customer orientation</td>
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<tr>
<td>Resources:</td>
<td>• Creativity and innovativeness in product development</td>
<td>Creativity</td>
<td>92% (11)</td>
</tr>
<tr>
<td>• Personal credibility and market acceptance of the owner / entrepreneur</td>
<td>• Creativity and innovativeness in market development</td>
<td></td>
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<tr>
<td>• Credibility and trustworthiness of the top management</td>
<td>• Creativity of employees</td>
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<tr>
<td>• Brand strength of foreign suppliers and the principals</td>
<td>• Opportunity creation</td>
<td></td>
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<tr>
<td>• Corporate Credibility</td>
<td>• Business Innovation</td>
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<tr>
<td>• Credibility based on</td>
<td>• Resources to support creativity and product innovativeness</td>
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<td>• Market/Customer orientation</td>
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<td>• Creativity of employees</td>
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<td></td>
<td>• Opportunity creation</td>
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</table>
commitment to quality
- Brand strength and market acceptance of products
- Trust in technical and after-sales service delivery
- Brand credibility of products and services
- Trustworthiness of products and services built in the market

Skills:
- Use credibility and trust of the sales and business development staff to win new business
- Use distinct competencies of the technical staff to offer extraordinary service to build service credibility
- Offering superior technical and after sales service compared to competitors
- Ability to use relationships and networks to secure new business
- Past experience and credentials

With above evidence, it was noted that entrepreneurs were in the view that both creativity and credibility have associated with their strategic decisions in achieving growth and maintaining sustainability. Six different dimensions included in both creativity and credibility were hypothesized in order to see how each dimension was perceived by entrepreneurs as embedded in growth and sustainability. Hypotheses tested are given below;

**Hypotheses of the influence of creativity for growth:**
H1: Creativity in Product Development positively influences growth of entrepreneurial firms in hostile markets.
H2: Creativity in Market Development positively influences growth of entrepreneurial firms in hostile markets.
H3: Creativity in Product and Service Delivery positively influences growth of entrepreneurial firms in hostile markets.
H4: Creativity in Customer Service positively influences growth of entrepreneurial firms in hostile markets.
H5: Creativity in Internal Management and Systems positively influences growth of entrepreneurial firms in hostile markets.
H6: Overall Creativity of the Organization positively influences growth of entrepreneurial firms in hostile markets.

**Hypotheses of the influence of credibility for the growth of entrepreneurial firms:**
H7: Corporate Credibility/Brand Credibility of the Organization positively influences growth of entrepreneurial firms in hostile markets.
H8: Credibility of Products and Service Offerings positively influences growth of entrepreneurial firms in hostile markets.
The Link between Creativity and Credibility with Sustainable Growth of Entrepreneurial Firms: Evidence from Sri Lanka

H9: Credibility of the Owners/Directors positively influences growth of entrepreneurial firms in hostile markets.

H10: Credibility of Top Management positively influences growth of entrepreneurial firms in hostile markets.

H11: Credibility of Technical and Customer Service Staff and capabilities positively influences growth of entrepreneurial firms in hostile markets.

H12: Credibility of Sales and Customer Relationship Staff positively influences growth of entrepreneurial firms in hostile markets.

With respect to the dimensions pertaining to Creativity, Pearson Correlations calculated at the 0.05 confidence level (2-tailed) revealed that the overall creativity of the firm had the highest positive relation with growth of the firm thus showing a correlation coefficient of 0.765. Creativity in Customer Service, Creativity in Product/Service Delivery and Creativity in Product Development also showed strong relation with growth by showing correlation coefficients of 0.760, 0.703 and 0.704 respectively. All those four dimensions were statistically significant as the corresponding p-value were almost zeros. Creativity in Market Development had the weakest relation with growth with a positive correlation of just 0.196 followed by the dimension of Creativity in Internal Management Systems resulted a positive correlation coefficient of 0.15.

With respect to the association of six dimensions included under the element of credibility, with growth, it was found that brand (corporate) credibility and the credibility of the sales/customer service staff had strongly influenced the growth of firms. The coefficient correlations of Brand (corporate) credibility (H8) and the credibility of the sales/customer service staff (H12) were 0.791 and 0.790 respectively. These positive associations were significant. However, with respect to all other four dimensions, the relationships with growth were not significant thus showing weak association with growth. The lowest correlation coefficient of 0.158 was resulted for the dimension of Credibility of the owner/chairman/MD/Board of directors. The highest weak form relation was seen between Credibility of Technical Staff and growth of firm. The correlation coefficient of Credibility of Technical Staff was 0.193.

The data analysis generated adequate evidence to conclude that both creativity and credibility are important and influential ingredients for surviving and growing constantly under turbulent market environment in Sri Lanka despite the fact that some dimensions had weak but positive relations with growth and sustainability. Hence, management can further explore the possibilities of promoting such dimensions of both creativity and credibility which had strong, positive and significant relations with growth. On the other hand, they can explore on dimensions which did not have such strong relations with growth and examine the ways how best they could be linked to growth strategies of firms.

DATA ANALYSIS AND INTERPRETATION REFERRING TO OPINION SURVEY

As found in the case of interviews, the survey data also found a significant correlation between creativity and growth of firms in general. However, it was limited only to three dimensions of creativity namely, creativity in product development, customer service and product and service delivery which had significant influence on growth. Hence, business strategies connected with creativity in relation to offering innovative products, providing adequate customer care and service and offering convenient and effective delivery channels are extremely important for firms to achieve their growth targets and survival in hostile market conditions. Similar finding had been revealed by Eaton et. al.,(2006), Manseau, (2005), and Panuwatwanich et al., (2008) in the relation between creativity and growth.

With respect to the relation between creditability and growth, multiple regressions were run to test whether there is a relationship between credibility and the growth of firms. Accordingly, the credibility
was assigned to six independent variables namely product and services, corporate Brand, Owner Chairman, Top Management, Technical Staff and sales customer service. The output of regression analysis revealed that all the dimensions of credibility had strong positive relations with growth of firms thus revealing the importance of credibility in achieving growth in emerging markets.

The adjusted $R^2$ of the model was 0.614. This says that all six credibility factors explain about 61% of the growth of firm. This is a strong explanation about the relationship between creditability and growth. The results of one way ANOVA showed that the $p$ value of the test was almost zero. Therefore the test is significant and it can be concluded that there is a strong positive relationship between the growth of firms and the perception of the top management about six credibility aspects denoted in six independent variables. Hence, the credibility of Sales and Customer Services, credibility of Top Management, Credibility of Product and Services, Credibility of Owner/Chairman, Credibility of Technical Staff and the Credibility of Corporate Brand together have a positive influence on the revenue growth of firms.

The outcome of the influence of each independent variable on growth shows that the credibility of corporate brand is the most significant influential variable in determining the growth of firms. This was characterized by the lowest significance value (0.001) in relation to the creditability of corporate brand. The lowest influencing variable was the credibility of the owner/ chairman as it had higher $p$ value of 0.043. None of the other credibility variables has a higher $p$ value than 5% thus indicating all the credibility types and aspects are crucial for growth of firms and positively influence the growth.

The analysis of the regression model was further expanded to see whether there is any influence on the growth of firms in relation to their size. Accordingly the firm size was identified as small, medium and large. The adjusted $R^2$’s for the models used for small companies, medium companies and large companies were .809, .728 and 0.690 respectively thus assuring the fitness of the models used.

With respect to small companies, the ANOVA test was significant as the $p$ value is almost zero. This indicates that the all six credibility variables positively contribute towards the growth of small firms. However, the most influential credibility factor for small companies was the credibility of owner chairman as against the credibility of corporate brand which was seen in the case where the test was run for all the companies together. The credibility of product and services and sales customer services had the least influence on growth as the $p$ values of both aspects were 0.049 and 0.047 respectively despite the fact that they were below the significance level of 5%. Therefore, it could be concluded that all the credibility variables though there were varying influences, had positive significant influence on the growth of small size firms.

With respect to medium size companies too, the ANOVA test was significant. The most influential credibility factor for medium companies is the credibility of corporate brand as in the case of multiple regression test run for all the companies together. The credibility of sales customer services too had significant influence on the growth compared to other variables. The credibility of top management has the lowest influence as its corresponding $p$-value is 0.041. Other variables too had significant influence on the growth of firms as all significance level were less than 5%. Therefore, it could be concluded that all the credibility variables though there were varying influences, had positive significant influence on the growth of medium size firms as well.

With respect to large companies too, the ANOVA test was significant. The most influential credibility factor for large companies is the credibility of corporate brand as in the case of multiple regression test run for all the companies together. The credibility of product and service credibility followed by the credibility of sales customer services and the credibility of technical staff respectively. The credibility of top management has the lowest influence as its
corresponding p-value is 0.035 compared to medium size companies. Other variables too had significant influence on the growth of large firms as all significance level were less than 5%.

Further, it was noted that there were not much difference in the level of influences of credibility factors between medium and large companies where the corporate brand became the most influential where as in the case of small companies, it was the credibility of owner/chairman. This situation could be justified as most of small companies are highly concentrated with the family ownerships where the owner and the chairman are the same and close supervision and intervention of owner managers can also be seen.

Nevertheless, in concluding remarks, it could be mentioned that the perception of top management with respect to the relationship between the growth of firm and different credibility aspects are highly correlated and therefore, the credibility significantly influences on growth of firm irrespective of its size. Further, it could be argued that the aspects of credibility are more influential than that of creativity in relation to growth achievements.

LIMITATION OF THE STUDY

This research is limited to investigating ‘creativity’ and ‘credibility’ only success factors for growth of firms operating in emerging markets, though there could be many other factors that influence venture performance. The samples selected for this research was limited to Sri Lankan entrepreneurs that started as entrepreneurial start-ups. The number of entrepreneurs and firms considered for the primary empirical survey was limited to twelve. This limitation was due to the strategic actions related to development, enhancement and utilization of creativity and credibility of these firms interviewed tending to be saturated after the 12th organization. This resulted in assuming that the strategic actions related to creativity and credibility are definite and thus the sample should be limited to 12 case studies.

Our interviews during the case research stage too were focused on determining the actions that the respondent firms had taken to develop enhance and utilize creativity and credibility as success factors in business. However, the non-availability of statistically verifiable evidence to assess the direct influence of creativity and credibility on performance of respondent firms was another limiting factor. Though all the respondents stated that creativity and credibility had significantly helped them to build a sustainable business, no tangible evidence were found to validate it.

The large data survey was limited to 146 entrepreneurs and only six questions for each factor with responses to choose from a Likert scale, hence restricting the respondents’ freedom to express their full views, which is also a limitation of this study. The respondents in the secondary data survey were limited to top managers of entrepreneurial enterprises.

The main objective of the research was to understand the link between creativity, credibility and the growth of entrepreneurial firms in emerging markets. However, the growth of ventures was measured only by annual revenues.

FINDINGS AND CONCLUDING NOTES

The findings on our research suggest that both factors of creativity and credibility are vital and important for entrepreneurial firms to survive and growth in emerging markets. Further, the case research conducted on 12 successful entrepreneurial firms in Sri Lanka provided strong evidence that they used both creativity and credibility when deciding on strategic actions adopted and operating in hostile emerging market conditions.
Subsequent to a comprehensive literature survey on the two phenomenon of creativity and credibility, the study revealed strategic actions taken by 12 successful entrepreneurs in Sri Lanka with regards to building, enhancing and utilizing creativity and credibility as a success factors for survival and growth. Based on the empirical findings, twelve hypotheses depicting significance of creativity and credibility on the growth of entrepreneurial firms were developed. Hypotheses focused on six different dimensions for each aspect of creativity and credibility. The Hypotheses were then tested based on empirical evidence from 146 entrepreneurial firms operating in Sri Lanka.

We attempted to validate the hypotheses regarding the effectiveness of creativity and credibility as strategic success factors to survive and grow in hostile market conditions. The empirical evidence found on 12 entrepreneurs during the first phase of the study suggested that both the creativity and credibility had worked as a success factors for the respondents to gain customer acceptance over competitors. Further, strategic actions adopted by the entrepreneurs were well connected with creativity and credibility to gain business success.

The survey study too confirmed that creativity and credibility are vital factors for survival and growth of entrepreneurial firms. Our research found significant evidence to suggest that both creativity and credibility strongly and positively influence the performance of entrepreneurial firms.

In conclusion, we suggest that entrepreneurial firms operating in emerging markets could rely on creativity and credibility as strategic success factors to build resilience to withstand adverse influence of market hostilities and therefore perform well in hostile markets.

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Proceedings of the 12th AGBA World Congress, Malaysia, November 2015
Page 41 of 1173
INTRODUCTION
Working outside of the traditional office setting in a telework arrangement has continued to be a fruitful topic of academic research. Existing literature has investigated teleworking from the perspectives of employers and employees through theoretical lenses including strategy, environmentalism, information technology, leadership, and organizational behavior. With a focus on the interrelation of academia and practice, this paper seeks to fully explore how contingency theory helps explain external constraints affecting telework and how this theoretical perspective is linked to practical applications by human resource consultants.

Telework, in general, entails an arrangement where firms allow their employees to perform required tasks in a location other than the main office. This ability to do this work is generally facilitated by technology resources for communication and productivity (Bailey & Kurland, 2002; Dewett & Jones, 2001; Guimaraes & Dallow, 1999; Haddon & Brynin, 2005; Neufeld & Fang, 2005; Westfall, 2004). The use of e-mails, internet, and telephones and any other form of electronic communication resources allows teleworking employees to exchange information with their subordinates, coworkers, superiors, and customers (Chalmers, 2008; Fisher, 2005; Gajendran & Harrison, 2007; Stanworth, 1998; Topi, 2004).

An ongoing discussion of the issues relating to telework is important because of the potential for the positive impact of this working arrangement on employee productivity, motivation, satisfaction, and work/life balance. If properly utilized, the telework arrangement provides a multitude of benefits that have been explored in previous literature. In particular, a host of management literature has determined that telework leads to a potential increase employees’ productivity and motivation (Barsness, Diekmann, & Seidel, 2005; Butler, Aasheim & Williams, 2007; Daniels, Lamond, & Standen, 2001; Martinez-Sanchez, et al., 2008; Mayo, et al., 2009; Sanchez, et al., 2007). Work satisfaction has been found to be impacted by the nature of the telework relationship. Some authors have determined that, in general, satisfaction is enhanced for those who are allowed to telework (Ahuja, et al., 2006; Bailey & Kurland, 2002; Belanger, 1999; Sanchez, et al., 2007; Virick, Dasilva, & Arrington, 2010). Further, a goal that is often cited is the ability of telework to facilitate work/life balance including those achieved through a more flexible work schedule (Bailey & Kurland, 2002; Baruch, 2000; Higa & Wijayanayake, 1998; Hilbrecht, et al., 2008; Kossek, Lautsch, & Eaton, 2006; Lautsch, Kossek, & Eaton, 2009; Major, et al., 2008; Sanchez, et al., 2007).

Clearly, many of the issues associated with telework are applicable irrespective of whether employees work within or away from the traditional office setting. However, it is critical to recognize that certain issues and complications are augmented by the total reliance that teleworkers have on technology to perform their jobs. This absolute dependence amplifies the implications of existing regulations and generates issues that are unique to the teleworking relationship. Those legal and regulatory contingencies that are unavoidable in the telework setting and create constraints imposed on human resources managers and consultants alike are the focus of this paper.
The goal of this paper is to discuss the legal guidelines and constraints that influence teleworking arrangements. Human resources managers and consultants must adhere to not only explicit legal requirements set forth in statutes and regulations, but also those actions that can lead to litigation from their employees and customers. Further, care must be taken to identify international telework legal considerations that intertwine United States issues with those of Europe and Asia.

Contingency theory provides important insight into how decisions regarding telework are made within an organization by human resources managers, HR consultants, and consultants. Contingency theory proposes that there is no best way to make decisions regarding strategy, policies, or practices in a business environment. Instead, the optimal course of action is dependent upon external influences and constraints.

Constraints based on cultural norms, social values, and managerial practices all influence the means by which a firm’s employees can be treated (Ferris, Hochwarter, & Buckley, 1999; Mayo, et al., 2009). Legal and regulatory constraints are encompassed within the sphere of influences. Those influences create contingencies that must be addressed by employers and consultants in creating and maintaining a teleworking relationship.

This paper contributes to the existing telework literature in four important ways. First, it extends the analysis of the legal considerations associated with telework in the academic management literature, using contingency theory as a structure of analysis. Second, it updates the scope of literature that had been collected in a previous telework articles, particularly the review article Bailey and Kurland (2002) and the telework research meta-analysis from Gajendran and Harrison (2007). Third, this paper provides a review of the current management literature that directly addresses legal issues of telework as a preliminary resource for future telework research. Finally, it provides a resource to help bridge the divide between academia and consultants in terms of recognizing unavoidable constraints on the teleworking arrangement.

This paper proceeds as follows. First, I will discuss legal issues relating to specific statutes and regulations, including (1) legal status of teleworkers, (2) workplace safety and conditions, (3) workers with disabilities, (4) intellectual property, (5) environmental impacts, and (6) monitoring. Next, I will review issues that can become the basis for litigation, particularly those involving broad areas of the invasion of privacy. Fourth, I discuss telework legal issues in the international setting. I will then conclude with implications of this literature review and the importance of further research regarding the management implications of telework under a legal framework.

LEGAL AND REGULATORY IMPLICATIONS OF TELEWORK

Employment Status of Teleworkers

Only when a telework is deemed to be equivalent to full time employment, as that which is performed in a traditional office setting will protections afforded by laws and regulations apply. Contingency theory dictates that the constraints on human resources managers and consultants understand the constraints imposed by the legal status of their teleworking employees. The treatment of those who telework cannot diverge from the human resource practices that are applied to employees in a more traditional work setting.

A threshold legal consideration is whether a teleworker is an employee of the firm or acts as an independent contractor. Those who are deemed to be employees are generally entitled to compensation, legal, and regulatory protections commensurate with those who work in a more traditional setting in accordance with the telework agreement (Baruch & Smith, 2002; Harris, 2003; Hartstein & Schulman, 1996; Moon & Stanworth, 1997; Nunes, 2005; Potter, 2003; Shin, Sheng, & Higa, 2000). Further, legal
Telework Regulatory and Legal Contingencies
for Employers and Consultants

Proceedings of the 12th AGBA World Congress, Malaysia, November 2015
Page 46 of 1173

and regulatory protections afforded employees hinges on this determination of employment (Kurland & Egan, 1999; Swink, 2001).

A substantive test of employment is the degree of control that the employer holds over the employee (Baruch, 2000; Swink, 2001). Indicia of the level of control include the type of work that is performed, the degree of permanence of relationship, repercussions if the individual fails to complete work, the ability to terminate the arrangement, withholding of income tax, and whether equipment for the completion of required tasks is provided by the employer (Swink, 2001; Townsend & Bennett, 2003).

The provision of equipment by the employer is a clear indication of employment and control in the context of telework. This is not a point of contention in the traditional work arrangement. Employers provide workspace, equipment, and facilities to perform required work for employees at a physical office. However, teleworkers who work away from the office, at home or otherwise, generally do not receive remuneration for this alternative physical space. When employers provide the means of communication that facilitates the telework arrangement, such as a computer and/or internet access, a finding of employment is difficult to circumvent.

Determinations of employee status are more ambiguous in some countries. For example, Ellison (1999) outlines the standards of the type of work that can be performed at a worker’s home to ensure the status of employee under German statutory guidelines. Part-time telework under German law is also discussed by Hornung & Glaser (2009). Both articles state that despite these rules, teleworking arrangements do not adhere to the control standard that is prevalent in the United States. Telework employment in India is also unclear because the use and utility of this type of arrangement is largely unregulated by the government (Mitter, 2000).

Once the determination that a person engaged in telework is indeed an employee, the legal implications of the arrangement can be easily ascertained.

WORKPLACE CONDITIONS AND SAFETY OF TELEWORKERS

Occupational Safety and Health Act (OSHA)

Standards of safety in the workplace are set forth in the Occupational Safety and Health Act (OSHA) that was enacted in 1970, which created the Occupational Safety and Health Administration. Under OSHA, covered employers are required to ensure that all employees must be afforded safe and healthy conditions in which to work (Mello, 2007; Raiborn & Butler, 2007; Swink, 2001).

An OSHA Directive, CPL 2-0.125, which was promulgated in February of 2000, specifically addresses home-based worksites relating to the telework arrangement. In this directive, the Department of Labor explicitly states that it “strongly supports telecommuting and telework. Family-friendly, flexible and fair work arrangements, including telecommuting, can benefit individual employees and their families, employers, and society as a whole.” While OSHA will not inspect the work areas of telework employees nor require employers to do so, safe working conditions must be maintained and can lead to regulatory violations if a complaint is made (Farmer, 1995; Mills, et al., 2001; Potter, 2003; Swink, 2001). Accordingly, conditions of healthy work under OSHA ultimately remain under the prevue of the employers.

Complications associated with computer use that is prevalent with teleworkers can result in musculoskeletal disorders (Harrington & Walker, 2004). Ergonomically appropriate conditions for these disorders are a potential requirement for a healthy work environment (Harrington & Walker, 2004; Hislop & Axtell, 2007; Ozcelik, 2010; Sharit, et al., 2009). Further, emotional stress that results in unhealthy
working conditions associated with the telework arrangement may give rise to OSHA or other health condition violations (Konradt, et al., 2000; Macik-Frey, Quick, & Nelson, 2007; Mann & Holdsworth, 2003). In order to ensure compliance with OSHA, employers may be compelled to inspect the location where telework occurs, even if doing so would potentially constitute an invasion of privacy (Fairweather, 1999).

Workers’ Compensation Law
Work-related injuries are covered by an amalgam of laws generally grouped as “Workers’ Comp”. Under these statutes, employees who suffer work-related injuries are entitled to employer-provided replacement of income and some measure of coverage of attendant medical expenses (Martinez-Sanchez, et al., 2008; Mills, et al., 2001; Stone, 2006). As a result of this coverage, employees are excluded from bringing additional legal action against their employers for the injuries. These laws are not reliant on OSHA provisions, although these regulations may give rise to potential claims (Hartstein & Schulman, 1996; Potter, 2003) nor is there any federal standardization. Each state designates the definition of covered employees and the types of injuries that will generally be covered.

The definition of who will be considered an employee under these statutes tends to be quite broad. For example, New York State Workers’ Compensation Law, Sec. 203, defines a covered employee as a person that “performs any work for remuneration or profit” and is “engaged in the service of an employer … in any trade, business, or occupation.” The workers’ compensation law in Texas is similarly far-reaching, in that it covers all activities that are undertaken in the “course and scope of employment” for activities “conducted on the premises of the employer or at other locations” (Hartstein & Schulman, 1996). Most states have similar course-of-employment language that generally includes the telework arrangement (Stone, 2006).

Teleworkers may become injured at work for a variety of reasons. As with any working arrangement where individuals use computers extensively, repetitive stress caused by continued computer use can cause result in carpal tunnel syndrome or other ergonomic-related injuries. The likelihood of these types of injuries are greatly increased for those who telework since they must use a computer almost exclusively in their work requirements (Swink, 2001; Harrington & Walker, 2004; Ozcelik, 2010). Injuries caused by falling at home, traveling for work-related purposes, or during activities that may also generally occur in a traditional setting (e.g., while eating lunch), are also subject to workers’ compensation claims (Martinez-Sanchez, et al, 2008; Mills, et al., 2001; Swink, 2001). However, it is unresolved as to whether injuries at home will result in workers’ compensation claims (Budworth, 1997; Stone, 2006). Accordingly, consultants are required to incorporate these unknown potential factors of liability as contingencies of telework policies and practices.

Emotional Stress as an Unsafe Working Conditions
The ability to work away from the traditional office under a teleworking arrangement may result in negative consequences and increased emotional stress. Family relationships, job requirements, managerial trust, and other external influences can generate conflicts (Golden, Veiga, & Simsek, 2006; Greenhill, A. & Wilson, M, 2006; Kelliher & Anderson, 2010; Sanchez, et al., 2007; Sorenson & Cree, 2000; Standen, Daniels & Lamond, 1999). Turnover intentions and decreased organizational commitment can result from these stresses (Ahuja, et al., 2006; Bailey & Kurland, 2002; Crossan & Burton, 1993; Golden, 2006; Hunton & Norman, 2010; Mann & Holdsworth, 2003; Ory & Mokhtarian, 2006; Sanchez, et al., 2007). The divide between work and family roles may become blurred. Especially when employees are enabled to work from home, which can cause strain (Breaugh & Frye, 2008; Desrochers, Hilton, & Larwood, 2005; Fenner & Renn, 2010; Fisher, 2005; Hecht, T. D. & Allen, N. J. 2009; Johnson, Andrey, & Shaw, 2007; Sharit, et al., 2009; Shumate & Fulk, 2004; Tietze, 2005; Tietze, Harris, & Musson, 2003; Tietze & Musson, 2005).
A reduction in a trusting relationship among employees and their managers can ensue in the teleworking environment (Adler, Noel & Ambrose, 2006; Gajendran & Harrison, 2007; Kasper-Fuehrer & Ashkanasy, 2001; Kurland & Bailey, 1999; Raghuram & Wiesenfeld, 2004) and can be a considerable problem in affecting overall productivity and emotional stress. Traditional employees may feel that teleworkers are afforded preferential treatment (Felstead, et al., 2002; Golden, 2007). Conversely, teleworkers may observe that those who work in a more traditional setting are granted more resources and opportunities for success (Chiaburu & Harrison, 2008; Chidambaram & Jones, 1993; Gajendran & Harrison, 2007).

A challenge that is of particular concern to managers is the feeling of isolation felt by teleworkers (Cooper & Kurland, 2002; Golden, Veiga, & Dino, 2008; Kurland & Egan, 1999; Thatcher & Zhu, 2006; Vega & Brennan, 2000). This detachment from others who are at a main office and from others who telework encumber teleworking employees’ capabilities for enhanced productivity (Kamerade & Burchell, 2004).

These emotional stressors that are specifically related to telework may result in a determination that the working arrangement is unsafe and can generate viable workers’ compensation claims (Taylor, Fieldman, & Altman, 2008). Consultants and their client firms must look at the contingency tradeoffs between the benefits of telework and the possibility of emotional stress that can be suffered by the teleworking employees.

FAIR LABOR STANDARDS ACT

The number of hours that an employee is allowed to work before overtime must be paid is set forth in the Fair Labor Standards Act (FLSA) in 1938. The law is directed only at those firms that engage in interstate commerce and have gross revenue in excess of $500,000 per year. The Department of Labor provided regulatory guidelines in the “homeworker’s exception” (29 CFR Section 785.23) which allows for compensation agreements that do not follow strict hourly wage guidelines. However, this regulation does not specifically apply to the teleworkers arrangement (Hartstein & Schulman, 1996; Stone, 2006).

Under this statute, employees that are not specifically exempt from statute (i.e., are not salaried) must be compensated for work in excess of forty hour in a given week. However, the fact that an employee is salaried does not automatically excuse the employer from paying overtime in adherence with the FLSA. Salaried employees must also participate in “white collar” executive, administrative, professional, computer, and outside sales activities in order to be exempted under the law (Potter, 2003; Steward, 2000; Swink, 2001).

The burden is on the employer to demonstrate that accurate time records have been maintained so as to assure compliance with the FLSA (Mills, et al., 2001; Ozcelik, 2010). This requirement is particularly challenging in that determining the amount of work performed by teleworkers is extremely difficult (Ellen & Hempstead, 2002). Monitoring teleworking employees is a tenuous requirement, particularly when it is unclear to the employer whether they are “on the clock” (Kurland & Egan, 1999; Rustad & Paulsson, 2005; Stone, 2006).

Human resource managers and consultants are required to evaluate how to determine and measure the amount of work undertaken by teleworkers has been a source of extensive research. For example, employers may expect their teleworking employees to be available to work at any time (Bailey & Kurland, 2002; Chalmers, 2008; Hartstein & Schulman, 1996; Mirchandani, 1998; Sanchez, et al., 2007). The pressure of this unrelenting ability to engage in work that may be explicitly imposed in the telework arrangement can cause undue stress and work exhaustion (Golden, 2006; Hornung & Glaser, 2007; Mann & Holdsworth, 2003; Shin, Sheng, & Higa, 2000). Employers may not be specifically bound to the provisions of the Fair Labor Standards Act regarding the number of hours an employee may engage in...
telework. However, recognizing the need for defining the scope and limitations of how much work must be undertaken is important to avoid the challenges of excess workload that can be prevalent in a teleworking arrangement.

**FAMILY MEDICAL LEAVE ACT**

The Family Medical Leave Act (FMLA) was enacted in 1993 by the federal government so that individuals would be enabled to care for family members or address certain health considerations without risking the loss of their employment. Employers are required under the provisions of the law to allow employees to have up to twelve work weeks in a twelve-month period of unpaid leave and then return to work.

Those employees who do not work in excess of 1,250 hours or those businesses with fewer than fifty employees are not covered by the FMLA (Department of Labor, Wage and Hour Division, 2010; Colopy & Dielman, 2009; Hartstein & Schulman, 1996; Kelly, et al., 2008; Stone, 2006.). Employers must attempt to find a position that is substantially equivalent upon the individuals’ return to work, which may prove problematic if the teleworking arrangement is no longer suitable for the position that had been vacated during this twelve-week period of time. Teleworkers who are fit the contingency that designates them as full-time employees must be afforded this statutory protection in the same manner as those who perform work in the traditional office setting (Kelly, et al., 2008).

**TELEWORKERS WITH DISABILITIES**

The Americans with Disabilities Act of 1990 prohibits discrimination based on a person’s disability that limits the ability to performance of major life activities (Ludgate, 1997; 42 U.S.C. 12111). Under this law, employers must attempt to make a reasonable accommodation to enable their employees to continue to work despite their impairment.

Teleworking allows employers to continue to benefit from the skills of their employees as a reasonable accommodation to their disability. This arrangement alleviates the potential need to reengineer a workspace in the traditional work setting (Alimandi, Andrich, & Porqueddu, 1995; Gemignani, 2000; Potter, 2003; Schopp, 2004; Further, employees may prefer the facilities that are available in their own homes to facilitate their needs (Bricout, 2004).

The Equal Employment Opportunity Commission (EEOC) and courts have been the arbiters of disputes whether reasonable accommodations have been attempted (Emens, 2008; Hartstein & Schulman, 1996; Kaplan, Weiss, Moon, & Baker, 2006). Telecommuting is not directly identified in legislation or regulations as to whether it is a reasonable accommodation, but has been found to be an appropriate means by which the needs of an employee’s needs may be facilitated (Baker, Moon, & Ward, 2006; Cassam, 1995; Kaplan, et al., 2006). Similar determinates as those from the EEOC regarding the viability of telework as an accommodation for the disabled have been made in Portugal (Nunes, 2005) and Canada (Montreuil, & Lippel, 2003; Moos & Skaburskis, 2010).

Employers are not required to allow their employees to telework as a reasonable accommodation of disability (Howard, 1997; Ludgate, 1997). This is particularly the case where the effective performance of the scope of employment does not readily translate to the use of telework. For example, manufacturing or service industries may require physical presence at a work site. Telework may not be used as an alternative working arrangement when a disability is not highly restrictive. For example, Peters, et al. (2004) found that those employees whose impairments were not completely restrictive (e.g., requiring a wheelchair), the telecommuting option was neither offered nor accepted at a statistically significant level greater than that of a non-disabled individual. Finally, employers may not force disabled employees to
become teleworkers. That is, employers cannot avoid the legal requirements of making reasonable efforts to provide an appropriate work environment (Ludgate, 1997).

INTELLECTUAL PROPERTY PROTECTIONS AND TELEWORK

The technological capabilities of email allow for the risk of transmittal of sensitive company information with relative ease. Access to companies’ information may be critical to teleworkers’ ability to perform their job functions, but necessarily require the information to be disseminated away from the traditional office (Barlow, et al., 2007). The susceptibility of key processes, patentable technology, trade secrets, and other strategic information to circumvent security measures is of critical concern to managers. Clearly, intellectual property may be vulnerable regardless of where employees work. However, the constant access that is generally afforded to those who work outside of the office enhances the risks that this information could be improperly transferred (Mills, et al., 2001; Raiborn & Butler, 2007; Smith & Tabak, 2009). Proprietary data is constantly at risk with the continuing use of electronic communication inherent in telework, which could severely damage firms’ competitiveness and could potentially lead to legal challenges. Employers are held liable for infringement of intellectual property laws that occur as the result of teleworkers’ activities that occur under the scope of their employment (Martinez-Sanchez, et al., 2008; Mills, et al., 2001; Swink, 2001). Accordingly, consultants cannot ignore the potential legal liability that can ensue if teleworkers are granted a great deal of leeway over the information that is transmitted in the course of their work away from the firewall or other security precautions that may be more prevalent in a traditional office setting.

ENVIRONMENTAL IMPACT OF TELEWORK

One of the benefits related to telework is the reduction of commuting and the associated avoidance of polluting emissions of automobiles (Andreev, Salomon, & Pliskin, 2010; Aundhkar, et al., 2000; Baruch, 2001; Kitou & Horvath, 2008; Mokhtarian, Collantes, & Gertz, 2004; Safirova, 2002; Zhou, Su, & Winters, 2009). These environmental protection influences are tangentially linked to business purposes, such as the generation of good will and corporate responsibility. The external influences of the regulatory requirements of pollution reduction are another contingency factor that is included in the practice of teleworking.

Statutory support has been created to reinforce this benefit. The Clean Air Act (42 U.S.C. 7401) was passed in 1963 in attempts to limit those activities that generate airborne pollution. Under this statute, the Environmental Protection Agency (EPA) is tasked to develop and enforce regulations that will prevent exposure to hazardous levels of airborne contaminants. To the extent that teleworkers are enabled to work from home or an alternate locate that allows them to avoid a daily commute, the associated pollution that would otherwise be generated by the use of their means of travel will be avoided (Aundhkar, et al., 2000; Baruch & Smith, 2002; Harstein & Schulman, 1996; Kitou & Horvath, 2008; Rhee, 2009; Safirova, 2002).

The environmental benefits of telework were more fully recognized as a response to the significant amendment to the Clean Air Act in 1990 (42 U.S.C. 37411). Under these new provisions, corporations were explicitly required to reduce work-related traffic congestion (Guimaries & Dallow, 1999; Handy & Mokhtarian, 1996; Hartstein & Schulman, 1996). Those states with the worst air quality were specifically identified. Corporations with more than 100 employees in these targeted states were required to reduce the number of daily commuters by at least twenty-five percent (Pearce, 2009). However, the enforceability of legal requirements to reduce greenhouse gasses is tenuous, particularly where there is an absence of public transportation, and states are reticent to institute an unattainable mandate (Hartstein & Schulman, 1996).
Companies that operate internationally must contend with pollution constraints as well. International regulations for pollution reduction directly require that telework be considered as a means of traffic control (Larsen & Andersen, 2007; Schweitzer & Duxbury, 2006; Telework in the European Union Report, 2010). Irrespective of the degree of enforcement of pollution standards, the reduced travel resulting from teleworking effectively reduces pollution relating to a daily commute. Further, the current trend to reduce carbon footprints and ozone-depleting impurities may lead to a greater commitment to enforcing these provisions (Kitou & Horvath, 2008).

**PRIVACY AND TELEWORK**

**Constitutional Protection**

The right to privacy, free speech, and protections from unreasonable search and seizure are not specifically covered by the United States Constitution. In fact, private-sector teleworkers are not afforded constitutional protections with respect to the actions of private firms (Nord, McCubbins, & Nord, 2006; Smith & Tabak, 2009). Governmental action is required. As such, teleworking employees of the federal, state, and local governments are able to rely on the U.S. Constitution for statutory reinforcement of these rights. Federal agencies are highly cognizant of the rights that accrue to governmental teleworkers. In 2001, the U.S. government’s General Accounting Office (GAO) prepared a report specifically to identity the potential barriers to telecommuting that private companies face, including privacy issues, intellectual property, health and safety, and international legal considerations. (General Accounting Office, 2001). It is clear, however, that those teleworkers who work for private firms must rely on other statutes or, more frequently, litigation using common law tort actions to seek privacy protections (Nord, McCubbins, & Nord, 2006; Smith & Tabak, 2009).

**Electronic Communications Privacy Act**

The Electronic Communications Privacy Act of 1986 (18 U.S.C. 2510) is the only federal statute that specifically addresses surveillance of electronic communications by employers and the associated privacy protections that can apply to teleworking activities. The statute encompasses virtually all communication facilitated by the use of technology in the course of interstate or international commerce. The law specifically allows an employer to survive privacy claims if it satisfies any one of three specifically delineated exceptions (Smith & Tabak, 2009).

First, if the employer is the “provider” of the equipment used for communication, then the employer is fully able to monitor internet activity. The provider exception includes the employer providing or reimbursing the costs of internet service. Second, the employer is allowed to monitor if there is “consent.” Where at least one party to the communication provides consent to be monitored, then there is no violation of the Act. Employee consents are prevalent with initial logon to employer-provided internet servers (Smith & Tabak, 2009). Third, monitoring can occur in the “ordinary course of business.” The employer may monitor employee communications to ensure quality control, prevent inappropriate usage, inhibit excessive usage, and deter usage not related to authorized purposes (Lasprogata, King, & Pillay, 2004; Rustad & Paulsson, 2005; Smith & Tabak, 2009). Of particular concern in the teleworking environment is the prevention of sexual harassment and discrimination (Beasley, Seubert, & Lomodavid, 2001). Monitoring of electronic communication is often the only way to detect and prevent this highly inappropriate behavior.

Electronic communications are not only capable of being monitored by supervisors, but also are subject to recording and/or archiving for future scrutiny by employers. These memorialized conversations are also subject to discovery in legal proceedings. In fact, those who use email in the course of their employment do not enjoy the protection under the Fifth Amendment to be protected from self-incrimination (See, e.g. United States Supreme Court Case, Braswell v. United States, 487 U.S. 99 (1988); Barker, Cobb, &
Karcher, 2009). Maintaining the integrity of electronic documents, including employee emails and recorded telephone conversations may be critically important for continuing operations, but the exposure to potential liability is of concern to employers.

**Litigation of Privacy Concerns by Teleworkers**

Litigation has the impact on constraining managers in the implementation of telework arrangements so that future lawsuits can be avoided. Absent the legal precedents enforced by the court system, the best interests of teleworking employees could suffer potential infringement. The ability of teleworkers to commence lawsuits under common law provides an important recourse against employers who are believed to have acted improperly.

In general, employers are responsible for ensuring that their employees and customers avoid an invasion of privacy, theft of identity or other personal information, or exposure to a hostile working environment (Ambrose & Gelb, 2006; Cohen & Cohen, 2007). Most states recognize the common law cause of action for invasion of privacy. In general, the act of intentionally intruding upon the privacy of an individual if that intrusion would be highly offensive to a reasonable person (Cohen & Cohen, 2007; Nord, McCubbins, & Nord, 2006).

The challenge for human resource managers and consultants who need to protect the firm from suit for invasion of privacy must overcome the presumption that either (1) the employee had a reasonable expectation of privacy or (2) that the intrusion was in fact highly offensive. As indicated above, there are statutory exemptions from this reasonable expectation. For example, where the employer provides the means of engaging in telework, then the Electronic Communications Act precludes a breach of privacy claim. Another example where a privacy claim will not withstand dismissal is when the employee must actively accept the employers’ conditions of use of telework-related technology.

Teleworkers’ use of electronic communication allows managers to easily monitor all communications to the extent they deem appropriate. This monitoring can occur without the knowledge or consent of the employees and is completely technologically feasible (Baruch, 2000). Such control mechanisms may give rise to an invasion of individual privacy of teleworkers in the home environment to the extent that it may be reasonably construed to be an inappropriate intrusion beyond allowable business purposes (Baruch, 2000; Nord, McCubbins, & Nord, 2006; Swink, 2001). Employers can overreach the “business purpose” exception to the Electronic Communications Privacy Act and intrude into employees’ privacy (Smith & Tabak, 2009). Employers can monitor telephone conversations, but only to the extent that they can determine whether the conversation is personal. There is no definitive standard as to when this determination must be made (Nord, McCubbins, & Nord, 2006).

Monitoring of teleworking activities may cause employees to feel that their employers are not acting ethically or morally in how they are treated (Guthrie, 1997; Moon & Stanworth, 1997). Teleworking employees may determine that they are not trusted by their employers (Alder, Schminke, & Noel; 2007; Zweig & Webster, 2002). Accordingly, monitoring of teleworking employees may give rise to privacy concerns, even if these considerations of privacy do not reach the level of legal liability (Potter, 2003).

Employees may determine that employers that act in a manner that is a perceived invasion of privacy are acting unethically (Alder, Schminke, & Noel, 2007; Baruch, 2000; Guthrie, 1997). In addition, monitoring of performance, activities, and communications in conjunction with teleworking activities may heighten the feelings of perceived unethical behavior by employers (Baruch, 2000; Daniels, Lamond, & Standen, 2001; Ellison, 1999). Accordingly, overall productivity can suffer when teleworking employees conclude that the employers’ monitoring of activity and/or communications is excessive.
The legitimate purposes of employers to engage in activities that infringe on teleworkers’ privacy is rife with challenges. Legal liability may result from excessive monitoring of communications or behavior. Even the threat of liability, even if unfounded, can have repercussions on the employers’ reputation outside of the firm. Moreover, teleworkers may perceive that the employers are acting beyond their appropriate capacity and are therefore engendering a lack of trust of those who are working outside of the traditional office environment. Accordingly, privacy considerations require a delicate balance of business purposes that would not exceed a reasonable expectation of privacy that teleworkers maintain in their work environment.

GLOBAL TELEWORK LEGAL CONSIDERATIONS

Regulations, laws, and treaties among countries outside of the United States give rise to additional considerations regarding the teleworking employment relationship. Irrespective of the precedents and guidelines that have been established in the United States, firms that have a multinational presence are subject to many potential variants of telework issues (Baruch & Yuen, 2000; Darbishire, 2000).

The 2010 Telework in the European Union report commissioned by the European Foundation for the Improvement of Living and Working Conditions sets forth specific definitions, guidelines, and requirements regarding telework (Deakin & Koukiadaki, 2007; Larsen & Andersen, 2007; Telework in the European Union Report, 2010). This report involves the laws and regulations of European Union countries relating to issues of telework including (1) voluntary work arrangement, (2) employment safety and work conditions, (3) privacy, (4) data protection, (5) organization of work, (6) accommodations for disabled workers, (7) telework training, (8) collective bargaining rights, and (9) the interrelation of legal and regulatory requirements specific to individual countries that are members of the European Union (Telework in the European Union Report. 2010). All of the countries that are members of the European Union have taken part in this agreement and incorporated some or all of its precepts into formal teleworking guidelines.

Many authors have explored the legal and regulatory implications of teleworking practices in various individual countries. These analyses do not directly stem from the European Union Report of 2010, but rather explore the unique legal requirements that are imposed in each country with respect to the teleworking arrangement. The international telework literature includes broad-based global legal issues (Deakin & Koukiadaki, 2007; DiMartino & Wirth, 1990; Lasprogata, King, & Pillay, 2004; Smith & Tabak, 2009), throughout Europe (Bilevičiūtė & Bilevičienė, 2010; Dimartino & Wirth, 1990; Kamerade & Burchell, 2004; Rustad & Paulsson, 2005), or Asia (Gordon, & Peterson, 1993). Journal articles also have directed a focus on particular countries including: Canada (Montreuil, & Lippel, 2003; Moos & Skaburskis, 2010; Solomon & Templer, 1992), Egypt (Abdel-Wahab, 2007); India (Aundhkar, et al., 2000; Irani, Gothoskar, & Sharma, 2000; Mitter, 2000; Mitter & Sen, 2000), Italy (Baroncelli, 1998; Valsecchi, 2006), Japan (Higa & Shin, 2003; Higa & Wijayanayake, 1998; Hori, 2007; Mitomo & Jitsuzumi, 1999), Norway (Hjorthol, R. J. 2006); Portugal (Nunes, 2005), Spain (Obra, Camara, & Melendez, 2002), The Netherlands (Peters & Van Der Lippe, 2007), Turkey (Iscan & Naktiyok, 2005), and United Arab Emirates (U.A.E.) (Aboelmaged & Elamin, 2009). All of these countries adhere to many of the principles and guidelines as set forth in the United States laws and regulations. However, each country may have unique considerations that require close inspection when engaging in telework arrangements within its borders.

CONCLUSION

As legislation, regulation, and litigation relating to telework continue to expand, management research must consider their implications. Further studies can develop the impact of the legal constraints on managerial and employee behavior. The extent to which the performance at the firm and/or employee
level is impacted with the continuing threat of legal repercussion can be determined over time. It behooves management scholars to consider how legal challenges act as ever-present external influences on managers’ and employees’ ability to reap the benefits of the teleworking arrangement.

The literature review set forth in this paper seeks to shed light on the issues associated with telework as viewed through the lens of contingency theory and those guidelines set forth by law and regulation. Telework research has continued to investigate the means by which telework can increase productivity and provide a means to enhance the work experience of teleworking employees. Policies and practices must conform to the protections engendered by existing law in order to avoid exposure to criminal and/or civil liability. Prudence dictates that employers and managers identify those legal issues that may arise when the teleworking arrangement is considered.

REFERENCES


All of the footnotes and the remainder of the references cited in this paper are omitted due to space considerations. Interested parties are invited to contact the author for a complete copy of the paper.
The Unpopularity of Sachet Marketing in China: Perspectives from Managers and Consumers

ABSTRACT

Purpose – This study aims to investigate the factors that make the huge China market less conducive to the practice of buying products in sachet sizes.

Design/methodology/approach – The investigation involves two studies: (1) in-depth interviews with Chinese managers in five multinational companies operating in China (Procter & Gamble, Unilever, Johnson & Johnson, Amway, and Avon) to understand why these companies have abandoned sachet marketing, and (2) a face-to-face survey of 468 Chinese consumers in two cities of different sizes in China, namely, Shanghai and Zhuhai, to gain insights into consumers’ perception of products in sachets.

Findings – Study 1 finds that multinational companies use sachets mainly for product introduction or promotion. According to the interviewed managers, the relatively higher level of disposable income, historical habits, and inconvenience of frequent purchases are the main factors why sachets are not popular in China. The increasing purchasing power and the monthly salaries of urban Chinese employees provide them with the liquidity to buy products in larger packages. Chinese consumers tend to perceive that products in sachets cost more per unit than do products in regular sizes. Besides, the presence of cheaper local brands make branded products in sachets less attractive. Generally, the Chinese would buy sachets only when they want to try a personal care product.

Study 2 finds that Chinese residents in Zhuhai and Shanghai differ in their agreements to the various reasons for the unpopularity of products in sachet in China. Shanghai participants show significantly higher agreements than do Zhuhai participants to the following reasons:

- I do not like buying products in sachets because I will need to go to buy them often.
- Products in sachets are often more expensive than larger-sized products in terms of price per gram/ml.
- Products in sachet do not provide good value for money.
- Using products in sachet is more wasteful to the environment than larger-sized products (because sachets use more raw materials on the packaging than necessary).
- Sachet packages are harmful to our environment.
- China does not have enough small corner stores to make products in sachet widely available to consumers.
- There is no advertising of products in sachets in China.
- I buy products in sachets only when I want to try new personal care products.
- I buy products in sachets only when I want to try new food products.
- I buy products in sachet only for use while traveling.
In contrast, Zhuhai participants exhibit higher agreements than do Shanghai participants to the following reasons.

- Products in sachets are not hygienic.
- Products in sachets tend to lower the brand image.
- People may perceive me to be poor if I buy products in sachets.

The two samples do not differ in their agreements to the remaining nine reasons. The adjusted agreement scores of both samples range from 2.738 to 5.651 out of 7.

**Originality/value** – There has been little in-depth analysis of the unpopularity of sachet marketing in China. This study fills this gap in research. It analyzes reasons why sachet marketing is not popular in China from the perspectives of both managers and consumers, identifies factors to consider before employing sachet marketing, and provides managerial advices and implications for using sachet marketing successfully.

**Keywords:** China, Consumer Goods, Marketing Strategy, Sachet Marketing, Package Size, Multinational Companies, Distribution Systems, Empirical Research
Issues Concerning the Statutory Duties of Licensed Housing Developers under Section 7 of the Housing Development (Control & Licensing) Act 1966 (Act 118) in Peninsular Malaysia

Keywords: Housing Development Projects in Malaysia, Statutory Duties of Housing Developers, Defaults, Purchasers’ Losses, Legal Remedies

INTRODUCTION

In Peninsular Malaysia, private housing developers who carry out housing development are subject to the Housing Development (Control & Licensing) Act 1966 (Act 118). Parliament enacted Act 118 for the purpose of protecting the rights of the purchasers. In addition, the current aims of Act 118, as enshrined in the preamble and the long title of Act 118, is to provide for the control and licensing of the business of housing development in Peninsular Malaysia, the protection of the interest of purchasers and for matters connected therewith.

In Rasiah Munusamy v. Lim Tan & Sons Sdn. Bhd [1985] 2 MLJ 291(Supreme Court) the appellant purchaser alleged that the respondent vendor orally agreed to sell and transfer to the appellant a double storey terrace house which the respondent vendor undertook to build. The respondent vendor alleged that the oral agreement was not valid under rule 12(1) of the Housing Developers Rules, 1970. The learned trial judge in the High Court held that since only the method or mode of entering into the agreement was in contravention of the law, the verbal agreement was valid and enforceable. Likewise, the Supreme Court, in relation to the enforceability of the oral agreement, held, inter alia, that, although the oral agreement did not comply with the provision of rule 12(1) of the Housing Developers (Control and Licensing) Rules, 1970, the appellant purchaser clearly belongs to a class for whose protection the statutory prohibition is imposed and as such the appellant can enforce his right for specific performance of the oral contract of sale provided he is a bona fide purchaser. Secondly, the Supreme Court opined, in the circumstances of this case, the appellant purchaser could not be said to be a mala fide purchaser. He cannot be deprived of the protection given by the Housing Developers legislation nor is there justification in holding that the appellant purchaser had used the housing developers’ legislation as an engine of fraud. The appellant purchaser has not perpetrated any fraud, legal or equitable, and his claim for specific performance should have been granted. Mohamed Azmi SCJ in this case said at pages 294—295:

“Going back to the dispute on the validity and enforceability of the oral agreement under the Housing Developers legislation, the law on this point as a general rule is that although no action can arise from a prohibited and illegal act, if a plaintiff can show that he is a member of the class for whose protection the statutory prohibition was imposed, then as an exception such a person can enforce rights or recover property transferred under the illegal transaction...Similarly, in the present appeal, the oral agreement entered into between the purchaser and the vendor is prohibited by Rule 12(1) of the Housing Developers (Control and Licensing) Rules 1970 which requires “every contract of sale shall be in writing”, and Rule 17 provides penalty to any licensed Housing Developer who contravenes any of the provisions of the 1970 Rules. Now, what is the nature and objective of the Housing Developers legislation? As stated by Sir Garfield Barwick in Daiman Development Sdn Bhd v Mathew Lui Chin Teck [1981]1 MLJ 56, 60, "Nothing in the rules expressly purports to invalidate a contract which does not comply with the provisions of the rules.... In our judgment although the oral agreement does not
comply with the provision of Rule 12(1), the purchaser clearly belongs to a class for whose protection the statutory prohibition is imposed and as such the purchaser can enforce his right for specific performance of the oral contract of sale provided he is a *bona fide* purchaser. In normal circumstances, these allegations if unexplained would be sufficient to satisfy us that the purchaser is not a *bona fide* buyer and therefore would render the oral agreement unenforceable. But having regard to the whole evidence and in the light of our conclusion that the learned Judge was correct in holding that the repudiation of the contract is not valid, the impact of these four allegations has been whittled down to the extent that we are satisfied that this is merely a case of the pot calling the kettle black. We are of the view that the vendor is more guilty of the alleged unconscionable conduct assuming for one moment that such conduct is indeed unmeritorious and unconscionable. **On allegation (a) that the oral agreement was at the behest of the purchaser, the simple answer to that argument is that the responsibility of having the contract in writing lies on the vendor as licensed Housing Developer. This is clear from Rules 12(1) and 17. It is for the vendor to insist on the written agreement. The fact that the idea of having no written agreement had originated from the purchaser for whatever reason, does not relieve the vendor from prosecution under Rule 17. The legislature has placed on the developer rather than the buyer the responsibility of ensuring compliance with the Rules which *inter alia* includes the requirement of the contract to be in writing failing which the developer is liable to prosecution.** In the circumstances, we do not think that ground (a) would make the purchaser a *mala fide* buyer.”(emphasis added).

**OBJECTIVES**

The main objective of this paper is to examine the statutory duties under section 7 of Act 118 imposed on housing developers in Peninsular Malaysia. Further, this paper will identify and study the issues involving the said statutory duties of the housing developers. It follows that, this paper will suggest ways to overcome the issues and provide better protection to house purchasers.

**SCOPE**

This paper highlights and analyses legal issues pertaining to the law and enforcement of HDA provision in Act 118 in two abandoned housing projects in Peninsular Malaysia. The analysis is done by applying qualitative case study and legal research methodologies over these two abandoned housing projects happened in Malaysia. These two housing projects are:

1) Taman Harmoni, Lot 82, Mukim of Cheras, District of Hulu Langat, at the State of Selangor, Malaysia; and,
2) Taman Lingkaran Nur, KM 21, Jalan Cheras-Kajang, Selangor at P.T. 6443, H.S(D) 16848, Mukim of Cheras, District of Hulu Langat, also at the State of Selangor, Malaysia.

**GENERAL ISSUES CONCERNING HOUSING DEVELOPER'S STATUTORY DUTIES**

The general statutory duties of housing developers are provided under section 7 of the Housing Development (Control & Licensing) Act 1966 (Act 118). The followings are the general statutory duties of housing developers under section 7.

Section 7 of Act 118 reads: In addition to the liabilities and duties imposed in sections 8 and 9, a licensed housing developer shall –
(a) within four weeks of the making of any alterations in or to any of the documents submitted to the Controller...;
(b) exhibit at all times in a conspicuous position in any office..., a copy of his licence, advertisement and sale permit and a copy of his last audited balance-sheet ...;
(c) keep or cause to be kept in his office in West Malaysia such accounting and other records as will sufficiently explain the transactions and the financial position of the licensed housing developer and enable true and fair profit and loss accounts and balance-sheets and any documents required to be attached thereto ...;
(d) every year appoint an auditor or auditors in the manner required under section 9;
(e) within six months after the close of the financial year of the licensed housing developer in question send to the Controller and also publish in the Gazette a copy of the report of the auditor,...;
(f) not later than the 21st day of January and the 21st day of July of each year or at such frequency as may be determined by the Controller from time to time or upon the request of the Controller, send to the Controller a correct and complete statement in writing made on oath or affirmation,..., on the progress of the housing development which the housing developer is engaged in,... until certificate of completion and compliance have been issued...;
(g) where he considers that he is likely to become unable to meet his obligations to the purchasers at any stage of the housing development before the issuance of the certificate of fitness of completion and compliance, forthwith inform the Controller of such fact;
(h) undertake the following -
   (i) within twenty-one days from the date of receipt by the housing developer of the certificate of completion and compliance, submit such certificate to the Controller;
   (ii) within twenty-one days after the date of handing over of vacant possession to the first purchaser of the housing accommodation in the housing development, inform the Controller in writing of the handing over...
(i) inform the Controller of any refusal in the issuance of certificate of completion and compliance;
(j) ensure that the development of the housing accommodation has been carried out in accordance with any requirements prescribed under any law regulating buildings and has exercised all such diligence as may be required for the issuance of certificate of completion and compliance and for the issuance and transfer of the titles to the housing accommodation to the purchasers; and
(k) inform the Controller of the progress in the issuance of separate or strata titles for the housing accommodation and the transfer of such titles to the purchasers at such frequency as may be determined by the Controller beginning from the date of the handing over of vacant possession to the first purchaser of the housing accommodation in the housing development until separate or strata titles for all the housing accommodation have been issued.

It is evident that the above statutory duties have not been fully complied with by the developers. The author perceives that the violations and contraventions of the above statutory duties emanate from the misunderstanding or rather a lackadaisical attitude of the developers toward these statutory duties. What is important for the developers, it is opined, is the procurement of the Certificate of Fitness (‘CF’) or the Certificate of Completion and Compliance (‘CCC’), the Ministry of Urban Well-being, Housing and Local Government (‘MHLG’) and the delivery of vacant possession of the purported completed units to the purchasers on time to avoid any liability to pay the late delivery damages. Similarly, as long as they
can obtain the planning permission, the approved plans, the housing developer’s licences and the advertisement and sale permits, they are safe and secured. Thus, in the result of their failures to fully comply with the statutory duties prescribed by sections 7, 8 and 9 to Act 118, had caused difficulties for the Housing Controller to effectively govern and to give expeditious directions and exercise appropriate actions, to avoid or lessen the problems of abandonment.

It is observed that, MHLG has not been able to fully carry out the supervision and enforcement effectively due to insufficient staff, inadequate professional staff, ineffective administrative machinery and lack of technical and legal knowledge (Ahmad Subki bin Nusi, Interview by author, Pusat Bandar Damansara, Kuala Lumpur, 8 February, 2007 and also based on the observations of the researcher).

**RESEARCH METHODOLOGY**

The author used qualitative case study and legal research methodologies to analyze the data generated from the data sources.

The reason as to why, the author has chosen qualitative case study method is because the author wishes to do an in-depth and detailed case studies of certain abandoned housing projects. In addition, as the nature of the research is of a case study, it warrants the qualitative approach be employed. Qualitative methodology concerns exploring people’s life, histories or everyday behaviour that quantitative research is unable to grasp. Quantitative methodology, on the other hand, limits the information that certain sources could offer. The weakness of the quantitative methodology is that, it is subject to limited variables set out at the outset of the research (Silverman, 2000; Yin, 1994; Yin, 2003).

There may be other social and cultural variables and cultures that have not been contemplated and measured by previous researches or the knowledge of the researchers. The implications of this defect are that, the results produced may not be confident enough and may not represent the true state of the situation under research. It could be misleading and spurious. Much of quantitative research leads to the use of a set of ad hoc procedures to define, count and analyze its variable. On this basis, qualitative researchers have preferred to describe how, in everyday life, we actually go about defining, counting and analyzing (Silverman, 2000).

By using the qualitative method, information gathered will be more and enriching as it involves an in-depth and deeper understanding and study of a particular matter. For example, quantitative research could not answer questions and matters which have not been planned or thought about (Silverman, 2000). In abandoned housing projects, it is evident that there are many information that are un-explorable by simply answering the specific set of sample questions affordable by using quantitative research methodology. These matters include the idea of individual context, experience, feelings and intuitions. Thus, it is suggested that it is more prudent to use qualitative research methodology than quantitative research so that the findings and information would be meaningful and enriching. By using qualitative methodology, many new aspects of problems can be identified and thus, once they are identified, suggestions would then follow, resulting in the research results and findings being more beneficial and practical.

Further, due to the nature of this writing, which is humanistic and subjective, this writing utilized the qualitative research approach.

The sources of data for analysis of the above two case studies are the accessible files of the MHLG, Insolvency Department and District and Land offices. Apart from this, the author also carried out interviews with relevant people. The author also carried out observation in the course of eliciting data and information from the sources. The purpose of observation is to collect information that may not be
obtained through ordinary methods such as file review and interviews. The information include subtle and hidden information, reactions, demeanour, culture, policies and worldviews.

The second type of methodology that the author used is the legal research methodology. This methodology is used to analyse the legal data and information contained the legal data source such as legislations and statutory provisions, case law and the accessible documents that recorded legal events and issues. According to Anwarul Yaqin, legal research means a systematic study of legal rules, principles, concepts, theories, doctrines, decided cases, legal institutions, legal problems, issues or questions or a combination of some or all of them (Yaqin, 2007). The law that involved in this legal research is the housing law concerning HDA as contained in Act 118 and Regulations 1991. The author wishes to know and highlight the issues and grievances that the purchasers faced in abandoned housing projects that are due to the flaws in the HDA provisions. Once the legal issues and problems are identified, the author will suggest certain legal reforms that should be made to render the HDA provisions are more legally protective to purchase.

RESULTS AND DISCUSSION

Case Study 1 - Taman Harmoni, Lot 82, Mukim of Cheras, District of Hulu Langat, at the State of Selangor, Malaysia

The project—Taman Harmoni at Lot 82, Mukim of Cheras, District of Hulu Langat was divided into two (2) phases—Phase I consists of single-storey-medium-cost-terraced houses, while Phase II involved the development and erection of the low-cost flats. The development for Phase I was fully completed, albeit delayed, by the defaulting developer (K&T Development Sdn. Bhd. (‘K&T’)), whilst Phase II had not been commenced at all, except for the preliminary, piling, and levelling works done by the defaulting developer. Thus Phase II was considered an abandoned housing project. This project was a joint venture between K&T, Perbadanan Setiausaha Kerajaan Negeri Selangor (State Secretary of Selangor Incorporated (SUK (Incorporated)), being the land proprietor and Permodalan Negeri Selangor Berhad (PNSB). The major reason leading to the abandonment of the project was the financial difficulties faced by K&T. These difficulties arose due to the lack of skills, experience, and expertise of the defaulting housing developer company (K&T), and the inappropriate selling prices for the units compared to the costs of construction and unforeseen costs (earth works and piling works) faced by K & T (MHLG File Number: KPKT/08/824/6037-1).

This project (Taman Harmoni) was also a joint venture (JV) between K&T, SUK (Incorporated) being the land proprietor, and PNSB. This JV was made effective by a Management Agreement and Power of Attorney (PA) dated 24 June 1992, a JV agreement dated 9 November 1992, a PA dated 9 November 1992, and a Supplementary Agreement dated 4 November, 1993 (MHLG File Number: KPKT/08/824/6037-1).

Fortunately, the project had been revived by the land proprietor—SUK (Incorporated) through their project manager, PNSB—until full completion and Certificate of Fitness for Occupation (‘CF’) were obtained on 1 July 2005. However, the rehabilitation was a loss making venture for PNSB and SUK (Incorporated). Nevertheless, the rehabilitation had proceeded, bearing on the reason that this project was for the social welfare of the low-income group in Selangor. Furthermore, the rehabilitation undertaken was not without difficulties. Among the problems were the civil suit initiated by K&T against the rehabilitating parties, and the problem of getting the required consent from Syarikat Bekalan Air Selangor Sdn. Bhd. (SYABAS), which is the water authority in the state for connecting the temporary water supply while pending on the completion of the final water supply that could take about one (1) year to complete, after which this would enable the purchasers, who had been awaiting for the delivery of vacant possession and occupation of the units for the last 10 (ten) years since the signing of the sales and purchase
agreements to obtain vacant possession, to move into the completed units (MHLG File Number: KPKT/08/824/6037-1).

On the part of the purchasers, the difficulties that they had to bear were the inability to occupy the purported units on time, having to incur other costs such as rents, and inability to get any late delivery compensation from K&T. Pursuant to a resolution passed in the Selangor State Executive Council (EXCO) dated 2 October 1991 on the application of the SUK (Incorporated) to alienate a piece of land formerly known as Lot 82, Mukim of Cheras, District of Hulu Langat, Selangor (the said land) and based on the layout plan as approved by the Selangor State Department of Town and Country Planning, the Council had agreed on the proposal of alienating the said land to SUK (Incorporated). Prior to the application for such alienation, the EXCO had once approved an application for the said land to be developed into a Low-Cost-Housing-Special-Programme on 21 September 1988 (Hulu Langat Land and District office File Number: P.T.D. U.L 1/2/520-91 & Kajang Municipal Council File Number: MPKj PB/KM 2/41-99).

Analysis and Findings
Under the above case study, it is evident that there were some failures on part of K&T to comply with section 7(d) (appointment of auditor), section 9(1) of Act 118 (Responsibility To Audit)—failure to appoint auditor for years 1997, 1998 and 2000 before the project was taken over by PNSB, and section 7(e)—failure to publish the audited accounts in the gazette for years 1997, 1998 and 2000 before the project was taken over by PNSB. The developer failed to submit the progress development reports as required by section 7(f) of Act 118 for years 1997 and 2000, before the project was taken over by PNSB. The developer also failed to inform forthwith the problems facing the project as required by section 7(g) of Act 118 (MHLG files numbers KPKT/08/824/6037-1 and KPKT/BL/19/6037-1).

Case Study 2 – Taman Lingkaran Nur, KM 21, Jalan Cheras-Kajang, Selangor at P.T. 6443, H.S(D) 16848, Mukim of Cheras, District of Hulu Langat, also at the State of Selangor, Malaysia
Taman Lingkaran Nur, Kajang, Selangor above was a result of a privatization project between Saktimuna Sdn. Bhd. (the defaulting developer) (Saktimuna) and the Selangor State Government. The latter was the proprietor of the project land, who later alienated the land to Saktimuna for it to develop into a housing project subject to certain terms and conditions. However, in the course of the development of the project, the project failed and was abandoned as Saktimuna faced serious financial problems due to insufficient sales and revenues generated through sales, and their inability to meet the development and construction costs, which persisted from 1992 to early 2000 (MHLG File Number: KPKT/08/824/4275).

Later the project was taken over by one Syarikat Lingkaran Nur Sdn. Bhd. (SLN)—the first rehabilitating party with the consent of the Selangor State Government and the defaulting developer. Unfortunately, SLN also suffered the same fate, i.e. it was also unable to complete the project due to financial constraints (MHLG File Number: KPKT/08/824/4275).

On the instruction of MHLG and numerous appeals from the aggrieved purchasers, Syarikat Perumahan Negara Berhad (SPNB) had taken over part of the project, i.e. Phase 1A from SLN, with the consent of the Selangor State Government and Saktimuna. Being a government linked company (GLC), SPNB obtained funds from the Ministry of Finance (MOF) to revive the project. The rehabilitation succeeded. However, this rescue was a welfare service, in that the available moneys in the hands of the end-financiers were insufficient to meet the rehabilitation costs. MOF had to top-up funds to ensure the completion of the rehabilitation. During the course of the rehabilitation, there were several problems faced by SPNB, and one of them was the refusal and failure of certain purchasers to give consent to SPNB to carry out the purported rehabilitation works. Thus, not all the units in Phase 1A had been fully rehabilitated and obtained CFs. The remaining phases (Phase 1B and 2), except for Phase 3 which SLN had a joint-venture with Tanming Sdn. Bhd. and it was developed into a completed housing project now
known as Taman Cheras Idaman, have as yet been revived. These phases (Phases 1B and 2) are still in the course of negotiation and study for rehabilitation, both by Saktimuna, the OR (being the Kuala Lumpur Department of Insolvency—Jabatan Insolvensi, Kuala Lumpur) and the new chargee (Idaman Wajib Sdn. Bhd.) (MHLG File Number: KPKT/08/824/4275).

Saktimuna was wound up on 11 March 2005 upon application of the Inland Revenue Board (Lembaga Hasil Dalam Negeri – LHDN) for failure of the developer company (Saktimuna) to settle corporate tax to LHDN. On 11 March 2005, the Official Receiver (OR) being KL JIM, was appointed as the provisional liquidator for the developer company. Later OR was also appointed as the liquidator for the developer company on 12 May 2009 (MHLG File Number: KPKT/08/824/4275; Kuala Lumpur Department of Insolvency file number: JIM(WP)14/2005/A).

Phases 1B and 2 at Taman Lingkaran Nur were vested in Singesinga Sdn. Bhd. (Singesinga) by the chargee lender—Messrs CIMB Bank Berhad (CIMB) in settlement of the outstanding unpaid loan of Saktimuna to CIMB (the chargee lender), through a court’s vesting order (MHLG File Number: KPKT/08/824/4275; Kuala Lumpur Department of Insolvency file number: JIM(WP)14/2005/A).

As at 31 December 2010, there is no rehabilitation or resumption of the housing development project for Phases 1B and 2 at Taman Lingkaran Nur. Nonetheless, recent news is that there is an interested party to buy the whole housing development area at Phase 2 and settle all the damage of the Phase 2’s purchasers. The interested party is Messrs Idaman Wajib Sdn. Bhd. (IWSB), the developer responsible for erecting a housing development project adjacent to Taman Lingkaran Nur (MHLG File Number: KPKT/08/824/4275).

As at 15 April 2008, Phase 1B which consisted of 52 units had been fully sold to public purchasers. The completion stage for Phase 1B is between 0% and 35%, while Phase 2 consists of 108 units where 98 units had been sold to the public. However these 98 units have not been constructed at all (i.e. the project has as yet to commence, abandoned, and the land on which the project is to be erected is still barren and vacant land filled with bushes and scrubs) (MHLG File Number: KPKT/08/824/4275).

As of today, there is no plan to rehabilitate Phase 1B. However, with respect to Phase 2, there is an interested buyer, namely IWSB, to purchase the land in settlement of the redemption sum as prescribed by Sinesinga (the chargee). In this project (Phases 1A, 1B, and 2) the OR, as the liquidator to the wound up housing developer company (Saktimuna Sdn. Bhd), does not rehabilitate the project (Kuala Lumpur Department of Insolvency file number: JIM(WP)14/2005/A; PPT(WP)141/2005/A).

Analysis and Findings
From the above case study, it was evident that the developer did not send the audited reports for years 1988, 1989, 1990, 1998 and 1999 to the appointed auditors in contravention of section 7(d), section 9(1) and section 7(e) of Act 118. The developer also failed to submit the progress development reports for years 1988, 1989, 1990 and 1991 in accordance with section 7(f) of Act 118. This was because there was no development work carried out, due to the problem of the termination of the loan funds from the Government Treasury as the subdivision of the titles had not yet been approved by the State Authority and due to the certification letter from MHLG stating that the project undertaken by the developer was abandoned.

According to the developer, the master title to the land was still in the hands of the lender bank (Bangkok Bank). Thus the developer had to obtain the bank’s consent for the release of the same. Further, the developer had to contact all purchasers to settle the land costs before the lender bank could release the title to them. Once all these had been executed, then could the developer apply for the subdivision of the title (MHLG File Numbers: KPKT/08/842/4275; KPKT/08/824/4275 Jld.2).
The developer also faced some problems with the Division of Housing Loan, Treasury, where in October, 1996, the developer submitted claims to them totalling RM 446,468.00 (57 claims) but only 7 claims had been processed by the Division and paid. Note also that, despite there was an approval of a loan grant of RM 1 million from Mayban Finance Berhad in 1997, the lender froze the facility for two (2) months as the lender had received news from Utusan Malaysia dated 3 June, 1997, informing that the project was abandoned.

CONCLUSION AND RECOMMENDATIONS

It is evident based on the above case studies, the developer failed to comply with the provisions in Act 118 particularly provisions under section 7(d),(e),(f) and (g). Further, despite the fact that, the provisions have not been complied by the developers, MHLG still failed to enforcement the provisions and mete out punishments as prescribed by sections 19 (Offences by a housing developer) and 22 (Liability of director, manager and other officials for offences) of Act 118. Section 19 provides, upon conviction, the developers can be liable to a fine which shall not be less than fifty thousand ringgit but which shall not exceed two hundred and fifty thousand ringgit or to imprisonment for a term not exceeding three years or to both and shall also be liable to a further fine not exceeding five hundred ringgit for every day during which the offence is continued after the conviction. Further, MHLG failed to carry out investigation pursuant to section 10 of Act 118. MHLG also failed to revoke the housing developer’s licence pursuant to section 13 on failure of the developers to comply with the above provisions. The Minister also was found to have failed to invoke sections 11 and 12 of Act 118 for the purpose of safeguarding the rights and interests of purchasers in the abandoned housing projects upon knowing that there were blatant disregard of the laws.

Following the above situations, it is further submitted that, the aggrieved purchasers, in problematic and abandoned housing projects have a cause of action and locus standi to claim legal and equitable reme
dies from MHLG as a public authority, if it is proven that the latter has acted in breach of natural justice, fiduciary, statutory and legal duty and the doctrine of legitimate expectation (procedural and substantive) to act fairly, in good faith and reasonably in failing to carry out the provisions under Act 118.

MHLG may be liable due to any wrongful acts, breach of duties and negligence, in the exercise of the powers conferred by the Act 118. The liability emanates from the principle of vicarious liability. The MHLG’s Minister and officials might have been negligent or in breach of the duties, in that they failed to fully invoke and enforce as well mete out punishment to the defaulting developers.

Apart from the above, the aggrieved purchasers can also invoke section 4 of the Enforcement and Integrity Commission Act 2009 (Act 700) by way of lodging complaint to Enforcement and Integrity Commission to take action under Act 700.

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Issues Concerning the Housing Development Account (‘HDA’) in Peninsular Malaysia: A Case Study of Abandoned Housing Projects

Keywords: Abandoned Housing Projects, Housing Development Account, Issues, Fraudulent Housing Developers, Purchasers’ Losses, Legal Remedies.

INTRODUCTION

Housing is a burgeoning industry in Malaysia. Initially housing was provided by the Malaysian Federal Government in the early days of its independence. Later, the private sector was invited by the government to participate in providing housing accommodation to meet the public upsurges in demand for housing. To govern the housing industry spearheaded by the private sector, the Malaysian Government introduced laws. One of the laws is the Housing Development (Control & Licensing) Act 1966 (Act 118). Nevertheless, despite there are many housing policies and legal means to ensure housing success, there are still issues plaguing housing industry in Malaysia. For an instance one of the big issues is the issue of abandoned housing projects. This issue has been existed since 1970s. Until now, this issue has not been fully addressed and resolved by the government. Many purchasers have become victims in abandoned housing projects, suffered irreparable damage and exorbitant losses.

OBJECTIVES

The objective of this paper is to discuss the issues arising from the enforcement of the requirement that the housing developers in Malaysia must open and maintain Housing Development Account pursuant section 7A of Act 118 and the Housing Development (Housing Development Account) Regulations 1991 (‘Regulations 1991’). The purpose of HDA is to ensure the housing development funds are used for legitimate purposes and not to be abused by the irresponsible parties to the detriment of the house purchasers. This writing is pertinent particularly in the event of abandonment of housing development projects, which hitherto have not been fully resolved by the Malaysian government. By identifying the issues, the author will suggest some proposal to overcome the issues and provide better protection to house purchasers.

SCOPE

This paper highlights and analyses legal issues pertaining to the law and enforcement of HDA provision in Act 118 in two abandoned housing projects in Peninsular Malaysia. The analysis is done by applying qualitative case study and legal research methodologies over these two abandoned housing projects happened in Malaysia. These two housing projects are:

1) Taman Harmoni, Lot 82, Mukim of Cheras, District of Hulu Langat, at the State of Selangor, Malaysia; and,
2) Taman Lingkaran Nur, KM 21, Jalan Cheras-Kajang, Selangor at P.T. 6443, H.S(D) 16848, Mukim of Cheras, District of Hulu Langat, also at the State of Selangor, Malaysia.

GENERAL ISSUES CONCERNING HDA

There are cases where housing developers have abused the requirements under section 7A of Act 118.
According to this provision, all licensed housing developers are required to open and maintain Housing Development Account (HDA). The claim for payment made by the housing developers to the purchasers’ financiers (bank) must be supported by the certificates issued by architects and/or engineers proving that the progress development of the house has been duly carried out in accordance with the requirements of the law. However, despite architects or engineers have evidenced the completion of certain progress development, it is evident that, this duty may not have been done honestly. In other words, there are fraudulent practices by developers, architects, engineers and bank managers to withdraw the available money in the hands of the end-financiers at the expense of the purchasers (Soo Hong & Leong Kew Mooi & Ors v. United Malayan Banking Corporation Bhd & Anor [1997] 1 MLJ 690; [1997] 2 CLJ 548).

There is no provision in Act 118, or the statutory housing agreements (Schedules G, H, I and J) (the said agreement’), or the Street, Drainage and Building Act 1974 (Act 113) (‘SDBA’) or the Uniform Building By-Laws 1984 (GN. 5178/84) (‘UBBL’), which requires the construction works and the progressive claims made by the developers, to be mandatorily inspected and verified by Ministry of Urban Well-Being, Housing and Local Government (‘MHLG’) (the housing authority) and the local authority (the building authority). The amended section 7(f) of Act 118, which requires developers to provide a true periodic statement about the progress development of the housing project, it is opined, is still insufficient for ensuring that the stages of construction have been duly carried out in accordance with the law (Act 118, SDBA and UBBL). This is because, there is no provision requiring a cross-check, supervision and inspection of the construction works to be conducted by MHLG or the local authority. Further, even though there are penal provisions against the developer and the architect or the engineer or the Principal Submitting Person (‘PSP’) pursuant to sections 22E (this section provides penal punishment against the stakeholder who releases dishonestly the purchasers’ moneys), 22F of Act 118 (Progress Certification) and section 70(27) of the SDBA who may have dishonestly released the moneys or provided false progressive certificate for supporting claims, these provisions, it is opined, are still inadequate to prevent the problem. This is because penal action or civil action may take some time to succeed depending on the proofs available and is time-consuming process in court plus other procedural tussles. In the worst situation, the perpetrator housing developers may not have monetary provisions to meet the losses suffered by the purchasers. It is opined, there should be a preventive provision rather than remedial. Likewise, the existence of the new section 7C (Freezing of the HDA), may not provide much help as there is no legal requirement for a cross-check, supervision and inspection against the works done by the developers, MHLG and the local authority.

Further, according to a building lawyer - SY Kok, there are several loose and creative yet cunning devices which the developer can apply to circumvent the above provision, much to the chagrin and the detriment of the purchasers. For an example, the developer can deposit the proceeds of the current project into the former housing development project’s account, and uses it for other unpermitted purpose. There are two further issues in this respect. Firstly, whether the moneys obtained through loan for the purpose of initial works on construction and development sites and for other matters related thereto, prior to the obtaining of the development licence, have to be channelled into the HDA, as well? Secondly, in regard to any administrative expenses (including marketing and advertising expenses) incurred on the housing development, which could be manipulated to the advantage of the developer under the guise of highly inflated or exorbitant marketing and advertising bills or via generous salaries and bonuses for officers and directors of the developers (Kok, 1998, at 160, 161 & 162).

Further there is evident that, in the course of rehabilitation, the rehabilitating parties and the rehabilitation funder stipulate that the funds for the running of the rehabilitation must be monitored by an appointed accountant or a stakeholder. This accountant or stakeholder will control the cash-flow of the funds. This is made through agreement and consent judgment of all parties in the housing development such as the purchasers, contractors, creditors, suppliers etc., to circumvent this statutory duty (i.e. not to open nor to channel the moneys received from the purchasers into the HDA, but to open an alternative trust account.
for facilitating the distribution of various monetary obligations owed by the developer to various third parties). This happened in the rehabilitation of Tingkat Nusantara Lots 300 & 302, Section 9W, NED, Georgetown, Penang (MHLG File Number: KPCT/BL/19/1171-1). Thus, these means are applied for contracting out of section 7A of Act 118 and the Housing Development (Housing Development Account) Regulations 1991 (‘Regulations 1991’). It is opined, the obligation of the developer or the rehabilitating parties to open and maintain as well as to ensure that all moneys received from the purchasers are channelled into this HDA remains enforceable and cannot be absolved. This statutory duty shall also be observed even though the developer’s licence has expired. This is the law laid in Honour Properties Sdn Bhd & Anor v. Duniaga Sdn Bhd [2002] 7 MLJ 203 (High Court). Thus, the agreement or the purported consent judgement which contravenes this statutory duty is regarded as void.

The moneys held in the housing development account (HDA) and held by the stakeholder in the situations as spelt out by section 7A (5)(a)(b) of Act 118 shall be subject to the provisions of, for example—the Companies Act 1965 (‘CA’) and the Income Tax Act 1967. By the insertion of this provision, subject to section 7A(6)(a)(b) of Act 118, if the housing projects are abandoned, the moneys available in this account shall not be withdrawn and used by the defaulting developer for his personal purposes for example, to settle his debts owed to the creditors. However, it appears that, if there were a plan for rehabilitation, the caretaker for the rehabilitation of the project, shall have to apply to the court for the withdrawal of these moneys. Nevertheless, the provision contained in section 7A does not mention the monetary provision to fund rehabilitation and the liability of the defaulting housing developer or MHLG to rehabilitate the abandoned housing project. Further, there is nothing, in the provisions of the said agreements, purchasers’ housing loan agreements and the bridging loan agreements providing these matters either. Section 7A(6)(a) of Act 118 only specifies that, the moneys in the hands of the stakeholder (usually lawyer), official receiver, trustee in bankruptcy or liquidator shall be used in accordance with the provisions of the Regulations under Act 118. Meanwhile section 7A(6)(b) of Act 118 provides that if there is any remaining balance of the moneys after deducting against the obligations and liabilities, the balances shall be given to the developer back. But there is nothing whatsoever, being provided in Act 118 and its regulations nor in the said agreements, that the moneys or the balances, if any, be used for the purpose of the rehabilitation scheme. Likewise, there is no provision serving as legal protection and remedies for the purchasers and the stakeholders, for ensuring the completion of the project through rehabilitation scheme, in the said agreements, Act 118 and its regulations, or even in the housing loan agreements and the bridging loan agreements, in the event, the purported housing project carried is later inevitably, abandoned. It appears, these matters, should be made clear, at least in Act 118 and its Regulations.

RESEARCH METHODOLOGY

The author used qualitative case study and legal research methodologies to analyze the data generated from the data sources.

The reason as to why, the author has chosen qualitative case study method is because, the author wished to do an in-depth and detailed case studies of certain abandoned housing projects. In addition, as the nature of the research is of a case study, it warrants the qualitative approach be employed. Qualitative methodology concerns exploring people’s life, histories or everyday behaviour that quantitative research is unable to grasp. Quantitative methodology, on the other hand, limits the information that certain sources could offer. The weakness of the quantitative methodology is that, it is subject to limited variables set out at the outset of the research (Silverman, 2000; Yin, 1994; Yin, 2003).

There may be other social and cultural variables and cultures that have not been contemplated and measured by previous researches or the knowledge of the researchers. The implications of this defect are that, the results produced may not be confident enough and may not represent the true state of the
situation under research. It could be misleading and spurious. Much of quantitative research leads to the use of a set of ad hoc procedures to define, count and analyze its variable. On this basis, qualitative researchers have preferred to describe how, in everyday life, we actually go about defining, counting and analyzing (Silverman, 2000).

By using the qualitative method, information gathered will be more and enriching as it involves an in-depth and deeper understanding and study of a particular matter. For example, quantitative research could not answer questions and matters which have not been planned or thought about (Silverman, 2000). In abandoned housing projects, it is evident that there are many information that are un-explorable by simply answering the specific set of sample questions affordable by using quantitative research methodology. These matters include the idea of individual context, experience, feelings and intuitions. Thus, it is suggested that it is more prudent to use qualitative research methodology than quantitative research so that the findings and information would be meaningful and enriching. By using qualitative methodology, many new aspects of problems can be identified and thus, once they are identified, suggestions would then follow, resulting in the research results and findings being more beneficial and practical.

Further, due to the nature of this writing, which is humanistic and subjective, this writing utilized the qualitative research approach.

The sources of data for analysis of the above two case studies are the accessible files of the Ministry of Urban Well-Being, Housing and Local Government (‘MHLG’), Insolvency Department and District and Land offices. Apart from this, the author also carried out interviews with relevant people. The author also carried out observation in the course of eliciting data and information from the sources. The purpose of observation is to collect information that may not be obtained through ordinary methods such as file review and interviews. The information include subtle and hidden information, reactions, demeanour, culture, policies and worldviews.

The second type of methodology that the author used is the legal research methodology. This methodology is used to analyse the legal data and information contained the legal data source such as legislations and statutory provisions, case law and the accessible documents that recorded legal events and issues. According to Anwarul Yaqin, legal research means a systematic study of legal rules, principles, concepts, theories, doctrines, decided cases, legal institutions, legal problems, issues or questions or a combination of some or all of them (Yaqin, 2007). The law that involved in this legal research is the housing law concerning HDA as contained in Act 118 and Regulations 1991. The author wishes to know and highlight the issues and grievances that the purchasers faced in abandoned housing projects that are due to the flaws in the HDA provisions. Once the legal issues and problems are identified, the author will suggest certain legal reforms that should be made to render the HDA provisions more legally protective to purchasers.

**RESULTS AND DISCUSSION**

**Case Study 1 - Taman Harmoni, Lot 82, Mukim of Cheras, District of Hulu Langat, at the State of Selangor, Malaysia**

Pursuant to a resolution passed in the Selangor State Executive Council (EXCO) dated 2 October 1991 on the application of the State Secretary of Selangor Incorporated (SUK (Incorporated)) to alienate a piece of land formerly known as Lot 82, Mukim of Cheras, District of Hulu Langat, Selangor (the said land) and based on the layout plan as approved by the Selangor State Department of Town and Country Planning, the Council had agreed on the proposal of alienating the said land to SUK (Incorporated). Prior to the application for such alienation, the EXCO had once approved an application for the said land to be developed into a Low-Cost-Housing-Special-Programme on 21 September 1988. This housing project
The project—Taman Harmoni at Lot 82, Mukim of Cheras, District of Hulu Langat was divided into two (2) phases—Phase I consists of single-storey-medium-cost-terraced houses, while Phase II involved the development and erection of the low-cost flats. The development for Phase I was fully completed, albeit delayed, by the defaulting developer (K&T Development Sdn. Bhd. (‘K&T’)), whilst Phase II had not been commenced at all, except for the preliminary, piling, and levelling works done by the defaulting developer. Thus Phase II was considered an abandoned housing project. This project was a joint venture between K&T, Perbadanan Setiausaha Kerajaan Negeri Selangor (State Secretary of Selangor Incorporated (SUK (Incorporated)), being the land proprietor and Permodalan Negeri Selangor Berhad (PNSB). The major reason leading to the abandonment of the project was the financial difficulties faced by K&T. These difficulties arose due to the lack of skills, experience, and expertise of the defaulting housing developer company (K&T), and the inappropriate selling prices for the units compared to the costs of construction and unforeseen costs (earth works and piling works) faced by K&T (MHLG File Number: KPKT/08/824/6037-1).

This project (Taman Harmoni) was also a joint venture (JV) between K&T, SUK (Incorporated) being the land proprietor, and PNSB. This JV was made effective by a Management Agreement and Power of Attorney (PA) dated 24 June 1992, a JV agreement dated 9 November 1992, a PA dated 9 November 1992, and a Supplementary Agreement dated 4 November, 1993 (MHLG File Number: KPKT/08/824/6037-1).

Fortunately, the project had been revived by the land proprietor—SUK (Incorporated) through their project manager, PNSB—until full completion and Certificate of Fitness for Occupation (‘CF’) were obtained on 1 July 2005. However, the rehabilitation was a loss making venture for PNSB and SUK (Incorporated). Nevertheless, the rehabilitation had proceeded, bearing on the reason that this project was for the social welfare of the low-income group in Selangor. Furthermore, the rehabilitation undertaken was not without difficulties. Among the problems were the civil suit initiated by K&T against the rehabilitating parties, and the problem of getting the required consent from Syarikat Bekalan Air Selangor Sdn. Bhd. (SYABAS), which is the water authority in the state for connecting the temporary water supply while pending on the completion of the final water supply that could take about one (1) year to complete, after which this would enable the purchasers, who had been awaiting for the delivery of vacant possession and occupation of the units for the last 10 (ten) years since the signing of the sales and purchase agreements to obtain vacant possession, to move into the completed units (MHLG File Number: KPKT/08/824/6037-1).

On the part of the purchasers, the difficulties that they had to bear were the inability to occupy the purported units on time, having to incur other costs such as rents, and inability to get any late delivery compensation from K&T.

Analysis and Findings
There was no evidence that the developer for Taman Harmoni (K&T Development Sdn. Bhd) had swindled out or siphoned off or had used the moneys received unreasonably in the course of construction to their advantage to the detriment of the purchasers. Even if there had been such a case, the law on the withdrawal of the money from the end-financers’ hands and from the Housing Development Account (HDA) may be abused by the developer in that they might unscrupulously act in concert with the architect, engineer (being qualified persons) and the bank manager for withdrawing the same (Md. Dahlan, 2001 at 157 & 158).
Nonetheless, there is no provision in Act 118, that allows MHLG or the purchasers to verify each and every claim and withdrawal made from the Housing Development Account. There is also no provision imposing MHLG to carry out visual and technical supervision and inspection and verifying each and every stage of construction of the houses and the project during the course of development and cross-checking each and every certificate of completion issued by the architect or engineer (the qualified persons) for supporting the claims in withdrawing the end-finance moneys from the HDA. Further, there is no provision, requiring MHLG to get verification from the local authority concerning the quality and standard of the works done for each and every stage of development so as to comply with the UBBL and the SDBA. Although the developer was obligated to comply with these laws (UBBL, SDBA, NLC and Act 118) according to section 7(j) of Act 118, this obligation can still, arguably, be abused by the developer as MHLG and the local authority do not monitor these laws effectively.

The judicial decision in *Public Prosecutor v Annamaly a/l Naravan* [1989] 1 MLJ 45 (High Court), too could hamper the speedy administrative action undertaken by the Minister or his Deputy for the purpose of safeguarding the interests of purchasers involved in abandoned housing projects. In this case, the High Court negated the right of the Deputy Minister of MHLG in issuing directives to the unlicensed housing developer to refund all the deposit paid by the purchasers. The court held that any such a directive should be sanctioned by court order before becoming enforceable. Thus, this decision has undermined the administrative functions of MHLG for a speedy action and remedy in the protection of the purchasers’ interests, without having to go to court. Further, it is opined, this decision has negated the purpose of sections 11 and 12 of Act 118.

**Case Study 2 – Taman Lingkaran Nur, KM 21, Jalan Cheras-Kajang, Selangor at P.T. 6443, H.S(D) 16848, Mukim of Cheras, District of Hulu Langat, also at the State of Selangor, Malaysia**

Taman Lingkaran Nur, Kajang, Selangor above was a result of a privatization project between Saktimuna Sdn. Bhd. (the defaulting developer) (Saktimuna) and the Selangor State Government. The latter was the proprietor of the project land, who later alienated the land to Saktimuna for it to develop into a housing project subject to certain terms and conditions. However, in the course of the development of the project, the project failed and was abandoned as Saktimuna faced serious financial problems due to insufficient sales and revenues generated through sales, and their inability to meet the development and construction costs, which persisted from 1992 to early 2000 (MHLG File Number: KPKT/08/824/4275).

Later the project was taken over by one Syarikat Lingkaran Nur Sdn. Bhd. (SLN)—the first rehabilitating party with the consent of the Selangor State Government and the defaulting developer. Unfortunately, SLN also suffered the same fate, i.e. it was also unable to complete the project due to financial constraints (MHLG File Number: KPKT/08/824/4275).

On the instruction of MHLG and numerous appeals from the aggrieved purchasers, Syarikat Perumahan Negara Berhad (SPNB) had taken over part of the project, i.e. Phase 1A from SLN, with the consent of the Selangor State Government and Saktimuna. Being a government linked company (GLC), SPNB obtained funds from the Ministry of Finance (MOF) to revive the project. The rehabilitation succeeded. However, this rescue was a welfare service, in that the available moneys in the hands of the end-financiers were insufficient to meet the rehabilitation costs. MOF had to top-up funds to ensure the completion of the rehabilitation. During the course of the rehabilitation, there were several problems faced by SPNB, and one of them was the refusal and failure of certain purchasers to give consent to SPNB to carry out the purported rehabilitation works. Thus, not all the units in Phase 1A had been fully rehabilitated and obtained CFs. The remaining phases (Phase 1B and 2), except for Phase 3 which SLN had a joint-venture with Tanming Sdn. Bhd. and it was developed into a completed housing project now known as Taman Cheras Idaman, have as yet been revived. These phases (Phases 1B and 2) are still in the course of negotiation and study for rehabilitation, both by Saktimuna, the OR (being the Kuala...
Lumpur Department of Insolvency—Jabatan Insolvensi, Kuala Lumpur) and the new chargee (Idaman Wajib Sdn. Bhd.)(MHLG File Number: KPKT/08/824/4275).

Saktimuna was wound up on 11 March 2005 upon application of the Inland Revenue Board (Lembaga Hasil Dalam Negeri – LHDN) for failure of the developer company (Saktimuna) to settle corporate tax to LHDN. On 11 March 2005, the Official Receiver (OR) being KL JIM, was appointed as the provisional liquidator for the developer company. Later OR was also appointed as the liquidator for the developer company on 12 May 2009 (MHLG File Number: KPKT/08/824/4275; Kuala Lumpur Department of Insolvency file number: JIM(WP)14/2005/A).

Phases 1B and 2 at Taman Lingkaran Nur were vested in Singesinga Sdn. Bhd. (Singesinga) by the chargee lender—Messrs CIMB Bank Berhad (CIMB) in settlement of the outstanding unpaid loan of Saktimuna to CIMB (the chargee lender), through a court’s vesting order (MHLG File Number: KPKT/08/824/4275; Kuala Lumpur Department of Insolvency file number: JIM(WP)14/2005/A).

As at 31 December 2010, there is no rehabilitation or resumption of the housing development project for Phases 1B and 2 at Taman Lingkaran Nur. Nonetheless, recent news is that there is an interested party to buy the whole housing development area at Phase 2 and settle all the damage of the Phase 2’s purchasers. The interested party is Messrs Idaman Wajib Sdn. Bhd. (IWSB), the developer responsible for erecting a housing development project adjacent to Taman Lingkaran Nur (MHLG File Number: KPKT/08/824/4275).

As at 15 April 2008, Phase 1B which consisted of 52 units had been fully sold to public purchasers. The completion stage for Phase 1B is between 0% and 35%, while Phase 2 consists of 108 units where 98 units had been sold to the public. However these 98 units have not been constructed at all (i.e. the project has as yet to commence, abandoned, and the land on which the project is to be erected is still barren and vacant land filled with bushes and scrubs) (MHLG File Number: KPKT/08/824/4275).

As of today, there is no plan to rehabilitate Phase 1B. However, with respect to Phase 2, there is an interested buyer, namely IWSB, to purchase the land in settlement of the redemption sum as prescribed by Sinesinga (the chargee). In this project (Phases 1A, 1B, and 2) the OR, as the liquidator to the wound up housing developer company (Saktimuna Sdn. Bhd), does not rehabilitate the project (Kuala Lumpur Department of Insolvency file number: JIM(WP)14/2005/A; PPT(WP)141/2005/A).

Analysis and Findings
Saktimuna Sdn. Bhd (‘Saktimuna’) was proven to have claimed and withdrawn the purchasers’ moneys in the housing development account dishonestly in conflict with section 7A and the Housing Developers (Housing Development Account) Regulations 1991. In receipt of the complaints lodged by purchasers, MHLG requested Saktimuna to return all the payments dishonestly received but not all purchasers got the purported refund (MHLG File Number: KPKT/08/824/4275). Further, Saktimuna also executed supplementary agreements with some purchasers in Phase 2, purportedly to upgrade the works and materials for the to-be-built-units and required the purchasers to execute the same, costing each of them an additional sum of RM 12,300.00. Thus, the act of the developer had clearly circumvented the law in the statutory sale and purchase agreements and Act 118, in order to get additional funds. In addition, there was no right given to the purchasers to request a stop of the release of the moneys in the housing development account on any breach committed by the developer, considered detrimental to the purchasers’ interests (MHLG File Number: KPKT/08/824/4275).

Further, the author repeats the contentions and elaborations as provided under the first case study above – Taman Harmoni on matters pertaining to:
1) the absence of provision in Act 118 requiring MHLG or the purchasers to verify each and every claim and withdrawal of moneys made from the Housing Development Account;

2) no provision requiring MHLG to carry out inspection, verification and inspection over each and every stage of construction and cross-check over each and every certificate of completion issued by the architect or engineer of the developer;

3) no provision requiring MHLG to obtain verification from the local authority over the quality and standards of works done for each and every stage of construction; and,

4) the judicial problem emanating from Public Prosecutor v Annamaly a/l Naravan [1989] 1 MLJ 45 (High Court).

CONCLUSION AND RECOMMENDATIONS

The case-studies reveal the failure of the developers to comply with regulation 8 of the Housing Developers (Housing Development Account) Regulations 1991 and section 7A of Act 118 to the detriment of the purchasers. In order to protect the funds of purchasers still in the hands of the end-financiers from being released dishonestly by the developer working in concert with the qualified persons/PSP or other parties, it is proposed that the claims, the construction stages and the works as prescribed in the statutory standard contract of sale (Schedules G, H, I and J) done shall also be verified, supervised and inspected by the Housing Controller. This is to ensure that each and every stage of construction and the works are duly completed in accordance with the law, and that the approved specifications and plans and that the developer’s claim is a true claim. The claim made by the developer for release of the money in the Housing Development Account, shall also be accompanied by the certificate from the local authority or the technical agencies, as the case may be, certifying that the erection of the building is in accordance with the requirements of the law (such as the SDBA and UBBL).

In consequence, a new provision has to be added to section 7 of Act 118 and Regulation 8(1) of Regulations 1991, imposing a duty on the Controller to undertake reasonable periodic inspection and supervision over the progressive development/construction stages and the works as prescribed in the statutory standard contract of sale and purchase (Schedules G, H, I and J). The provision shall also provide the right of purchasers to independently supervise and inspect the construction stages and the works done and grant power to request the end-financiers to stop any release of money to the vendor developer, if the works done are not according to the law.

To grease the implementation of the above suggestions, it is proposed that, MHLG should also open up branches in each and every district in Peninsular Malaysia, where housing development projects are carried out. The statutory duties as prescribed by Act 118 and its Regulations, can be effectively carried out by the branches’ officers. These duties include, for example, the processing of the applications for housing developer’s licences, applications for advertisement and sale permit, implementing full enforcement of the provisions in Act 118 and carrying out supervisions and inspections of each and every stage of construction in the housing development projects erected within that particular district, without having to call on the MHLG head-quarter’s officers in Putrajaya to carry out the same, which may not be practical and expedient. Only urgent and classified matters are to be handled by the MHLG headquarters. Most of the statutory duties provided in Act 118 would be executed by the branches’ officers. Thus, by having this administrative reform, it can make the above proposed duties to be efficiently and effectively undertaken.

The local authority shall also have to undertake supervision and inspection to cross-check the quality and standard of works during and after the course of construction of the building units and infrastructures. It is suggested, section 70D (1)(a) of the SDBA be amended and a new sub-section shall be added.
Following the above amendment, for the purpose of issuing the Certificate of Completion and Compliance (CCC) pursuant to section 70(20) of the SDBA, and the new by-law 25(1) and (2) of the Selangor UBBL, the PSP, must also get the certification from the local authority or the technical agencies.

In conjunction with the above proposal, section 95(2) of the SDBA needs to be repealed. This is to ensure the works executed by the local authority are done in accordance with the law and reasonable practice. The repeal is to ensure the works done by the local authority are made in a professional way. Further the development of the law in New Zealand, Australia and the United Kingdom has shown that the local authority no longer enjoys this immunity (Invercargill City Council v Hamlin [1996] 1 All ER 756, [1996] AC 624; Sutherland Shire Council v Heyman & Anor [1985] 157 CLR 424; 60 ALR 1; Sutherland Shire Council v Becker 40370/05, 2006 NSWCA 344 BC200610573; Winnipeg Condominum Corp No 36 v Bird Construction Co Ltd & Ors [1995] 121 DLR (4th Ed) 193). For the above purpose the schedule of works, stages of construction, flowcharts and plans for the whole development of the intended building and project shall also be submitted to the local authority for approval. It is suggested that this additional requirement be put into practice or a new by-law 3(3) for the UBBL be enacted.

Thus, by having the above provisions, the quality of building works and materials used for the construction of the building and project under the housing development would be in accordance with the requirements of the UBBL, SDBA, the building standard practices/guidelines and Act 118 (especially in accordance with the terms and conditions stipulated in the statutory standard sale and purchase contract). Further, the progress claim and release of the end-finance money are made after duly reasonable supervision, inspection and certification by the local authority and the technical agencies. Thus, this practice and legal requirement could preserve the money from being manipulated dishonestly by unscrupulous developers, engineers, architects and the bankers as that happened in Taman Lingkaran Nur.

Finally, the judicial decision in Annamaly a/l Naravan, is much regretted as this would hamper the speedy administrative action initiated by the Minister or his Deputy for the purpose of safeguarding the interests of purchasers, involved in abandoned housing project, invoked vide sections 11 and 12 of Act 118. Thus, this decision has marginalized the meaning of these provisions.

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Sutherland Shire Council v Heyman & Anor [1985] 157 CLR 424; 60 ALR 1;
The Influence of Organizational Commitment on Building Organizational Branding: Conceptual Framework

Keywords: Organizational Commitment, Employer Branding, Employer Brand Association, Employer Brand Loyalty, Organizational Culture, Organizational Identity.

INTRODUCTION

In today’s business environment, firms know that employees are their inimitable assets and that they should be considered an endowment from the labor market to the firm. Theorists and practitioners of this subject have inferred that organizations are structured by three main paradigms: (1) organizations are social systems in which activities are ruled by social work laws and psychological laws; (2) organizations are formed based on people’s common interests, through which management and employees work in collaboration to achieve organizational objectives and individuals’ goals; and (3) organizations endeavor to recruit and maintain good employees through ethical practices and stable job environments (Davis and Newstrom, 2002). Hence, an organization’s success depends on having a constant and skillful workforce who can be self-motivated and bring quality and human commitment as an added value to the organization (O’Malley, 2000). To achieve this indispensable objective, therefore, successful organizations continually strive to implement an effective human resource management strategy.

Various research studies show that organizational commitment has continued to be a subject of great attention since the early 1950s, when it was introduced into the field of organizational behavior (Mathieu and Zajac, 1990). Theorists and practitioners speculate that the influence of strong organizational commitment can bring benefits to any company, such as improved performance, organizational efficacy, low turnover, and reduced absenteeism (Meyer and Allen, 1997; Mowday, 1998; Cooper-Hakim and Viswesvaran, 2005). Even though abundant literature has corroborated the benefits of organizational commitment, it is still not clear how the organizational factors are connected with commitment or contribute to its development, or how these organizational factors can be controlled to endorse it (Kacmar et al., 1999). An organization’s prosperity depends on having a solid, secure talented work force, which can add value to the organization’s operations and structure. To realize these priorities, therefore, organizations have renovated the role of human resource management strategy and studied its relation to employer branding. The employer brand puts forth an image showing the organization as a good place to work (Sullivan, 2004). Many firms have developed formal employer branding or are interested in developing such a program. This project aims to identify and measure the notion of organizational commitment and link the elements of that commitment to employer branding.

LITERATURE REVIEW

Development of Organizational Commitment

The main focus for industrialists at the dawn of the 20th century was on how to manage their employees to maximize productivity and profit by applying Taylor’s scientific management theories (Wagner-Tsukamoto, 2008). Even though application of Taylor’s method boosted productivity and compensation, it created high levels of stress and excessive employee turnover, because workers were expected to surpass their normal working objectives (Stoner, Freeman, and Gilbert, 1996). However, through the outcome of Hawthorne’s studies in the 1930s, managers detected that employees increased productivity when they were given personal attention, even when working conditions were inadequate (Muldoon,
Because of the positive outcomes, therefore, organizational psychologists began investigating employees’ behavior, which resulted in several theories on job satisfaction and motivation, such as Maslow’s Hierarchy of Needs (Maslow, 2000), Herzberg’s Two Factor theory (Herzberg, 1957), and Theory X and Theory Y of McGregor (Sorensen and Minahan, 2011; McGregor, 1960).

By the 1970s, organizational commitment had achieved broad popularity, especially in the United States (Allen and Meyer, 1990). This advance was spurred by shortage in productivity, demotivated workforces, and tough competition that American industries were facing from foreign companies and industries, especially those in Japan (Lincoln and Kalleberg, 1990). Hence, an interest in organizational commitment stemmed from the prominent management practices at that time in Japan, where employee organizational commitment was observed to be the most competitive advantage boosting organizational prosperity (Vaszkun, and Tsutsui, 2012; Luthans et al., 1985).

There was a consistent lack of consensus on one unified definition for organizational commitment. Mowday et al. (1982) accentuated that researchers and practitioners from different fields who were investigating organizational commitment were applying their own personal interpretations to the subject, thereby increasing the difficulty of formulating a unified understanding of the subject of organizational commitment. O’Reilly and Chatman (1986) inferred that some researchers imposed a pattern of formulating their own organizational commitment definition rather than elaborating one of the existing definitions. The consequence is that commitment theory is characterized by redundancy and contamination, leading to weak theory development.

Theorists inferred that commitment is different from the notion of motivation or general attitude. Commitment can direct individuals to act in a manner that, from the perspective of neutral observers, is contrary to their own self-interest – for example, a part-time employee in the corporate sector can perform at a high level of productivity even though he or she has no job security (Meyer et al., 2002). On the other hand, some studies have concluded that organizational commitment should be viewed as one-dimensional (Porter et al., 1974), while others have concluded it is multi-dimensional (Allen and Meyer, 1990). More confusion resulted from the use of two approaches to describe the notion of organization commitment: an “exchange approach” and a “psychological approach”, in what became known as the behavioral and attitudinal schools of thought.

Meyer and Allen (1991) responded to the confusion over the definitions of organizational commitment by disseminating a model of three components of organizational commitment that describes commitment as a process that reflects a desire, a need, or an obligation to sustain rapport with the organization. In a nutshell, there are numerous points of conformity and discrepancy on the definition of organizational commitment. The major definitions of commitment usually assert that commitment is a stabilizing and an obliging force, and (b) gives direction to behavior (e.g., limits freedom, connects the person to a course of action).

**THEORETICAL APPROACH TO ORGANIZATIONAL COMMITMENT**

Organizational commitment research has experienced a clear dichotomy between three schools of thought: the social exchange theory, the attitudinal commitment, and the behavioral approach (Aryee, Budhwar, and Chen, 2002 and Mowday et al., 1982). In addition, a few researchers have demonstrated the multi-dimensional nature to organizational commitment (Reichers, 1985). These diverse approaches to the study of organizational commitment are discussed next.

**Social Exchange Theory (Individual Organization Exchange)**
The core idea of social exchange theory is the act of reciprocity, which stipulates that people should support or help those who have supported or helped them (Gouldner, 1960). Therefore, the social
exchange theory can reflect the relation between employees and the organization that is based on social or economic exchanges (Aryee et al., 2002). The economic exchange mechanism at work has been described as an individual–organization exchange relationship, in which the individual exerts effort and loyalty to an organization in exchange for certain features of his or her employment – so long as these are in line with the individual’s preferences (Porter et al., 1974). The social exchanges are non-obligatory actions, which can be initiated by the organization’s treatment of its employees with the expectation that these same employees will reciprocate with actions favorable to the organization. To simplify, according to this approach, employees join an organization bringing particular knowledge, skills, and goals, linked to the expectation of a work environment where his or her knowledge and skills will be used and goals fulfilled. The employees’ perception of beneficial rewards will result in increased commitment towards the organization (Mello, 2002; Daley, 2002). On the other hand, any failure by the organization to deliver satisfactory rewards in exchange for the employees’ efforts will lead to declining commitment to the organization (Martocchio, 2009).

To implement the social exchange theory, employees respond to desirable working conditions by paying back in ways that are beneficial to the organization and to their colleagues, such as with high commitment, increased job effort, and low turnover (Mowday et al., 1982). In practice, this could support the brand image of the organization as an attractive work environment in which build a career. Hence, such a condition will help to attract more well-qualified employees to work at these organizations where it can enhance the performance. On the contrary, employees react negatively to dissatisfying working conditions by holding negative work attitudes demonstrated by absenteeism, tardiness, low morale, job dissatisfaction and reduced organization commitment (Crede et al., 2007). In summary, the exchange theory speculates that the concept of commitment stems from employees’ satisfaction with the rewards and beneficial working conditions offered by the organization.

**Attitudinal Commitment**

The second approach to the study of organizational commitment perceives commitment as the individual’s psychological attachment to the organization. The attitudinal commitment speculates that if the employee’s values and objectives agree with those of the organization, then the commitment flourishes (Mowday et al., 1982). This approach, referred to as the affective commitment, has dominated the subject for more than three decades. Porter et al. (1974) defined it as “the identification of an individual and involvement in an organization, where this commitment is characterized by three major factors: (a) strong belief in and acceptance of the organization’s goals and values; (b) a willingness to exert major effort on behalf of the organization; and (c) confident desire to sustain organizational membership.” As an example, Google’s has the 10 percent rule, where engineers are allowed to use 10 percent of their working hours on anything they prefer in order to enhance their innovative ideas. In addition, for any employee who dies while working for Google, their family 50% of their salaries every year for the next decade. Such practices will flock different talents and fresh graduates to seek employment at Google, and to maintain the current employment for long-term career.

Meyer and Allen (1991) defined attitudinal commitment as the employees’ emotional attachment to, identification with, and involvement in the organization. According to this definition, therefore, attitudinal commitment speculates that employees are involved in a form of psychological bond with the organization. The outcomes of such a relationship between employees and the organization are increased work productivity, lower absenteeism, and reduced turnover. In another approach to explain attitudinal commitment, Wiener (1982) depicted that the employee’s commitment can be an outcome of adopted normative pressures by the company, not of rewards or retributions. An employee with strong normative commitment may feel obliged to strive to fulfill organizational goals.

The main difference between the exchange theory and the attitudinal approach is that in the former, employees give-and-take their loyalty and commitment in return for incentives from their organization,
while the latter approach emphasizes that employees willingly commit themselves to the organization and its welfare, regardless of reciprocal treatment, believing “it is the right and moral thing to do”. The focal point for this approach is that the commitment results from personal considerations by the employee before joining the organization, such as family and cultural socialization or the organization’s values, but not rewards and remunerations (Wiener, 1982). This feeling of indebtedness may come from the support the organization offers employees, such as tuition reimbursements, training, and career development programs. Hence, the ethical obligation of repayment might be motivating the employee until she or he considers the debt paid (Meyer and Allen, 1997).

To summarize, it is proposed that employees with affective or attitudinal commitment are attached to organization’s goals and values, while normative commitment results from the smooth alignment of the employees’ and the organization’s goals and standards, so that the employees feel ethically obliged to repay.

Behavioral Approach
Practitioners generally agree that the origin of behavioral commitment can be traced to Becker (1960), whereby the behavioral approach perceives commitment as an instrumental factor rather than a psychological one. The focal point of this approach is that employees remain with their organization because the cost of leaving would be high. To compare attitudinal and behavioral approaches to commitment, Mowday and his colleagues (1982) distinguished between them as follows: “Attitudinal commitment or affective commitment focuses on the practice by which an employee comes to think about his/her relationship with the organization. […] Behavioral commitment, on the other hand, relates to the process by which individuals become locked into a certain organization and how they deal with this problem.” The behavioral approach is now referred to as continuance commitment.

Becker’s studies in the 1960s delineated the structure of the behavioral approach as one type of commitment that is engaged in a consistent line of activity where an employee remains with the organization because of the accumulation of “side bets” that would be lost if the activity were discontinued. To simplify, this type of commitment reflects the benefits correlated with continued participation and the cost associated with leaving the organization.

Continuance of commitment reflects a type of relation in which, over a period of employment, certain costs increase, making it much more difficult for the employee to leave the organization. Hence, the greater the costs and investment, the more difficult the disengagement becomes. Becker (1960) labeled these costs as “side bets,” where an individual acts in a committed manner because previously irrelevant situational factors had now become agents of influence or “investments” in the individual's present actions (e.g., pension plan, family requirements, desirability of work location, seniority, extended holidays). Because an employee views these side bets as rewards and benefits, accepting a different job becomes undesirable.

Hrebiniak and Alutto (1972) expanded the side bets concept, viewing commitment as a phenomenon of exchange and accrual that was "dependent on the employee's perception of the ratio of inducements to contributions and the accumulation of the side bets or investments in the employing system." This approach also accentuated the organization’s role in offering side bets to employees, to lock them into continued employment through promotion and private pension plans. Alternatively, continued commitment could result in reduced rapport between an employee and the organization. Employees might wish to seek a challenge in a new workplace, but cannot afford to do so because of the risk of losing their side bets. Just to keep their jobs, therefore, these employees might perform their duties only at the organization’s minimum requirement rather than perform them in the manner of the affective and normative commitment. For example, an employee might feel he will lose status and seniority if he leaves a law firm, or an employee might be reluctant to leave his current workplace because he will lose
the major sum of his indemnity if he resigns. The critical issue with continuance commitment is that it can maintain employees not willing to offer their full potential, an outcome that can negatively affect job behavior and customer service.

This research investigation is based on Meyer and Allen’s (1997) conceptualization of the three types of organizational commitment. First, the affective commitment reflects the emotional attachment to, identification with, and involvement in the organization from the employee’s perspective. An employee with high affective commitment is attached to an organization because he or she wants to be. Second, the continuance commitment refers to “an awareness of the costs affiliated with leaving the organization,” such as loss of job position, community status, or pensions. Consequently, an employee with a high level of continuance commitment is loyal to the employer because he or she needs to be. Third, the normative commitment, the last component of Meyer and Allen’s multidimensional model of commitment, reflects “a feeling of obligation to continue employment.” Therefore, employees with normative commitment are convinced they ought to stay with an organization because, from their consideration, it is “morally right” to do so for the benefit of the organization (Meyer and Allen, 1997). Figure 1 depicts Meyer and Allen’s three types of organizational commitment. This research will identify the influence of these commitments on employer branding.

**Figure 1: Multi-dimensional Model of Commitment**

"I stay because I want to."

Affective Commitment

Continuance Commitment

Normative Commitment

"I stay because I have to."

"I stay because I ought to."

**ORGANIZATIONAL COMMITMENT, MULTI-DIMENSIONAL APPROACH**

The three approaches of organizational commitment – the social exchange, attitudinal and behavioral approaches – describe different views of commitment such as psychological attachment, loyalty to the organization, and costs attached to leaving the organization. Mowday et al. (1982) inferred that the three approaches are not mutually exclusive but are interdependent, and stated that there is an incessant cyclical relation between the three types of commitment. Mathieu and Zajac (1990) also claimed that the three approaches are not completely distinct concepts and that the measurement and influence of each contains elements of the other. For instance, an employee might join an organization because of attitudinal
commitment but, through time and rewards, remain there long-term because of the accumulated side bets resulting in continuance commitment.

Meyer and Allen (1984) carried out the first real comprehensive study that explored the multidimensionality of organizational commitment, and introduced the notion of continuance commitment alongside the concept of affective commitment. Afterwards, by checking numerous commitment studies, Allen and Meyer (1990) concluded that organizational commitment consists of three general paradigms: affective attachment to the organization, perceived costs related to leaving the organization, and an obligation to stay in the organization. These paradigms became known in the contemporary literature as Affective, Continuance, and Normative commitment, respectively. Allen and Meyer (1990) developed the most prominent measurement scales for organizational commitment – the Organizational Commitment Questionnaire (OCQ). Using the three dimensional organizational commitment measures (multidimensionality of organizational commitment), this questionnaire was successful, having acceptable internal consistency, so it was adopted in various studies in American and other Western contexts. In addition, the OCQ is progressively gaining momentum in non-Western cultural and business contexts.

On the contrary, different forms of commitment have been recognized and measured in several studies, such as those by Angel and Perry (1981), and Jaros et al. (1993). For example, Jaros and colleagues referred to the three dimensions of commitment as moral, affective, and continuance commitment. As already discussed, the use of different constructs and measurements caused confusion in examining the notion of organizational commitment. In summary, this study adopted the most prominent and valid measurement of organizational commitment. Allen and Meyer’s multi-dimensional constructs consist of three dimensions: affective commitment, reflecting employees’ psychological bond and identification towards their organizations; normative commitment, reflecting employees’ loyalty and moral obligation to sustain employment in their organizations; and continuance commitment, recognizing the costs associated with employees leaving their workplace.

EMPLOYER BRANDING

The American Marketing Association defines a brand as “a name, term, sign, symbol, or design, or combination of them which is intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors” (Al-Kwifi and Ahmed, 2015). Brands are highly valued assets that are often considered as the central output of brand management. Firms focus their branding activities on product development, but branding can equally be utilized in human resource management. “Employer branding” consists of the application of branding principles to human resource management. Employer branding is used to attract employees and to assure that current employees are actively engaged in the culture and strategy of the organization (Schein, 1985). Hence, employer branding seeks to differentiate the firm’s characteristics as an employer from those of its competitors; it also seeks to promote the organization both internally and externally (Schneider, 1987). For many years major Japanese companies had a corporate culture and a corporate identity that created employer branding, and their employees definitely exhibited very strong organizational commitment. The Japanese people generally are very hard-working and efficient. During the post-World War II period, “Japan Incorporated” thrived and flourished, and workers had total job security and remained in the same company for their entire working lives.

Employer branding has been defined as “a targeted, long-term strategy to manage the awareness and perceptions of employees, potential employees, and related stakeholders with regards to a particular firm” (Sullivan, 2004). Furthermore, the employer brand promotes an image of the organization as a good place to work (Sullivan, 2004). We can observe the increasing usage of the term “employer branding” in books and internet searches as well as in academic research.
Employer branding entails a two-step process. The first step is the creation of the “value proposition” that is to be embodied in the brand. Managers develop a concept of the unique value their company offers its employees by utilizing information about the organization’s culture, management style, qualities of current employees, current employment image, and impressions of product or service quality (Sullivan, 2002). Presented as a true representation of what the firm offers to its employees, the value proposition provides the central message that is conveyed by the brand (Eisenberg et al., 2001).

In the second step of the process, the firm markets the value proposition to its targeted potential employees, recruiting agencies, and placement counselor. External marketing of the employer brand is designed primarily to attract the target population, but is also intended to support and enhance the product or corporate brands. In order for employer branding to be effective, it is essential that the employer brand be consistent with all other branding efforts of the firm (Sullivan, 1999). The employer brand differs from the corporate brand in two significant ways: first, the employer brand is employment specific, characterizing the firm’s identity as an employer; and second, it is directed both internally and externally, whereas product and corporate branding efforts are intended primarily for an external audience.

External marketing of the employer brand is designed to attract the best possible workers by establishing the image of the firm as an outstanding employer. The distinctiveness of the brand is presumed to permit the firm to acquire distinctive human capital. Recruits, having been attracted by the brand, acquire assumptions about the firm’s employment that they then carry into the firm, thus supporting the firm’s values as well as strengthening their own commitment to the firm. The Japanese companies provided many benefits for their employees, including company trips abroad to Europe and the U.S for them and their spouses; free transportation, hotels and meals; and tickets for cultural and entertainment attractions. These company benefits and activities encouraged bonding among employees as well as total devotion to the company, and achieved the ultimate in employer branding loyalty.

Internal marketing cultivates a workforce that other firms are unable to duplicate. The workplace culture is molded around the corporate goals through constant reinforcement of the firm’s value proposition. The firm can then maintain a unique culture focused on doing business the firm’s way. Southwest Airlines is an example of a firm that emphasizes the concept of outstanding workplace culture that competitors have failed to imitate (Anderson et al., 1994). Southwest Airlines focuses on creating a stable distinctive workforce so that it can be a source of competitive advantage. In addition to fostering a workforce that is difficult to replicate, internal marketing also contributes to employee retention (Ambler and Barrow, 1996) by using the brand to reinforce the concept of quality employment, which encourages employees to remain with the organization. Southwest Airlines emphasized the values of fun and teamwork and communicated these values in advertisements to attract potential employees to the organization. In addition, the company’s training and development process through the company’s University offers the needed skills in a unique way and enables employees to bond with the organization’s culture and values.

**Conceptual Framework of Employer Branding**

Figure 2 presents a conceptual framework for understanding employer branding and organizational commitment. According to Figure 1, employer branding creates three principal assets – Brand Associations and Organizational Culture and Organizational Identity.
Figure 2: Conceptual Framework for Understanding Employer Branding and Organizational Commitment

Employer Brand Associations
Brand associations are the thoughts and ideas that a brand name evokes in the minds of consumers (Aaker, 1991). Brand associations often are verbalized opinions, but they may equally well be feelings about a brand, an emotional response, a smell, a taste or other sensation a consumer associates with the brand (Supphellen, 2000). Product-related associations are objective and tangible and relate to functional benefits derived from using a product or service. Other associations may be non-product-related attributes that represent consumers’ mental imagery and inferences about a product rather than what consumers think the product does or has; these associations correspond to the fulfillment of needs for social approval and personal expression. As examples, customers affiliate the Volvo brand with safety, and Toyota automobile recalled a specific car design because of safety problems that reflects accountability and transparency with the customers.

Employer brand association can be similarly defined. Functional benefits of the employer brand are elements of employment that are desirable in objective terms, like salary, pensions, medical insurance, and holiday allowances. Symbolic benefits concern perceptions about the prestige of the firm and about the social-approval applicants expect to enjoy if they work for the firm. For example, McDonalds is seen as having difficulties with the employer brand association, where McDonalds as a work place is observed as having a low-paying and menial-job image. Therefore, we can understand that trust is a two-way street even though there is major investment by firms in employee brand association; still, only 50% of the American workers believe that their employers are open and transparent with them, and only 25% of employees trust their employers at all (Brandemix, 2014). In conclusion, we can understand that potential applicants are attracted to a firm based on the extent to which they believe that the firm embodies the desired employee-related attributes and the relative importance they attach to those attributes. According to Figure 1, employer brand loyalty stems from the brand associations that are an outcome of a firm’s employer branding.

Employer Brand Loyalty and Organizational Commitment
Brand loyalty is the attachment that a consumer has to a brand (Aaker, 1991). A customer who is loyal to a brand is unlikely to switch to another brand, especially when his or her brand makes a change or is weakened by competition from other brands. Loyal customers will come back to pay the premium price despite an increase in price; examples are Apple and Samsung, where the customers are considered their advocates in the social network and marketing activities. Brand loyalty is founded on the positive exchange relationship that develops from the trust established between the product and the consumer (Morgan and Hunt, 1994). Brand loyalty has two dimensions – a behavioral dimension that represents the consumers’ willingness to repurchase the brand, and an attitudinal dimension that represents the consumers’ level of commitment to the brand (Chaudhuri and Holbrook, 2001).
Similar to product brand loyalty, employer brand loyalty is the commitment that employees make to their employer. Also similar to product brand loyalty, employer brand loyalty has two dimensions – a behavioral dimension related to organizational culture and an attitudinal dimension related to organizational identity. Employer branding is often used to foster organizational culture and organizational identity and, in turn, to promote employer brand loyalty. Employer brand loyalty, as conceptualized in the model, leads to organizational commitment. In employer branding terms, organizational commitment means that the worker feels an attachment to the organization as it is presented in its employer brand. While brand-loyal customers continue to purchase a product, even under less favorable circumstances, brand-loyal employees remain with the firm, even when conditions might prompt them to seek other employment. To summarize, brand loyalty in this paper is proposed as leading to organizational commitment. We therefore put forth the following hypothesis.

H1: Employer Brand loyalty enhances the development of organizational commitment

Organizational Culture and Organizational Identity/Organizational Commitment

Organizational culture is linked to normative commitment. The culture embraces the basic assumptions and values learned by the members of the organization, passed on to newcomers, and becomes evident by the ways people behave in the workplace (Schein, 1985; O’Reilly, 1989). Culture serves as a guide for employees to conform to the behavior patterns of other workers. In their work on corporate cultures, Deal and Kennedy (1982) and Peters and Waterman (1982) suggested that culture and commitment are inextricably bound, while specific types of culture contribute to increased levels of organizational commitment (Goodman et al., 2001). A vital task for managers is to develop and maintain a productive and supportive organizational culture. Within the organization, internal marketing efforts are designed to create a culture that reinforces desirable work behaviors and supports individual quality of work life. To accomplish these goals, firms promote the existing “value” of the corporation’ culture and sometimes utilize the internal marketing to influence culture changes. We can therefore observe that there is a nexus between normative commitment and the organizational culture that is one part of the employer branding.

Organizational identity is linked to affective commitment. Organizational commitment is the attitudinal factor in employer brand loyalty. Defined by Albert and Whetten (1985) as that which is central, enduring and distinctive about an organization, organizational identity is the mental image of the organization held by its members, and can be viewed as the affection towards the company as a group. People desire to identify with their organization, and they will do so if they consider the organizational identity to be attractive or unique (Dutton et al., 1994), and therefore, organizational identity can be seen as linked to affective commitment. The more positive the identity and the more it contributes to self-esteem, the more workers will identify with the firm (Dutton et al., 1994). Affective commitment is directly proportional to the sense of identification with the organization (Crewson, 1997). Organizational identity is constructed within the organization, but it is the result of its interactions with both internal and external constituencies (Gioia, 1998). Management can mold insiders’ perceptions of organizational identity using organizational goals, policies, and practices (Gioia et al., 2000). Managers can shape the organizational images held by employees, and therefore they can fundamentally shift the way insiders view the firm (Scott and Lane, 2000), but those images must ultimately be consistent with employees’ own experiences within the firm. The organizational culture and organizational identity that are derived from employer branding are believed to influence organizational commitment.

H2: Organizational Culture effect the development of organizational commitment
H3: Organizational Identity effect the development of organizational commitment
FURTHER RESEARCH DIRECTION AND MANAGERIAL IMPLICATIONS

In this paper we discussed a research agenda for proposing brand loyalty, organizational culture, and organizational identity as an influence on organizational commitment. The research needs to focus on how corporations develop the concept of employer branding and address the following questions: What mechanism is involved? What human resource policies and procedures should be implemented in order to enhance the employer branding that, in return, will lead to the three hypothesized factors?

Given that branding is usually linked to marketing function, what key role should the marketing activities play in the development of employer branding? If the marketing activities tend to be involved in the development of employer branding, then how should the marketing and the human resource interdependent actions be managed? The focal question is whether employer branding leads to better performance by the firm. Finding the relation between human resource management and the firm’s performance is more straightforward, such as linking human capital training and development to a better performance by the firm (Wright et al., 1994). On the other hand, do firms emphasize employer branding experience more than they do the firm’s performance, or improved recruitment outcomes, or lower turnover?

Linking employer branding and what stems from it, such as brand loyalty, organizational culture, and organizational identity, is a new approach to recruiting and retaining employees, and improving the performance of the human assets within an employment environment. Managers and leaders can use employer branding to align employee recruitment, retention, and talent management into a coordinated human resource strategy. Employer branding can be the mediator that links all of the major human resource activities in one human resource strategy rather than have each process act alone. As for management researchers, employer branding can be used to interrelate the aforementioned human resource activities into a valuable framework for strategic human resource management.

The implication of this relation between employer branding and organizational commitment from a theoretical perspective drives a new field of study, where researchers can observe the interaction of employer branding with human resource functions such as recruitment, training, retention, and succession planning. Within the multinational firms operating in the global arena, where branding became the key player term in marketing as well as in management function, management scholars and practitioners can research and utilize this relation in order to emphasize the brand employer and invest it in attracting talented employees. For example, as product brands carry slogans positioned in the mind of customers, the same strategy can be used with the firm’s mission statement where employees believe in and are attracted to the firm’s mission statement (Seiders et al., 2005).

The technological innovations were imitated mostly between competitors, such as the smart phone and the tablet industry; on the other hand it is becoming obvious within the talent management practitioners that employees are the only asset that cannot be imitated. The employer branding can play the key role in attracting and retaining the best employees (Keller, 1993). Investing in talent management can be the common work between the functions of human resource management and employer branding, where both can invest in enlarging both the image of the firm through the firm’s brand image and the employees’ quality and image in the labor market.

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INTRODUCTION

Several studies have exhibited an augmented interest in exploring consumer behavior using functional Magnetic Resonance Imaging. These studies were concentrated on identifying the association between certain brands and specific activation area in the human brain (Santos et al., 2011; Paulus and Frank, 2003). Research findings from these studies could have important implications for theory and practice. In specific, results will entice to marketing managers who are troubled with defining the antecedents that impact consumer selection of their brands and the best marketing tactics that boost consumer retention and encourage new customers to adopt their brands (Venkatraman et al., 2012).

Previous studies investigating issues related to brands evaluation using fMRI have shown a noticeable advancement, where recent work in cognitive neuroscience proposes certain neural correlation for object processing in specific regions of the brain (Frith and Frith 2001; Gallagher and Frith 2003). Later, Deppe et al. (2005) suggested that vmPFC is central in the processing of emotions during decision making when comparing brands, whereas brain regions associated with working memory can sustain reasoning at reduced activation levels. From a marketing prospective, the issue of customer brand loyalty is crucial for maintaining the long-term success of firms, especially those producing high technology products. Such products are characterized by rapid pace of technological change, which require intensive market research to evaluate consumer preferences (Al-kwififi and McNaughton, 2013), and rapid rate of integrating new features with more capabilities.

The main objective of this study is to propose a new approach to investigate the factors behind consumer attitude toward brand switching, using functional Magnetic Resonance Imaging, whereas most previous studies on brand switching used conventional marketing research approaches to investigate this behavior. Also, to further elucidate the role of the vmPFC in detecting consumer brand switching behavior, in particular for high technology brands. In this study, two smartphone brands can be used as a high technology product, namely Apple and Samsung.

LITERATURE REVIEW

Considerable research has already explored Neuromarketing and reported important findings, which in turn improved theory development and managerial practices. However, recent advances in neuroimaging technology, particularly the fMRI technique, have encouraged researchers to explore brand assessment from the neuroscience prospective (Schaefer et al., 2006; Klucharev et al., 2008; Esch et al., 2012). Plassmann et al. (2012) provided a broad review of past and current studies on consumer neuroscience and its potential applications for academics and practitioners. They indicated that fMRI is widely used as a powerful technique for studying consumer psychology related to branding, because it has high sensitivity to brain responses to stimuli (brands). By combining research findings from different studies, they determined the brain regions that reflect brain responses to different stimuli used in the consumer decision making, and found that the vmPEC was responsible for product evaluation during the fMRI experiment, as shown in Figure 1. Generally, previous research findings have enhanced our understanding.
The Potential of Neuromarketing in Exploring Consumer Behavior: Proposed Model and Implications

The main goal of this study is to explore the role of fMRI technology to investigate variations in brain activation during the decision making process to switch from one high technology brand to another, and define the factors that causes the most activation. Although previous work also focused on the influence of generic products, this study is the first attempt to explore brand switching behavior using high technology product through fMRI experiments. The proposed model can be tested on a group of

of the brain regions responsible for processing information and decision making (Santos et al., 2011; Yoon et al., 2006; Paulus and Frank, 2003).

Figure 1. Determining brain regions involved in consumer decision making

Many studies have confirmed the importance of the ventromedial prefrontal cortex region in human decision making (Fellows and Farah, 2005; Hsu et al., 2005). Using the well-known Coke and Pepsi brand drinks, McClure et al. (2004) combined behavioral taste tests with an fMRI experiment to investigate the neural responses that connect with the behavioral preference for Coke and Pepsi. They found coherent neural activation in the vmPFC that associated with individuals’ behavioral preferences for these drinks. Later, Chib et al. (2009) suggested that the brain uses a common area, inside the vmPFC, for decision value framework when making decisions between primarily different types of rewards.

There is mounting evidence suggesting that vmPFC region of the brain processes basic information about the relative value of options, predicting a direct role for this region in explaining decision making behavior of a person. Yoon et al. (2006) conducted fMRI experiment to investigate whether semantic judgments about products and humans are processed in similar ways. They found that consumers process descriptive judgments on products in a different manner than they process judgments on humans, a finding that emphasizes the brand personality concept and shows how our brain uses distinct regions to process brands. Other studies conducted in parallel have indicated that consumer behavior can be anticipated by defining the likely decision processes consumers will engage in a given context (Simonson et al., 2001; Weber and Johnson, 2009); for example, how consumers will react to different brands in a shopping mall as they search for their favorite items. Fellows and Farah (2007) tested twenty-one patients with vmPFC impairment to determine the importance of the fMRI in decision making under conditions of uncertainty. They found that this region of the brain is essential for all kinds of task selection, both uncertain and certain.

The main goal of this study is to explore the role of fMRI technology to investigate variations in brain activation during the decision making process to switch from one high technology brand to another, and define the factors that causes the most activation. Although previous work also focused on the influence of generic products, this study is the first attempt to explore brand switching behavior using high technology product through fMRI experiments. The proposed model can be tested on a group of

Note: ACC (anterior cingulate cortex), dlPFC (dorsolateral prefrontal cortex), IOFC (lateral orbitofrontal cortex), mOFC (medial orbitofrontal cortex), NAcc (nucleus accumbens), vmPFC (ventromedial prefrontal cortex), VS (ventral striatum). Figure adopted from Plassmann et al. (2012).
volunteers who participate in an fMRI experiment. The following section explains the theoretical model of the study and the hypotheses, and provides a detailed description of an fMRI experiment. Potential research implications are discussed.

THEORETICAL FRAMEWORK AND RESEARCH HYPOTHESES

The proposed model is a simplified version of Consumer Acceptance of Technology (CAT) model. The simplified model was selected because the full model cannot be validated using an fMRI experiment, given its many variables that could make the fMRI experiment more complicated and lead to more challenges in study interpretation (Amaro and Barker, 2006; Huettel et al., 2008). The suggested model accounts for cognitive and affect factors and their influence on switching attitude. Several studies have found that both cognition and affect play an important interactive role in the decision-making process (Forgas, 1995; Forgas, 2001; Zajonc, 1980). As defined by Bagozzi et al. (1999), affect is not a particular category of psychological process but a general mental feeling encompassing moods, attitudes, and emotions. They also highlighted the separate but interacting relationship between the two mental functions of cognition and emotion.

The CAT model, proposed by Kulviwat et al. (2007), is widely referenced in the literature and appears to be the most replicated and empirically cited model in the area of technology acceptance (Lin et al., 2007). The CAT model was developed to account for cognition as well as affect factors that influence attitude and, therefore behavior, in the consumer context. In this model, consumers may switch to another high technology smartphone brand not only to take advantage of its additional useful benefits but also to enjoy the new experience it offers. The CAT model was never tested using an fMRI experiment; therefore, the following sections explain how consumers perceive and adopt the technology based on related studies from conventional literature.

Hedman and Tscherning (2010) developed the emotion cognition behavior model, which includes stimuli, emotions, emotional response and cognitive processes as latent variables and intention to buy as a predictor to test the role of emotions. They used their model to test the adoption of the iPhone in Denmark. Their results showed a link between emotion and cognition whereby positive emotions triggered the constructs of cognitive process “compatibility” and “image”. Positive emotions were also shown to predict “intention to buy”.

Research Hypothesis
Perceived Usefulness. In the consumer context, perceived usefulness is defined as consumers’ perceived likelihood that using a technological instrument will benefit them in the performance of some task and will lead to some functional outcomes (Kulviwat et al., 2007). A significant body of research has shown that perceived usefulness plays an important role in determining attitude and behavioral intentions. Numerous studies have shown that perceived usefulness positively affects attitude towards behavior (Gentry and Calantone, 2002; Childers et al., 2001). The positive effect of perceived usefulness on attitude and behavioral intention was also observed in the use of smartphones (Kang et al., 2011). Yangil and Chen (2007) found that as perceived usefulness of the smartphone increases, the desire to buy that smartphone also increases. Since assessing perceived usefulness has a risk component, where the usefulness of the other brand might not be as high as expected, we expect that the vmPFC would experience more activation during decision making (Tom et al., 2007), as a result of high uncertainty during the task selections process (Fellows and Farah, 2007). Thus, we rationalize that the more the consumer perceives the usefulness of the other smartphone as high, and so long as its functionalities carry substantial benefits to the performance of the device, the less the associated risk and the more activation of the vmPFC, due to attitude toward switching to that other smartphone. Based on this argument the following hypothesis is proposed:
Hypothesis 1: The higher the perceived usefulness of the other smartphone, the greater the activation of the vmPFC when making the decision to switch to that smartphone.

Pleasure. Mehrabian and Russell (1974) suggest that customers’ emotional reaction to stimuli or environments, whether positive or negative, can lie along the three dimensions of “Pleasure Arousal Dominance” (PAD). Scholars have studied the effects of these dimensions on attitude and behavioral intentions, but the results are not consistent. Kulviwat et al. (2007) used the PAD paradigm to describe the effect of affective responses on attitude towards IT, and therefore on IT acceptance. Their results revealed that pleasure and arousal significantly influenced attitude; however, they found no support for the effect of dominance on attitude.

Wang and Scheepers (2012) found that pleasure affects attitude. However, they found no support for the relationships between arousal and attitude and between dominance and attitude. Since most of the previous studies found that pleasure has the strongest influence on attitude (Mummalaneni, 2005), the pleasure dimension was selected in this study. Pleasure encompasses positive emotional responses to stimuli, such as satisfaction, enjoyment, and happiness. It is verbally measured by the extent to which an individual reports feeling pleased versus annoyed, relaxed versus bored, happy versus unhappy, satisfied versus dissatisfied, relaxed versus bored, contended versus melancholic, and hopeful versus despairing (Mehrabian and Russell, 1974). Consumers with positive feelings toward the new product are more likely to have a favorable attitude towards it; and thus the more activation of the vmPFC, due to attitude toward switching. We propose that what consumers feel regarding the other smartphone will play a role in positively affecting attitude towards switching to the new smartphone.

Hypothesis 2: The higher the level of pleasure consumers feels toward the other smartphone, the greater the activation of the vmPFC when making the decision to switch to that smartphone.

METHODOLOGY

Since this study is proposing to use the fMRI technique, which entails complicated processes to measure the neural signal from brain and complex procedures to analyze images and get results, we intended to present information in this section in simple format, in order to give readers a better understanding of the study methodology. Most of the technical details are referred to in specific references.

Pre-experiment Preparation
The purpose of this session is to develop the stimuli to be used in the fMRI experiment. Participants who owned a smartphone from Apple or Samsung can be invited to this session, in order to identify the appropriate keywords that reflect the two independent variables in the proposed model: perceived usefulness, and pleasure. Each participant can be given a list of items (actually words) that represented each variable, and asked to rank these items as the most relevant in describing each variable. The list of items that related to perceived usefulness was selected from (Lin, et al., 2007; Kleijnen et al., 2004, Davis et al., 1989), whereas the list of items linked to pleasure was assembled from (Mehrabian and Russell, 1974). After collecting information from participants and sorting them, the four most-related words that echoed each variable can be determined.

Pre-Scan Screening
Before starting the fMRI experiment, study participants should be instructed about the MRI imaging procedure, in order to become familiar with the experiment protocol. This step is important because MRI scan is very sensitive and repeating it can be hard and expensive. Also, depending on the type of smartphone a participant is using, whether Apple or Samsung, we could apply the appropriate fMRI experiment for each participant. If an individual owned an Apple brand, he is presented a set of images.
during fMRI scan about the other brand (Samsung), in order to record his responses toward this brand.

**Imaging Session**

During an fMRI experiment, participants are asked to lie still on their back in an MRI scanner, where their head is inserted into a special coil that submits and receives the radio frequency waves. During an fMRI scan, the changes in blood oxygenation in the brain that happen in response to neural activity are detected. When a brain area becomes more active it consumes more oxygen, and to supply this increased demand for oxygen, blood flow to the active region increases (Buxton, 2002). This change in a specific region causes variations in local magnetic properties, leading to small differences in the MRI signal from the blood depending on the degree of oxygenation. Since blood oxygenation varies according to the levels of neural activity, these differences can be used to detect brain activity. This form of MRI is known as blood oxygenation level dependent (BOLD) imaging. Based on this mechanism, fMRI is able to produce activation maps showing which parts of the brain are involved as a response to a stimulus (Buxton, 2002; Huettel et al., 2008).

During the fMRI scan, the participant lies motionless on a bed in the MRI scanner for approximately 60 minutes. Generally, the initial 10-15 minutes are used to collect images of the brain anatomy, which are used to define the region where fMRI data is collected. During the initial stage, participants remain motionless and do not perform any task. Next, the actual fMRI experiment is run using a special pulse sequence. During the experiment, participants can see different stimuli through special goggles. An event-related fMRI experiment can be used to test the proposed model (Amaro and Barker, 2006). The event-related design is widely used because it allows for recognition of neural activity related to short, discrete stimuli (Liu et al., 2001). For each participant, the order of stimuli (images) is arbitrarily assigned. The baseline data is collected during the resting state (Gusnard and Raichle, 2001).

Each image with a specific word is attached to a specific brand name. For example, participants who own an Apple smartphone are presented with images related to the Samsung brand, so that we can record their switching attitude toward the other brand. The participant recorded his attitude to switch into the brand that he experienced during the imaging session by pressing the button on a hand-held device. Pushing the button indicates that the participant *likes* the idea of switching to a new brand, because otherwise the participant would record no response, meaning he *disliked* the idea of switching (Ajzen and Driver, 1992). The hand-held device can be used to record attitude toward switching.

**fMRI Data Analysis**

The analysis of functional brain images can be implemented using different available softwares. Regardless of the selected software, the following procedures have to be implemented. Initially, the data is first pre-processed to account for motion correction, because a participant might have moved his head inside the scanner during data acquisition. All images of each participant are realigned to the first volume acquired from the same subject, and this is followed by the standard procedure of image normalization, registration, and spatial smoothing. Full descriptions of procedures relating to brain image transformation can be found in standard references (e.g., Huettel et al. 2008; Brett et al., 2002). Then, the fMRI images are analyzed using t-test, which generates a statistical parametric map based on a significant test computed for every voxel. Next, the statistical map is transferred to the anatomy images to show which regions of the brain exhibited activity greater than a certain level of statistical significance. Usually, these images are displayed using color scale to indicate the degree of significance.

**POTENTIAL IMPLICATIONS**

This research could contribute to the literature on brand switching by exploring this topic from a new prospective. In the proposed study, marketing research and neuroscience are combined to find how a consumer’s brain processes brand information related to perceived usefulness and pleasure, in order to
reach an attitude to adopt a new brand. This information could enhance our understanding of the process by which the human brain perceives information about a brand and where information is processed in the brain, and it represents a new methodological tool to monitor mental processes without asking consumers directly for their views, insights, or assessments, and consequently, it can offer access to concealed information (Ariely and Berns, 2010). On the other hand, some consumers might prefer not to reveal their actual attitude toward some product or service, or they might find it difficult to express their feelings appropriately using conventional marketing assessment approaches. At this point, fMRI scan could easily detect consumer attitude and access the difference across various consumer groups. For marketing research and brand management, this field of consumer neuroscience can help to acquire new information about the psychology of branding and lay the foundation for new explorations in this field.

Recognizing the proper market segmentation standards poses challenges for brand managers. For example, the major marketing research failure that faced Coca Cola (Schindler, 1992) occurred when the responses of consumers and tests had failed to depict the emotional intensity of the major market segment, leading to significant drop in market share of Coca Cola due to brand switching to the sweeter tasting Pepsi. Since consumers’ preferences for brands result from a combination of many factors, fMRI can be used to identify some of these factors that come from features associated with each brand (McClure et al., 2004), while factors could be direct attributes of consumers themselves. Venkatraman et al., (2012) suggested that fMRI can be used effectively to implement market segmentation by providing new insights into individual differences in consumption behavior and brand preferences.

For a high technology product, managers should realize the most influential factors behind consumer switching behavior. Determining the main antecedents underpinning the decision making process to select a brand is a critical matter for marketers when defining the appropriate strategy to keep their market share from eroding, or expand their market domination. For high technology products, this study suggests that perceived usefulness of the new brand is a major factor in encouraging consumers to switch, which is related directly to product features. In the literature, there is mounting evidence that managers should pay more attention to the influence of product features on brand switching, suggesting that firms must continually launch products with enhanced and unique features (Al-kwifi and McNaughton, 2013; Vriens, and Hofstede, 2000; Zhou and Nakamoto, 2007).

Since brand features are critical for market share, different marketing strategies could be tested to examine their influence on triggering specific brain regions that would be integral to the process of decision making. In practice, this could be accomplished by presenting advertisements that cause an immediate response in consumer brand memories in a way that influences later behavior (Plassmann et al., 2007). Such advertisements could focus on enhancing the perceived usefulness of the brand by showing the unique features and how they add value for consumers (i.e., value proposition). It is also important that customer-service personnel have comprehensive knowledge about product features and capabilities so that they can project the value of all features, to convince consumers to adopt their brand. This issue becomes critical for high technology products, where more advanced features are integrated frequently so that marketing individuals have limited information about the product, because they do not experience it for long enough, or even have no knowledge to link it to consumers’ needs.

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The Potential of Neuromarketing in Exploring Consumer Behavior: Proposed Model and Implications

Proceedings of the 12th AGBA World Congress, Malaysia, November 2015
Page 104 of 1173


Consumer Evaluations of Store Brands: The Case of an Emerging Country (Malaysia)

Keywords: Retailing, Store Brands, Atmospherics, Consumer Evaluation, Consumer Behavior

INTRODUCTION

Retail industry has been showing dramatic change over the years. Due to the advancement of technologies, retail industry has undergone major transformation. Moreover, the growth of competition especially in the consumer market has made retailer more important. At the same time, different business strategies impose immense pressures on the traditional retailing system. Consequently, the intensity of competition among retailers is increasing steadily and significantly. Traditionally and historically, most of the retailers’ revenue was derived from selling manufacturers’ brands; therefore, creating their own brand became a challenging job for the retailers. By developing their own brands, any retailer can increase their profit margin.

Many retailers have been developing their own brands over the years. With the development of retail brands, scholars have been identifying different sorts of relationships between manufacturers and retailers (Segal-Horne and McGee, 1989; Davies, 1994), and between retailers brands, store image and store loyalty (Ghosh et al., 2005; Steenkamp and Dekimpe, 1997; Corstjens and Lal, 2000; Ailawadi, Neslin, and Gedenk, 2001). Likewise, there are many studies available on the theme of consumers’ perceptions toward store brands or retail brand (Jacoby and Olson, 1976; Bellizzi et al., 1981; Cunningham et al., 1982; de Chernatony, 1989; Lichtenstein et al., 1993; Richardson et al., 1996; Baltas, 1997; Grunert et al., 2006). Therefore, in recent years most of the retailers are focusing on the business expansions via retail brand development strategy. For instance, all the giant world retailers, such as Wal-Mart, Tesco, and Carrefour are offering their own brands in almost all major product categories. On the other hand, some retailers are adopting technological infusion in order to provide maximum value to their consumers. It is clear that in the both situations, organizations require huge capital investment. But due to the changing competitive environment, contemporary retailers are focusing on their own strategic weapons and are trying to provide maximum value to their consumers.

Scholars interchangeably use “retail brand”, “store brand”, or the “store brands” for the same use (Burt and Davies 1999). In the first issue of the Industrial Organization on store brands, Scott-Morton and Zettelmeyer (2000) mentioned that store brands are of the interest to both marketers and industrial organizational economists because they entail issues of competition among retailers, and between retailers and manufacturers. The growth of the retail labels is increasing day by day. Retailers are exploring every category of the main product in order to develop their own brand. Therefore, it becomes important to explore for both scholars and marketers about the demographics of the retail label buyers. Some of the important questions include who buy the products? What are the factors influencing consumer buying decision regarding retail brand? How retail brands provide benefit for the retailers? Therefore, this study tries to give the answer of the few important question regarding the consumers’ demographic for the potential buyers of the retail brand.
BACKGROUND OF THE PROBLEM

According to Journal of Retailing special issue of 2004, store brands is wider concept than developing product brand. Similarly, Ailawadi and Keller (2004) postulated that retail brands are multi-sensory than national brands, because store brands have association with the retail image. Therefore, developing retail brand becomes an important part of brand portfolio for the retailers. Moreover, scholars argue that it is the image of the retailer held by consumers that is the basis of the store brands equity (Burt and Davies 1999).

In addition, retail brand gains more profit when minimum promotion is persuaded, and price difference between national and retail brands is high (Hoch and Banerji 1993; Sethuraman 1992). One important hindrance for the retail brand is the perceived risk held by consumers during purchasing (Laroche et.al. 2005). When retail brand becomes more popular, the actual and perceived quality between national and retail brands is reduced (Batra and Sinha 2000). As a result, the scholars focus has shifted from price to other multidimensional considerations. More specifically, scholars give attention to the perceived risk, product presentation issues, product category and retail format consideration while studying the dynamics of store brands.

Perceived risk is defined as the subjective expectation of loss (Peter and Ryan 1976). In some studies, uncertainty and perceived risk has been examined interchangeably. Perceived risk is an important foundation for buying decisions (Dowling, 1999; Laroche et.al. 2005). Hence, more the perceived risk associated with retail brand, less will be market share, because consumers become cautious about their purchasing. It is clear that the involvement of consumers is much higher today than any era in history. Therefore, in their purchasing decisions, consumers always try to reduce uncertainty, posing challenges to the marketers to reduce perceived risks associated with a retail brand.

RESEARCH OBJECTIVES

Much of the previous literature on retail brands has been approached from the point of view of the result or output, such as customer behavior; retailer reactions to competitors; and supplier reactions to retailer brands, even though retailers themselves influence the consumer decision making process, through differentiated strategies. There is, therefore, lack of literature on how the retailers’ development activities such as a buying organization, supplier development, relationships with suppliers, item decisions, distribution, brand naming, packaging, in- store product display, and so on influence retail brands.

Many models have been developed by scholars to identify the relationships between risk behavior and consumption pattern (Mitchell 1998). The relationship between attitude and consumption behavior has been the subject of extensive research described in the consumer behavior and social psychology literature (Burt and Davies 1999; Jin and Suh, 2005; Herrera and Blanco 2011). Our research examines how perceived risk influences consumer attitude and consumption of the store brands. Risk and attitudes may share the same conceptual parameter under spinning that risk perception influences the attitude toward brand. Therefore, our research considers perceived risk as an independent variable and identifies the effect on the buying store brands. Our research provides answers to the following questions:

1. Are there any perceptual difference among consumers toward national and store brands?
2. Is there any price gap between national and store brands?
3. What are the important factors for store brands to be successful?
4. How does perceived risk affect the store brands?
SIGNIFICANCE OF THIS STUDY

There is huge gap of empirical evidence on store brands research as it is a new and promising industry. Our research examines Malaysians’ retail label proneness in order to develop a framework of the determinants that influence purchasing of store brands. Our research identifies the characteristics of the potential consumers of the store brands. Our research measures the perception of consumers toward retail and national brands. Hence, our study’s contribution is vital for the strategic brand management for both retail and manufacturer.

LITERATURE REVIEW

With the increasing brand power used across marketing channels, the position of retail brands has become an increasingly vital factor for retailers as a marketing tool to compete against their direct and indirect competitors.

Retailer Brand’s Roles
The increased share of retailer brands is given appreciable attention, in both its positive and negative aspects, by scholars with respect to the balance between retailer brands and manufacturer brands (Hoch and Banerji, 1993; Mills, 1995; Bhasin et al., 1995; Raju et al., 1995, Richardson et al., 1996). As retailers develop retailer brands with a wide variety of objectives (Cho, 2001), providing detail of these roles would be helpful to appreciate the processes by which retailers make decisions over the development of their own brands.

Consumers’ Perceptions of Attitudes towards Retailer Brands
The extent to which companies understand consumers is a key element in being able to develop successful national brand strategies (Foxall and Goldsmith, 1994; Narus and Anderson, 1996). For these reasons, it is important to identify consumers’ perceptions of national and retailer brands in order to understand what factors retailers should take into consideration from the customer’s point of view. As retailer brands grow in the marketplace, many scholars have paid attention to identifying the characteristics of consumers purchasing retailer or national brands (e.g. Frank and Boyd, 1965; Myers, 1967; Coe, 1971; Burger and Schott, 1972; Bettman, 1974; Murphy, 1978; Livesey and Lennon, 1978; Dietrich, 1978; Murphy and Lacziak, 1979; Bellizzi et al., 1981; Granzin, 1981; Cunningham et al., 1982).

Perceived risk is given much attention as it is regarded as a critical determinant of the consumers’ willingness to buy a brand (Grewal et al., 1994). How to remove perceived risk from the mind of consumers is of common interest for both retailers and manufacturers (Bettman, 1970, 1973). Moreover, Bettman (1974) and Narasimhan and Wilcox (1998) viewed perceived risk as the most important factor determining retailer brand market share.

Compared to national brands, it is widely accepted that retail brands have very higher perceived risk in terms of quality, although many consumers felt that store brand quality was the same or even better than national brands in the blind test carried out by Wulf et al. (2005). Perceived risk can arise from several dimensions such as emotional, social, or psychological (Narasimhan and Wilcox, 1998). Consistent with Narasimhan and Wilcox (1998), risk can be divided into six different sub-risks: financial risk, where consumers believe buying store brands is wasteful; uncertainty or performance risk, that products bought will not function as expected; Social acceptance risk, that buying store brands will damage his or her social status; Physical risk, that use of the product bought will damage consumers’ health; Psychological risk, that buying retailer brands could
make consumers feel unhappy; and time risk, that because of bad product performance consumers will waste their time (Mieres et al., 2006b).

Among all of the above, uncertainty relating to product performance risk and financial risk are the most important for retailer brand, probably due to the perceived lack of reliability of retail brands whereas consumers are likely to view national brands as more reliable (Mieres et al., 2006a). Likewise, as price increases, financial risk increases (Grewal et al., 1994). Similarly, one should remember that the degree to which consumers perceive a risk varies depending on individual demographic or socio-economic contexts (Hawkins et al., 1986). Amongst these risks, it is interesting to note the correlation between price and performance risk. The price of a product is positively correlated to the consumers’ shopping outlay. Financial risk, derived from buying a product can, therefore, be one of the biggest concerns for consumers. With respect to the relationship between price and performance risk, there is a different view. While price is an inherent component of monetary risk, price itself does not always have an impact on consumers’ perceptions (Grewal et al., 1994).

Perceived risk encourages consumers to look for brand related information (Narasimhan and Wilcox, 1998). Given that consumers have a relatively higher perceived risk when buying store brands as opposed to national brands, retailers need to improve information and knowledge of retailer brands. Peterson and Wilson (1985) suggested that a higher pricing will be a good way to reduce risk on the assumption that higher the price the better the product quality. Unlike other findings, however, their findings suggested that price is rarely connected with performance risk (White and Truly, 1989).

With respect to reducing perceived risk among consumers, McGoldrick (2002) noted that the degree of perceived risk can be influenced by the marketing ability of retailers, the consumers’ perceptions of retailers’ overall reputation, and the necessary time that retailer brands have been established in the market. Similarly, Mieres et al. (2006a) suggested that consumers’ perception that retailer brands are secondary alternatives to national brands can be mitigated as familiarity, and that prestige of retailer brands grow from more advertising in order to enhance brand image and retailers’ identity.

THEORETICAL FRAMEWORK

Since the concept of risk was introduced in economics in the 1920s, it has been successfully used in theories of decision making in economics, finance, and decision sciences. Perceived risk has received attention from both practitioners and academics and has been applied in a wide range of areas including intercultural comparisons, food technology, dental services, banking and apparel catalogue shopping (Mitchell, 1998). Perceived risk is “the nature and amount of risk perceived by a consumer in contemplating a particular purchase action”. The businesses need to identify the effects of different types of risks to reduce consumers’ perceived risk in order to serve them better. According to Mitchell (1998), risk analysis can be used in marketing resource allocation decisions as it is more powerful in explaining consumer’s behavior since consumers are often motivated to avoid mistakes than to maximize utility in purchasing and perception risk analysis can be helpful in brand-image development, targeting, positioning and segmentation.

Perceived risk consists of distinct dimensions. For example, Cox (1978) makes a distinction between uncertainty and significance of consequence and suggest two different modes of behavioral responses in an attempt to lower risk. Uncertainty about the outcome can be reduced by acquiring and handling information. Uncertainty about the consequence can be dealt with by reducing the consequences through reducing the amount of stake. According to Bauer (1960), consumer’s behavior involved risk because their purchasing actions “will produce consequences which he/she cannot anticipate with anything approximating certainty, and some of them are likely to be unpleasant”. Perceived risk theory
was initially used by marketing scholars to understand its effect on consumer behavior of marketing purchase decisions under such condition of imperfect information (Bauer, 1960; Cox, 1978; Cunningham, 1967). Cox (1978) argued that in a buying decision, a consumer attempts to identify buying goals, or desired product attributes. Scholars proposed that the consequences from a purchase can be divided into various types of losses: Financial, performance, time, physical and psychosocial. Risk perceptions directly affect purchasing and purchase intention (Mitchell et al., 1998; Rajagopal, 2014).

**Perceived Risk**
The perceived risk concept has come through infancy to adulthood and has established a tradition of research unparalleled in consumer behavior research (Mitchell, 1998). Bauer (1960) originally introduced the construct of perceived risk into the marketing literature, stating that “consumer behavior involves risk in the sense that any action of a consumer will produce consequence which he/she cannot anticipate with anything approximating certainty, and some of which at least are likely to be unpleasant”. Perceived risk is composed of “inherent risk”, which is the latent risk that a product (or retailer) class holds for a consumer and “handled risk”, which is the amount of conflict a product (or retailer) cause when the consumer chooses a brand or a store in a particular buying situation (Bettman, 1973). Perceived risk is defined as the expected negative utility associated with purchase of a particular brand or product (Dunn, Murphy, & Skelly, 1986). The concept of perception risk most often used by consumer scholars has defined risk in terms of the consumer’s perceptions of uncertainty and adverse consequences of buying a product/service. Perceived risk is the loss from a bad purchasing decision, perceived by consumers in a buying situation. Interpretation of perceived risk in negative consequences appears to correspond with a buyer’s perception towards the risk in general, and the attention on the factors concerning buyers in particular. Thus, perceived risk can be considered a negative consequence resulting from the purchase (Stone & Winter, 1987). The level of perceived risk is a crucial factor in consumer behavior (Bettman 1973; Dowling et al., 1994). When uncertainty is high, perception risk increases as consumers engage in different types of risk-reduction activities (Dowling et al., 1994). Perceived risk is powerful at explaining consumers’ behavior because “consumers are more often motivated to avoid mistakes than to maximize utility in purchasing”. Our research has developed a conceptual model for empirically testing in an emerging country (Malaysia). Figure 1 has presented the conceptual model for this study.

**Financial Risk**
Financial risk in store brands contexts is related to the risk that the product will not be worth its cost. Financial risk is more commonly associated with store brands than with national brand because quality is a major concern to store brands (Lee, Park, and Ahn, 2001). Even though retail brands are increasing every day and numerous consumers are buying store brands yet most of the consumers have doubt about the quality of the store brands. Scholars also have attributed financial risks associated with store brands to the lack of trust in the retailer and fear of purchasing wrong products by mistake and not getting right service from product. Financial risks may reduce the sales of store brands. Thus, we postulate that:

**H1:** *Perceived financial risk has significant effect on the buying decision of store brands.*

Figure 1 omitted but would have been here

**Product Performance Risk**
Product performance risk is defined as perceived risk associated with disappointment consumers may experience when the store brands does not meet their expectations. Higher product performance risk is created due to the lack of personal contact during the shopping process (Forsythe and Shi, 2003). The level of product performance risk associated with store brands may also depend upon the type of the product. For example, it may be less risky to buy sports or stationary products which are more

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*Proceedings of the 12th AGBA World Congress, Malaysia, November 2015*  
*Page 112 of 1173*
standardized than products like food products which involve experiential value through taste, healthiness, color, and quality (Bhatnagar et al., 2000; Forsythe et al., 2006). Other product factors influencing product performance risk may include the complexity of the product (e.g., technical complexity of electronic products), ego-related need of the product (e.g., Cologne), and the price of the product. The extent of product performance that is associated with this risk can vary depending on the context. For example, in traditional shopping, some scholars (e.g., Jacoby & Kaplan, 1972) used the term, physical risk to indicate a risk which causes harm to the health of a consumer. The physical risk is associated with the product performance risk in that such harm can be caused by the use of a product that does not function properly nor has errors that can injure the user, which is an issue of product performance. Furthermore, recently, some scholars (e.g., Forsythe et al., 2006) have also extended the definition of product performance risk by including service performance issues such as delivery, warranty and handling payment issues under the umbrella of product performance risk. Therefore, the second hypothesis for this study is given below.

**H2: There is significant effect of product performance risk on the buying decision of store brands.**

**Psychological Risk**
Jacoby and Kaplan (1972) have defined psychological risk as dissatisfaction or mental stress caused due to the purchase of the product by a consumer. The same concept of psychological risk can be applied to retail brand context assuming that consumers can be frustrated thinking about the alternatives before buying store brands products. Such frustration can cause mental stress due to long thinking process. Mental stress may also be caused by the lack of clear information about the product. Although it is feasible that consumers may perceive some psychological risks when they predict such mental stress during buying store brands product, little research has addressed this type of risk in the store brands context, warranting further research. Hence, we postulate that:

**H3: There is significant effect of psychological risk on the buying decision of store brands.**

**Social Risk**
This risk is associated with the opinions of family or friends when buying retail brands. This type of risk implies that the buyer is prompted by thinking about the group that the consumer belongs to principally either friends or family (Jacoby and Kaplan, 1972). Social risk begins with the work, who established that it can make the consumer doubt whether to accept an innovation, such as the purchase of retail brands (Cho, 2001). While the risk in the channel and the risk in the transaction impede consumers to buy retail brands, social risk could make consumers to buy if they consider the importance of buying because their reference groups consider buying store brands product appropriate or fashionable, and most members in the group buy retail brands. Hence, we postulate that:

**H4: There is significant effect of social risk on the buying decision of store brands**

**Store Atmosphere**
A retailer’s in-store atmosphere does influence consumers’ perceptions of a store’s image, whether or not they visit a store, how much time they spend in it, and how much money they spend (Bellizzi, et. al., 1983; Grewal et al. 2003). The impact of the store’s environment depends on the customer’s shopping goals. There are two basic shopping goals; task completion, and recreation. Based on our assumption, the shopping goal of buying new glasses is first and foremost related to task completion. With this in mind, we are now ready to look deeper into which elements that are important when influencing task completion shoppers. In reference to the physical features, good lightning in a store involves more than just simply illuminating space. Lightning can add value to a store atmosphere by highlighting merchandise, sculpting space and capturing a mood or feeling that enhances the store’s image. Having the appropriate lightning has showed to positively influence consumers’
shopping behavior. When consumers are shopping to ‘complete’ a task, they prefer to be in a soothing environment. Hence we postulate that:

**H5:** There is significant effect of store atmosphere on buying store brands

**Price**

Price is the focal in the creation of a store image. Consumers over time create and have a store price perception, which is based on comparing their perceptions of different stores (Sedzro, 2014). Price and promotions are perceived in relative terms at the point of purchase when consumers evaluate different offers and brands placed next to each other on the shelves (Cho 2001; Elg 2003; Evans et al. 2008).

Price perceptions are continuously formed and used by consumers in their decision making process, both in regard of choosing which store to visit and which product or service to buy. When looking further into how consumers perceive price. Price has both positive and negative roles. Price is in the positive perspective related to quality, prestige or status to the consumer, whereas the negative aspect is related to the economic sacrifice, and thereby the monetary expenditure that the consumer must incur in order to make the particular purchase. Hence, we postulate that:

**H6:** There is significant effect of price on the buying decision of store brands.

**RESEARCH METHODOLOGY**

All constructs, except for price, were adopted from Durukan and Bozaci (2011). Four constructs have been used to measure price, which have been adopted from Guenzi et al. (2009).

**Sampling**

The population consisted of all individuals who are frequently doing shopping in the retail stores including Tesco, Giant, and Jusco in Malaysia. To recognize more clearly the population in this study, we redefine the population for this research context. Basically, this research includes those buyers who have the membership card in any of the retail store in Malaysia. In this study, the sample frames were the databases from different retail stores. The commercial sampling frame is the best one available as there are no better alternatives in Malaysia because none of the third party keeps records of retail buyers except retailers. 1000 questionnaire were distributed to different individuals from different retail stores in different places across Malaysia. Out of 1000, 12 responses were invalid because questionnaires were not completed. Hence, this research considered 988 respondents for the final test.

61 percent respondents were females. In this study, most of the buyers were Malaya (52 percent) followed by Chinese (34 percent) and Indian (10 percent). Rests of other respondents hailed from miscellaneous ethnicities. In this sample, most of the respondents had diploma (40.48 percent), followed by bachelor (36.94 percent) and post graduate degree (11.53). Educators showed that most of the respondents were well educated. In relation with occupation, this sample has broad range of presentation. Having different types of occupation, including housewife, students and professional. Therefore, our sample provides adequate perceptual aspect resulting from different occupational groups. With 27.73 percent, IT professional became the highest number of respondents in this occupational category, followed by administrative occupation (23.38 percent). However, 2.32 percent respondents were housewives. Most of the respondents’ incomes for this study were between RM 3001 to RM 5000, followed by RM5001 to RM7000, and RM 1001 to RM 3000. Only 2.22 percent respondents’ income was above 9000. Additionally, 10 percent respondents do not have any income (unemployed).
In relation to marital status, samples show normal distribution. Both married and single status respondents were almost same number. There were 490 single status respondents whereas 485 respondents were married. This characteristic helps us to clarify which group of consumers are frequent purchasers for store brands. It is another important demographic aspect for this study due to assess respondents’ purchasing power and behavior. In this sample, most of the respondents spend between RM 501 to RM1000 for their shopping (39.06 percent). 18.82 percent respondents spend money between RM 1001 to RM1500 and not surprisingly, only 3.64 percent respondents spend more than RM 3000 per month for the shopping.

RESULTS

Buying of Different types of Store brands Product
In order to understand which type of retail brands consumers’ buy, this study asked two questions in section A in the questionnaire. First, we asked do you buy any store brands. If yes then which types do they buy? Among 988 respondents, 586 agreed and said that they buy store brands whereas rests of respondents.

In relation to buying retail brands, our study asked next question as which type of store brands products do you buy? Most of the respondents mentioned that they frequently buy food (543) and toiletries (543) followed by stationary (489), and kitchen material (386) as retail brand. Consumers are not buying retail electronic and cosmetic brands.

Measuring Perceptonal Differences among Different Demographic Attributes
Before examining perceptonal differences, our study measured average perception of respondents towards store brands. Table 1 shows mean and standard deviation for all the perceptonal statement. From the results it is clear that there is a mix perception about the store brands. Many of the respondents considered store brands as cheaper way to maximize their value (4.30). In relation with this, many respondents agreed that store brands helps to save shopping expenses without reducing number of products (3.97). Respondents also felt store brands has lots of variety compare to national brand (4.01). Many respondents agreed with the statement that store brands increase consumers’ purchasing power (4.02). However, many respondents agreed that store brands quality is not as good as manufacturer brands (4.52). Similarly, most of the respondents disagreed that store brands is available everywhere (2.03). Respondents also disagreed that store brands has all types of products (2.10). Rests of the statements, respondents were neutral. Table 1 presents respondents perception toward retail brands.

HYPOTHESIS TESTING

Reliability Test
In order to measure reliability for scale, this study used cronbach alpha. Table 2 shows composite reliability for all the variables. Results indicated that all the observed variables were in the rage of good and excellent. Therefore, this study could be used to pursue further research.
equation modeling. In conclusion, it is clear that data in this study has good reliability. We must include all items for structural equation modeling without dropping one. Table 3 presents unidimensionality for all variables.

Table 3 omitted but would have been here

**Estimating the Main Model**

Table 2 shows the latent variables: social risk, financial risk, performance risk, psychological risk, store atmosphere, price, and buying store brands. The fitness indices demonstrate that the data fit well with the survey data. All overall goodness-of-fit statistics were within acceptable fit as tabulated in Table 4. The normed Chi-square was below 5, with RMSEA and RMR equaling less than 0.10 and 0.08 respectively. This result was supported by the values of normed fit index and other fit indices that were well above the desired level, indicating support for the conceptual model. Consequently, these results suggest that the conceptual model is well and adequately fit.

Table 4 omitted but would have been here

In summary, based on results of model fit, it is clear that conceptual model for this study were well fitted and gives confidence to test proposed hypothesis.

**Hypothesis Testing of the Main Model**

Table 5 shows the results for hypothesis testing including beta value, significant value, and critical value. Results revealed that five out of six hypotheses were significantly supported. Only one variable was insignificant as its significant value was more than 0.05. Not surprisingly, all significant factors have negative effect on the intention to buy retail brands. It was expected because if there is high risk there will be less intention to purchase product.

Table 5 omitted but would have been here

**Financial Risk**

Our study examined financial risk as a risk related with cost against product value. More specifically, how does consumer evaluate brand price compare with brand benefits? Our results reveal that it has significant negative effect on buying retail brands. Meaning thereby that if consumers have more financial risk then consumer will buy less store branded products. These results are also supported by many prior studies (Cunningham, Gerlach and Young 2005; Zhao et al. 2008). They also found a significant negative relationship between financial risk and buying brands. Indeed, financial risk is an important factor for creating brand name among consumer’s mind, because consumers always try to maximize their perceived financial benefits. However, it is really difficult task for marketers to provide proper guideline for evaluating financial risk as it is very subjective in nature. Every consumers’ has his/her own way of evaluating financial risk. Therefore retailers should give proper comparison for enhancing consumers’ buying decision for store brands. Based on our results we assert that financial risk has significant negative association with the intention to buy retail brands.

**Product Performance Risk**

Another important determinant for buying product is product performance. Most of the time consumers become distrustful to purchase non-branded product due to performance risk (Martin, Camarero and Jose 2011; Herrera and Blanco 2011; Mitchell 1998). According to Suki, Ramayah and Suki (2011), product performance is one of the important factor for developing brand image in both
market and consumer mind. Many well-known brands fail due to dissatisfying consumers resulting from bad product performance.

Similarly Forsythe et al. (2006) concluded that providing superior performance is the key for being successful brand in the market. By providing high performance company can easily gain trust from consumers which helps to build a strong brand name among consumers.

Our results were compatible to similar studies. Our results showed that product performance has negative effect on buying store brands. It indicates that if any consumer has confusion about the performance of store brands, they would not buy store brands. In fact, it is the second most important factors among six factors identified in conceptual model. Therefore, without doubt, it can be conclude that in order to insist consumers to buy store brands, retailers must ensure higher performance with their product. So the proposed hypothesis related with product perceived performance has been accepted and can conclude that more the product perceived risk, the less will be intention to buy store brands.

**Psychological Risk**

Psychological risk refers to risk related with mental stress. This kind of risks occurs when consumer does not enjoy information regarding information such as how to use product, expire date, country of origin etc (Guenzi, Johnson and Castaldo 2009). Many studies have acknowledged that it is one of the important hindrance for selecting non-branded products (Ranchhod Gurau and Marandi 2011). Our study showed the similar outcomes and become the fourth important determinants for buying store brands.

Psychological risk showed negative effect on buying retail brands meaning, thereby if the consumers have high psychological risk, consumer will have less intention to buy store brands. Not surprisingly, many scholars mentioned consumers have been cheated with wrong information when they purchase non-branded products (Cho, 2001, Spangenberg et al., 2003). Hence, our proposed hypothesis related with psychological risk has been accepted and can conclude that more the psychological risk the less will be intention to buy store brands.

**Social Risk**

This factor appears in many prior branded researches especially focuses on brand building or developing brand equity (Elg 2003; Evans et al. 2008). In this study, social risk refers as risk of acceptance from society of buying store brands. As human is social based being, they need to interact with society every day. Hence, social risk has significant negative effect on buying store brands. The regression coefficient was -.369 (Figure 2). It indicates that the more the social risk perceived by consumers the less will be willing to buy store brands.

This result is similar with prior research conducted in different countries (Burt and Davies 1999). They also concluded that social risk has negative effect on buying decision. Most of the time consumer accompanied with their friend or family member during purchasing time. Hence selection brand indicated their status, prestige and so on. Therefore, it can conclude with empirical evidence that social risk has negative effect on buying store brands.

**Store Atmosphere**

Another important factor for selection store to buy product is store atmosphere (Kotler and Keller 2010). Surprisingly, this factor does not provide any empirical evidence in this study that this is important factor for buying store brands. Our results do not provide any significant evidence for store atmosphere on buying store brands. In contrast, previous studies mentioned that store atmosphere is important determinant for selecting retailers.
This insignificant association likely depends on research context. In this research, our focal point is intention to buy store brands not selecting retail store. Herrera and Blanco (2011) mentioned that establish brand solely depends on different product and service attribute not retail store. Retail store is just a channel of distribution. Indeed, retailers provide convenience and comfort for consumers place to buy. But selecting product not depends on retail atmosphere. In relation with this, our result also revealed insignificant effect of store atmosphere on buying store brands. Therefore, this hypothesis has been rejected.

Price
The last but not the least determinant for buying retail brand. Many scholars, without having doubt, mentioned that most of consumer buying store brands because of saving money (Cho 2001; Elg 2003; Evans et al. 2008). Similarly, these scholars also added that most of the consumers perceived that less cost is one of the main strength of store brands. In similar fashion, our results revealed that price is the most important determinants for buying store brands with regression standardized coefficient of -.758, indicating the importance of price buying retail brands. As a result, we can reject our proposed hypothesis related with price and conclude that the less the price of store brands the more will be intention to buy.

Table 6 omitted but would have been here

CONCLUSION, MARKETING IMPLICATIONS AND DISCUSSIONS

Numerous studies have acknowledged that Malaysia is a heaven for shopping because Malaysian government provides lots of incentives to consumers to enjoy shopping. For instance, tax rate in Malaysia is relatively low compared to many Asian countries. As result, retail industry has experienced growth for last few decades as high as 6.1 percent from 2009 to 2010.

Malaysian citizens have great passion for shopping. As result every year many retailers’ have been investing huge amount for developing their own retail brand. Hence, our study examined consumers’ perceptions toward retail brands yielding interesting and significant.

Our results reveal that most of the consumers prefer store brands for regular based product. More specifically, they prefer food, toiletries, and stationary and kitchen materials. Thus, consumers prefer store brands on those products which have less value or less expensive. It is clear that most of our respondents used store brands for these types of product rather than cosmetics and electronics. Consumers prefer branded cosmetic or reputed brand as they don’t want to compromise for their skin.

Users of store brands have more positive feeling rather than non-users. Indeed, non-users should have neutral perception toward store brands as they don’t have any prior experience with store brands. However, results for this study revealed that in some aspects both types of consumers have same perception toward store brands. For instance, none of the consumers feel that store brands are available everywhere. Similarly, results also indicated that respondents feel store brands is not as good as corporate brand and store brands do not offer huge product line. Therefore, it makes consumers reluctant to use store brands. For example, during our pilot test, one respondent mentioned that there is Tesco toothpaste but Tesco does not have Tesco mouthwash, which is complementary product.

At the same time, store brands users perceived that store brands enhance consumers’ purchasing power without compromising number of products. In this matter, there is significant difference between users and non-users. This difference likely occurred due to using store brands by the users. More specifically, store brands users have experienced of saving shopping cost with every purchase of store brands. In contract, non-users do not have any experience. Similarly, both groups have
significant perceptual differences toward maximizing purchasing value. Perhaps it could be because of each group of consumers have different value maximizing system. For instance, around 2.5 percent of the consumers around the world is considered as high sensitive consumers. They don’t compromise with quality in every products or services. Whereas almost 34 percent of consumers’ are always concerned about the price of products (Kotler and Armstrong 2010). There is, certainly, different perception toward value maximization process in these two groups. And this difference also existed in the store brands scenario.

Our study provided evidence of being different among different income group (Cunningham et al. 2005; Elg 2003; Suki, Ramaya and Suki 2011). It is not surprising that this difference has existed as many scholars are identified also similar results. This study proved once again that income is an important matter for selecting store brands. Most of the differences existed between below RM 3000 and above RM 3000 income holders. Certainly, unable to articulate that higher income groups belong to above RM 3000, as Malaysian higher income groups considered above RM 10,000. Therefore, it is clear that perceptual differences existed between lower and middle income groups along with higher income group.

Our study also found price gap between retail and national brands in nine product categories. More specifically, higher price differences found in the heterogeneous product category. However, there was tiny price difference in homogeneous product category such as chicken and mutton.

Lastly, our study assessed perceptual differences among different marital status groups. None of the prior research took initiatives to test these differences. However, this attributes could play important role as Mitchell (1998) and Murad, Ennew and Kortam (2011) mentioned that both single and married consumers have different sets of evaluating information which influence ultimate buying decision process. Our study tried to find is there any differences existed among different marital status group in relation with store brands. Results revealed that differences are exited, yet in some aspects all groups are same. In this study, we divided respondents into three main categories based on marital status. And differences were visible between single and married respondents. It is perhaps single consumers have different objectives during purchasing process. Single status consumers are less reactive toward brand. Ahmed, Ghingold and Dahari (2007) mentioned that youth consumers are not as involved as married couple. It could be one of the main reasons for being different perception between these groups.

Our study identified six factors influencing intention to buy retail brands. However, only one factor, store atmosphere, showed no significant effect on the buying store brands. Although many studies identified that store atmosphere is important for purchasing decision, but this study showed insignificant effect on store brands. Unlike store brands, corporate brands is available in everywhere. It can only be available in its specific retail store.

Rest of the results related with other five factors showed significant and expected findings. All the factors identified in our research, had negative significant effect on buying decision of store brands. It is also suggested my many studies that more the perceived risk, less will be intention to buy that brand (Cunningham et al. 2005; Zhao et al. 2008; Evans et al. 2008; Burt and Davies 1999). Among four perceived risk identified by this research, Product performance risk considered as the most important risk by respondents. It also reflected in their perception related store brands quality. Most of the respondents were disagreed that store brands are as good as corporate brand. Based on these results, it is clear that consumers do not have full confidence on store brands regarding the store brands performance. Similarly, financial risks become the second most important perceived risk related with store brands. It indicated that respondents feel it is risky to buy store brands in terms of losing...
money without getting benefits from products. Hence, it can be concluded that more the financial risk less the intention to buy store brands.

Among all the factors in our study, price is the most important factor to purchase store brands. It was not unexpected as many scholars mentioned that retail brand consumers are highly sensitive toward price (Elg 2003; Evans et al. 2008). Price also showed a significant negative effect of intention to buy store brands. It means if the store brands price is high then it will de-motivate consumers to buy store brands. These findings provided secrets of consumers’ perception about retail brands and can be concluded that in order to increase sales of store brands, retailers should set low price compare to corporate brands. Table 7 shows the summary of our study.

Table 7 omitted but would have been here

Marketing Implications

Findings of this study provide significant practical implication for Malaysian retail industry. More importantly, it provides empirical and market oriented evidence for the retailers. This research’s findings will be helpful for the managers of retail store especially who are engaging developing store brands. All important practical implications resulted from this study’s findings are listed below

- Store brands could successfully be established in the category of the product that consumers use almost everyday, such as food, beverage, plastic materials, toiletries, kitchen materials. Precisely, retailers should focus on mostly frequent purchase items.

- Retailers should create good awareness among their members about the benefits of their own retail brands. For example, retailers must convey information to the non-users of store brands that it can help boost their purchasing power. So, retailers must use proper communication techniques with non-users.

- Retailers must ensure availability of their own brand almost every brunch across the country.

- Retailers must offer different range of products with the same types of products. For instance, Head and Shoulder offers dandruff shampoo and it has many varieties in the same shampoo. Strategies should be deployed to increase product depth.

- Retailers must ensure good quality, offer money back guarantee, and product replacement.

- Retailers should provide different types of financial benefits in order to develop their own brands including rebate, discount in bulk purchase, and so on. Moreover, retailers should provide lots of sales promotion for their own products.

- In order to increase awareness among consumers, retailers should design advertisement for different media including TV, Radio, Internet, newspaper, and billboard in order to increase consumers’ involvement.

- In order to enhance distribution system, traditional retailers can transform into e-retailer. It will improve their distribution system. Moreover, this electronic system will bring lots of benefits for both consumers and retailer itself. For instance, if retailers are able to distribute their product or services on the door, as store atmosphere become insignificant, then this system can create huge switching cost for the consumers.
In order to reduce social risk, retailers should do promotion on social based web site such as Facebook, Twitter etc.

In order to reduce psychological risk, retailers should provide assurance of full satisfaction in terms of quality. Moreover, retailers must have good affiliation with third party such Malaysian Standard, ISO etc., in order to reduce risk of product performance.

Every retailer should have advanced customer relationship management system in their business activities in order to maintain a fruitful relationship between retailers and consumers.

Retailers should focus on homogeneous product category as national brands are not able to differentiate their products by offering premium quality with competitive price.

LIMITATIONS AND DIRECTION FOR FURTHER STUDY

Our study has tried to overcome all types of limitations by following scientific research process. However, none of the research is error free in this social science stream. Hence, this research also had some unsolved limitation regarding time, cost and sample. One of the major limitations in this study was getting the quality information from respondents. It was a difficult task for us gets a proper sample frame for the consumers as many retailers do not have up-to-date database for their consumers. Therefore, it was difficult to communicate with the right consumers to investigate.

Drawing sample was another important drawback for this study. We only collected data from Selangor, Kuala Lumpur, Johor Bahru and few urban areas. Therefore, generalizing the perception of Malaysian consumers across the whole country is inappropriate. It provides an area for further research with more sample size from each and every state of Malaysia. Similarly, with this result, it is not appropriate to draw conclusions for theory as this results only measure Malaysian perceptions. In this relation, it is suggested to pursue research with the theme of cross culture effect on store brands.

Another important limitation of this research is that this study never focuses on any specific product of store brands. It considered store brands as general. Therefore, sometimes store brands could be misinterpreted among consumers. Therefore, it is worth to conduct research on any specific store brands. Difference between national retailers and international retailers would be another important area to examine, which never includes in this research.

In spite of these limitations, our study provides an empirical view toward store brands across the setting of an emerging country (Malaysia). This research is one of the few research studies that has examined quantitatively of assessing factors indented to buy store brands. The aims of this study were to measure perceptual difference among different demographic attributes and also to identify important factors influencing intention to buy store brands.

Our results have provided significant insight about store brands from consumers’ point of view. We found that price plays the most important role in insisting consumers to buy store brands. Most of the scholars felt that store brands helps to increase consumer purchasing power without sacrificing number of brands. Furthermore, retailers need focus on their availability and must offer many versions of brands with the same range in order to satisfy different consumers’ needs.

REFERENCES


The remainder of the references and all of the figures and tables cited in this paper are omitted due to space considerations. Interested parties are invited to contact the author for a complete copy of the paper.
Managing Multinational Human Resources in a Volatile Region: An Exploratory Study of Kurdistan Region, Iraq

Keywords: Multinational, Iraq, Kurdistan, Human Resources, Management

INTRODUCTION

Background to Iraq and Kurdistan Region

Officially the Republic of Iraq is a country in Western Asia that borders Turkey to the north, Iran to the east, Kuwait to the southeast, Saudi Arabia to the south, Jordan to the southwest, and Syria to the west. The capital, Baghdad, is in the center of the country. Around 97% of the country's 36,000,000 people are Muslims, mainly Shias, Sunnis, and ethnic Kurds.

Iraq has a narrow section of coastline measuring 58 km (36 mi) on the northern Persian Gulf and its territory encompasses the Mesopotamian Alluvial Plain, the northwestern end of the Zagros mountain range, and the eastern part of the Syrian Desert. Two major rivers, the Tigris and Euphrates, run south through the center of Iraq and flow into the Shatt al-Arab near the Persian Gulf. These rivers provide Iraq with significant amounts of fertile land.

The region between the Tigris and Euphrates rivers is often referred to as Mesopotamia and thought to be the birthplace of writing and the world's oldest civilizations. The area has been home to continuous successive civilizations since the 6th millennium BC. At different periods in its history, Iraq was the center of the indigenous Akkadian, Sumerian, Assyrian, and Babylonian empires. It was also part of the Median, Achaemenid, Hellenistic, Parthian, Sassanid, Roman, Rashidun, Umayyad, Abbasid, Mongol, Safavid, Afsharid, and Ottoman empires, and under British control as a League of Nations mandate. Iraq's modern borders were mostly demarcated in 1920 by the League of Nations when the Ottoman Empire was divided by the Treaty of Sèvres. Iraq was placed under the authority of the United Kingdom as the British Mandate of Mesopotamia. A monarchy was established in 1921 and the Kingdom of Iraq gained independence from Britain in 1932. In 1958, the monarchy was overthrown and the Republic of Iraq was created. Iraq was controlled by the Arab Socialist Ba'ath Party from 1968 until 2003. After an invasion by the United States of America and its allies, Saddam Hussein's Ba'ath Party was removed from power and multi-party parliamentary elections were held. The American presence in Iraq ended in 2011 but the Iraqi insurgency continued and intensified as fighters from the Syrian Civil War spilled into the country.

The Kurdish people are an ethnic group whose origins are in the Middle East. They are one of the largest ethnic groups in the world that do not have a state of their own. The region of Kurdistan, the original geographic region of the Kurdish people and the home to the majority of Kurds today, covers contemporary Turkey, Iraq, Iran, and Syria. This geo-cultural region means "Land of the Kurds". Iraqi Kurdistan is an autonomous region in northern Iraq, covering 40,643 square kilometres (15,692 sq mi) and has a population of approximately 4 million people. Kurdish populations occupy the territory in and around the Zagros Mountains. These arid unwelcoming mountains have been a geographic buffer to cultural and political dominance from neighboring empires. Persians, Arabs, and Ottomans were kept away, and a space was carved out to develop Kurdish culture, language, and identity.
The Kurdish people within Iraq have grappled with various political statuses over their history. Once assumed to receive full independence via the Treaty of Sevres, Iraqi Kurds have experienced a recent and troubled history of betrayal, oppression, and genocide. After the fall of Saddam Hussein's regime in 2003, Iraqi Kurds, now governed by the Kurdistan Regional Government (KRG), face a crossroads in the political trajectory of Iraqi Kurdistan. Factors that play into their future include Kurdish diversity and factions, Kurdish relationships with the United States, Iraq's central government, and neighboring countries, previous political agreements, disputed territories, and Kurdish ethnonationalism.

Figure 1: Map of Iraq. Source: www.mepc.org/regions/Iraq

Figure 2: Map of Kurdistan. Source: www.joaleitao.com/IraqKurdistan/map-Kurdistan-google-map-Iraq-Kur

LITERATURE

The World economy has actually been growing faster for forty years than at any time since the eighteenth century, due to the world-wide push for liberalization of trade and financial markets. With the advent of
information age, the flow of information and goods needed to carry them have become the largest source of foreign currency income. In contemporary world, few customers are interested in where the material is made and packaged. Governments in most of the Middle Eastern countries, particularly United Arab Emirates and Qatar, have also come to understand the importance of increased participation in domestic economic growth. These countries have also realized that the success of its economy has been mainly due to the above reason besides low inflation, education and training as well as the encouragement of savings and investments. This strategy, no doubt encouraged MNC’s to venture into this region.

International business operations can take different forms namely International Corporation, Multinational Corporation (MNC), Global Corporation and Transnational corporations (see the table below for details).

<table>
<thead>
<tr>
<th>Global</th>
<th>Transnational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Views the world as a single market operations controlled centrally from the corporation office</td>
<td>Specialized facilities; permit local responsiveness, complex co-ordination mechanisms; provide global integration</td>
</tr>
<tr>
<td>International</td>
<td>Multinational</td>
</tr>
<tr>
<td>Use existing capabilities to expand into foreign markets</td>
<td>Several subsidiaries operating business unit in multiple countries</td>
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</table>

The purpose of this paper is to address the issue of multinational corporations in relation to managing human resources in a volatile Iraq in general and Kurdistan in particular. Multinational corporations are autonomous unit operating in multiple countries and giving their foreign subsidiaries a great deal of latitude to address local issues such as consumer preferences, political pressures, economic trends, to mention but few. To some extent, these subsidiaries are run as independent companies without much operation. With the process of internationalization, an organization needs to step up the process of decentralization. Although decentralization is complex because it involves differences in language, culture, economic and political systems, and management styles, it facilitates decision making and economic growth.

As business moves across boundaries, the managerial world of Human Resource Management turns upside down as they have to deal with a complete set of new behaviors, relationships, values and traditions in the region where they are to operate. Thus, they are forced with issues like individualism and collectivism, gender difference, power distance and uncertainty avoidance (Blunt, 1988), which if not understood could possibly result in fiasco within the organization.

Managers need to understand that copying home country practices into host country is certainly not going to yield result because the home country practices is best suited for that culture. As Torrington (1994) has demonstrated, ‘people management methods do not necessarily transfer from one culture to the other’. The growth of any organization will, therefore, depend very much on people capable of development. Without people as strategic resource within the corporation, it may be difficult if not impossible to secure the long-term strategic future of the corporation, even though financial resources might be adequate (Lowendale, 1992).

Iraq and Kurdistan Region have been host to many foreign companies that have brought with them their own human resource practices before the war within. Today, the story is different. International investors are reluctant to invest in volatile regions, not least Kurdistan. In addition, the lack of investment is having
incalculable implications on the Region’s economy. Ipso factor, there is a dart of skillful human resources in the locally established companies. Most of those few capable employees who accept the offer of employment hardly remain in their employ for the contract duration. There is too much turnover and this trend has added huge impact to the already limited financial resources. Human resources as the most important and most precious assets of any organizations cannot be ascertained, yet the success of Kurdistan Region entirely depends on constructive management of human resources. In this context, hiring, managing and developing employees whose skills and abilities match the organization needs is an administrator’s greatest challenge and perhaps most important responsibility (Morton, 1997).

STRATEGIES FOR KURDISTAN REGION USING THE CONCEPT OF SEVEN CS

Multinationals venturing into any country should take into consideration the significance of HRM processes, such as recruitment and selection, culture, employees’ compensation, effective communication systems, competence and coordination among the workforce. The seven “C”s of global HRM namely cosmopolitans, culture, compensation, communication, consultancy, competence and coordination give credibility to the above statement. Unlike the rest of the world, Kurdistan Iraq comprises of scores of religions such as Buddhism, Islam, Christianity, and Confucianism. The culture of each country is centered round the religion with the largest majority. While there are some similarities, dissimilarities in culture (due to the practice of different religion) can have a great impact on business operation. Hence factors like compensation, communication, competence and coordination cannot be followed homogeneously. In order to have a good understanding of the seven C’s, it is necessary at this juncture to explain laconically each of them.

Cosmopolitan: Since there is a scarcity of skilled workforce, the MNC’s should use the strategy of engaging both the home country nationals and expatriates. The process of recruitment and selection of the right people is of paramount importance as the performance of the organization will depend upon the capability of the workforce towards attaining the organizational objectives. On the other hand, if wrong people are selected, devastating and permanent damage may be inflicted on the organization. In order to overcome some of the problems associated with selection, the MNC’s should bear in mind the government regulations of the host country. Some of these regulations may include employing less skilled locals and the only strategy for overcoming this is to educate and train the unskilled. Although training cannot make a fish to fly nor birds to swim, but certainly training can make a fish swim better and a bird fly higher.

Culture influences people’s values, attitudes and behaviors. Culture also influences organizations through societal structures such as laws, and political systems through the values, attitudes, organizational goals and preferences of participants (client, employees and managers). Organizations are parts and parcel of the society and development of culture should take into account not only the people who are employed but also the development of the surrounding society, both nationally and internationally.

Hofstede’s (1991) study on work-related values and national cultural differences is very relevant in the context of Kurdistan. He found that there are four dimensions of culture that help to explain how and why people from various culture behave as they do. The four dimensions Hofstede examined were: individualism versus collectivism, power distance, uncertainty avoidance and masculinity. From the above cultural dimensions, we can infer that Kurdistan as a region is characterized by collectivism. But in power distance, Kurdistan Iraq seems to be on the Middle East list including Saudi Arabia, Kuwait, Qatar, United Arab Emirates, Yemen, Oman and Bahrain. This is mainly due to the patriarchal culture. In the case of uncertainty avoidance and masculinity, all of the countries in the Middle East except perhaps Turkey, fall into the masculinity category and this is very much in line with their culture since they place great value on cooperation, friendly atmosphere and security in employment.
Compensation: As MNC’s employ both home country, host country nationals and expatriates, they need to design compensation strategies that is acceptable to all of these groups. Usually the cost associated with a home country and an expatriate assignments is normally expensive due to their base pay in their home country plus the differentials to offset the higher costs of overseas goods, services, housing and taxes. In addition, incentive payment needs to be put in place for separation from family and assistance should be given to employees to cover costs such as moving and storage, automobile and educations expenses.

Communication is broadly defined as the creation and exchange of messages between two or more people through verbal and non-verbal means. The message could be in the form of information, opinions, ideas, feelings or attitudes. Communication of information is of chief significance in three aspects: firstly, in the production, individual communication is required for implementing the job. Secondly, in maintenance, communication is used to ensure that the organization is operating according to plan and does not deviate from its overall goals. It also has a human dimension as it nurtures work and social relationships in the organization, and thirdly, innovation communication provides information that helps employees to adapt to organizational changes. In Kurdistan Iraq which is the subject of this paper, relationship rather than production communication predominates and yet organizations which pursue production, maintenance and individual communications is said to function more effectively.

The flow of information from upward to downward is based on the concept of power distance as discussed earlier. Withholding information from subordinates is very common as the boss filters out information. As a result, only the head of the unit has access to the relevant information and yet this kind of practice lowers morals among employees. In order to overcome this management culture, a strategy of openness in providing information about the organizational goals, plans and problems is necessary.

The Middle Eastern cultures in general dictate that communication be soft, polite with respect as the ultimate. Direct accusations are normally avoided and if there is any, it is normally done informally. A person who directly accuses through formal communication is perceived as a person who has no respect for other individuals. Women in this region are considered to be inferior when compared with men and this culture affects the way managers interact with their female counterparts. In the Western society of the United States of America, Europe, Australasia, this kind of perception is contrary to the concept of equal opportunity and must be avoided at all cost. MNC’s wanting to extend their business operations to this region should understand these management dichotomies should they want to succeed.

Consultancy as one of the C’s has developed as an essential feature in most organizations because of the requirement of specialist expertise in manning the workforce. As MNC’s with different cultural background, it is pertinent for them to understand the needs and wants of the workforce in the host country. Sometimes the policies and practices of the home country seem to be incompatible with the culture of the host country and to solve this problem, expert knowledge should be sought. Although consultants are perceived as those who generate nothing but bad news, it may be a sensible strategy to use consultants to take the flak for unpopular initiatives (Torrington, 1994). Using consultants in the global HRM is less controversial than on the domestic aspects. This is because the hiring of experts is much more acceptable due to the skills they possess.

Competence is a demonstrable characteristics of the person including knowledge, skills and behavior that enables performance. Developing competence in an international organization is not so easy as education, management perceptions and business role differ greatly from country to country. In order to develop competence that is centrally driven, value sharing is necessary as it will help to foster corporate sense of participation.
The problem of achieving competence emanates from the recruitment and selection of expatriates. As described under our discussion on cosmopolitan, employing expatriates often involves huge costs and failures or mistakes can be very dangerous and expensive. MNCs in order to reduce the number of expatriates could employ locals and give them the necessary training to acquire and improve their skills. The colonial approach of filling key positions with home country nationals should be flexible. What is required instead, is a mixture of the locals and the foreign nationals as it will ameliorate the cultural and language problems.

*Coordination* is the last on the list of the seven c’s and this will very much depend on the parent company. It is achieved through a set of policies and procedures with improvement in communication, monitoring and feedback between parent company and subsidiaries. Contemporary companies with their subsidiaries have mission statement that helps them to adhere to a common objective and this enables employees to subscribe and energized. Coordination, above all, is a crucial challenge for MNC’s as its success will be determined by the way in which it is implemented.

**RECOMMENDATIONS AND CONCLUSIONS**

We have in this paper demonstrated how MNC’s can achieve its goal by adapting to the culture of the host country. Kurdistan Region of Iraq has not been growing economically for the last decade and the slow growth is likely to continue with less investments by MNCs due to the crises in Iraq and the entire region in the Middle East. The seven c’s approach have helped us to understand various issues which MNCs face while venturing into this region. With a scarcity of skilled workforce and the need to recruit home country nationals and expatriates, MNCs are faced with the problem of how to deal with a multicultural dimension. The seven c’s combined with Hofstede cultural dimensions have facilitated understanding of how MNCs could deal with the problem.

The need to understand culture is very crucial in dealing with the attitudes of the workforce in the host country. Thus training of home country nationals and expatriates on culture is required to develop competitive organization. Practices like compensation, communication, consultancy, competence and coordination are all important aspects of effective organization. By understanding the local culture and adapting to the cultural requirements, there is no doubt, that the above problems would be overcome.

Ethical considerations also play a very important role in business and MNCs should not engage in practices such as exploitation as it will discredit their business operations. Instead they should be socially responsible by avoiding discrimination on the basis of gender, sex, race or religion. Since their operation is likely to be long-term, the MNCs should endeavor to be society oriented by developing skills of the people in the host countries through constructive training programs. Kurdistan Iraq is a region in motion searching for development in terms of human resource and MNCs will be lauded if they implement training programs that will reflect the aspirations of the region. As the former President Habibie of Indonesia has vehemently stated in his television interview: “Do not give the people fish but teach them how to fish”. Teaching people how to fish will give them the opportunity to continue to eat fish for as long as it takes.

**REFERENCES**


Managing Multinational Human Resources in a Volatile Region: An Exploratory Study of Kurdistan Region, Iraq


www.joaleitao.com/IraqKurdistan/map-Kurdistan-google-map-Iraq-Kur
Shareholders’ Perception on Corporate Social Responsibility Reporting (CSRR) and Financial Performance of Listed Companies in Sri Lanka

Keywords: CSR, CSR Reporting, Perception, Financial Performance

INTRODUCTION

Brown, B. and Perry, S. (1994), found that there is an inseparable relationship between firms and the society and this relationship and interdependency of business and society are becoming more apparent in the recent past as people are influencing with the society to change social, economic and political consequences in the world. As a result, firms obviously need the social approval on their operations to assure their survival. Hence, the role of a business organization goes beyond the traditional objective of earning profits thus focusing on Corporate Social Responsibility (CSR).

CSR is generally discussed with main themes including corporate responsibility, corporate accountability, corporate ethics, corporate citizenship or stewardship, responsible entrepreneurship, and “triple bottom line to demonstrate its different facets. Within broad practices of CSR disclosures, some countries have already made CSR reporting as mandatory requirement but in Sri Lanka, CSR reporting is being practiced depending on the desires of individual firms and some motivations which are further to be researched. Friedman (1970) argued that there is one and only social responsibility of business; to use its resources and energy in activities designed to increase its profits so long as it says within the rules of the game….and engages in open and free competition, without deception and fraud. So, businesses should use resources in a proper manner in order to achieve its targets. However, it seems generally that neither business itself nor the general public has understood the substance of the concept.

Within the Sri Lankan context, preparation of financial statements and related disclosures of corporate entities, are mandatory guided by the Companies Act No:07 of 2007, Accounting and Auditing Standards Act No: 15 of 1995, the Securities and Exchange Commission of Sri Lanka Act No:36 of 1987, and the Inland Revenue Act No:10 of 2006. The corporate disclosures of specific sectors are governed by the Banking Act No 30 of 1988, (for Banking institutions) and the Insurance Act, (for insurance companies) and the financial reporting of public sector corporations and other governmental bodies are regulated by various governmental laws and regulations.

CSR disclosures are often provided in Sri Lanka on voluntary basis by providing information beyond traditional role of financial reporting mainly focusing shareholders. However, it is not much known how shareholders perceive the relations between CSR disclosures and financial performance of firms. Sometimes, the role of CSR reporting is questioned on the theoretical argument that companies do not have wider social responsibilities than simply to make money for their shareholders” (Gray, R.H., Owen, D. and Maunder, K, 1987). Among various literature findings, Amran and Devi (2007) in their exploratory study found that Malaysian firms engage in CSR because of the influence of the government. This study attempts to examine shareholders’ perspective on the relationship between CSR reporting and financial performance.
RESEARCH PROBLEM AND OBJECTIVES

According to the study of William et al (1999), the awareness level of managers on CSR is high despite the fact that their readiness to report the same is questionable and only very few firms seriously engaged in CSR reporting in order to reduce the pressure from various stakeholders. Shareholders are major stakeholders of a firm and therefore, shareholders perception on CSR reporting would help understand how financial performance is influenced by CSR reporting. The research problem of this study is to explore whether CSR reporting has a relation with financial performance from shareholders perspective. Pertaining to above research problem the following research objectives are aimed to be achieved in the study:

- What level of CSR reporting can be seen in financial reporting?
- What is the significance of shareholders’ perception on CSR reporting?
- What is the relationship between shareholders’ perception on CSR reporting and financial performance of firms?

SIGNIFICANCE OF THE STUDY

The quality and content of CSR disclosures mainly depend on the desires and motives of managers and some social influences as it is not mandatory in Sri Lanka. Managers are agents of shareholders. Shareholders influence and perception are important for conducting business operations smoothly in a competitive market. In general, shareholders can only access to information given in financial reporting. Apart from the assessment of financial information and shareholders reaction, it is worthwhile to explore how shareholders perceive non financial information such as CSR disclosures. The feedback of shareholders as to how they perceive information content of financial reporting either in a direct or indirect form is vital for managers in shaping the performance the firm. Therefore, the outcome of this study would help many parties in their decision making processes.

LITERATURE REVIEW

Corporate Social Responsibility Reporting (CSRR) or Sustainability Reporting was originated from a growing public awareness of the role of the corporate in society. CSR reporting dates back to the works of Gray et al. (1987) and they define it as; “... the process of communicating the social and environmental effects of organizations’ economic actions to particular interest groups within society and to society at large”.

According to Sethi (1975), there is no universally accepted definition for the concept of CSR and -there is a wide range of definitions available for CSR. Steiner and Steiner (2000) state that social responsibility is the duty a corporation has to create wealth by using means that avoid harm, to protect, or enhance societal assets. Hence, CSR stresses that organization is responsible for its wider impact on society (Frankental, 2001).

McWilliams and Siegel (2001) describe CSR as actions of organizations towards good that go beyond the self interest of the firm and legal compliance requirements. Further, it has been identified as a continuous process and not as simple and isolated activities so that firms should behave ethically and contributes towards the economic development as well (Rashid and Abdullah, 1991) and not only that it should be an obligation of the firm (Smith, 2003).
Hence, CSR comprises of policies, practices and programs that involve and interact with business operations of supply chains and decision making processes with due concern and respect to business ethics, community investment, environmental concerns, governance, human rights, the marketplace as well as the workplace (Tsoutsoura; 2004).

Paul, K., Cobas, E., Ceron, R., Frithiof, M., Maass, A., Navarro, I., Palmer, L., Serrano and Deaton, L., (2006) state that, social reporting is important and help develops standard practices and understanding and communication of CSR internally and externally. It is not that easy to assess the impact of CSR reporting. It may be on many stakeholders. Nevertheless, the performance of firms in turn has impact on all the stakeholders. Therefore, the impact of CSRR on organization may be either positive or negative. Positive disclosures are defined in accordance with the definition provided by Deegan and Gordon (1996, p.189) as those “that could broadly be termed as information presenting the company as operating in harmony with the environment”. Negative disclosures were defined as those ‘that present the company as operating to the detriment of the natural environment’ (Deegan and Gordon, 1996, p.189). However, it is argued that gives competitive advantages to business organizations (Kreutzer, cited by Paul Hohnen, 2005). In addition to performance, CSR might help build company image, customer loyalty (Rosen, Sandler, and Shani, 1991), and market position (Fombrun and Shanley, 1990) as well.

**METHODOLOGY**

Firms which report CSR were identified through a preliminary study carried out based on annual reports of the companies listed on CSE. The information content was then analyzed to achieve the objective one of the study.

To examine the second and third objectives, the data was collected through a structured questionnaire administered among a sample of major shareholders. The relationship was tested by using descriptive and inferential statistics. Under inferential statistics, regression model was used with SPSS application software package and the results were obtained.

The data was collected to the questionnaire while conducting an interview with each participant. First part of the questionnaire collects information on demography, such as gender, age and educational qualifications. Second part of the questionnaire focused on shareholders views towards the impact of CSR reporting together with other financial reporting aspects of the company. A five point likert scale survey instrument was used to solicit the views of different individuals. Participants were interviewed and ticked in the space provided to reflect the extent of their agreement or disagreement with each of the 16 statements. A score of one (1) was assigned for strong disagreement with the statement, while a score of five (5) represented strongly agreement. Further, demographic data of respondents such as gender, age and level of education were collected. The collected data was analyzed by using descriptive and inferential statistics.

78 companies, which were listed on CSE and reported CSR, were identified from the preliminary survey. It was able to interview 115 out of 639 major individual shareholders identified to get their views on the relationship between CSR reporting and financial performance. These 78 companies represented 17 business sectors out of 20 such sectors as defined by CSE as given in Table 1 below.

<table>
<thead>
<tr>
<th>Business Sector</th>
<th>No. of Firms disclosed CSR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land and Property</td>
<td>1</td>
</tr>
<tr>
<td>Investment Trust</td>
<td>1</td>
</tr>
</tbody>
</table>
The questionnaire was filled by the researchers based on the outcome of the interview with each respondent. On average, about 30 minutes were spent to interview each. Demography of the respondents reveals that 52% of participants were male. The highest percentage of participants is 28% that belong to the age category of 28-35 years. The lowest percentage was in the age category of above 56 years. With respect to the education, 35% of participants had only the basic school education and 25% were holding Bachelor’s degrees. The rest had either higher education or professional education.

Shareholders are clustered according to the different shareholdings and to the various demographic characteristics as below. One peculiar feature of the sample is that around 85% of respondents are with higher educational qualifications, which mean they have fair understanding of the concept and activities underlying the concept.

### DATA ANALYSIS AND INTERPRETATION

Data obtained through the questionnaire was first summarized based on the scores given by respondents to each question. A score of 1 reveals that the respondent has a strong agreement on the statement whereas the score of 5 represents the strong disagreement. The statements given in the questionnaire were ranked based on the score given and it was found that the highest agreement had been given to statement 15 with a score of 1.313. The highest disagreement was found with statement 16 with a score of 4.297.

In responding to the highest ranking question, investors have mentioned that CSR reporting has a big role to play towards the society. The second strongest perception of shareholders was that businesses should consider the impact of their activities on employees; local communities and the country as a whole while making profits. The next significant attitudes towards the concept of CSR reporting was the fact that business Organizations engage in CSR activities that are regarded as socially friendly mainly because of financial benefits, external pressure, regulations and law or for the publicity purpose. Hence, reputation of a firm can be increased by engaging in socially related activities.

On the other hand, mean score received for the statements 2, 9 and 16 were significantly different from that of for other statements. These statements revealed shareholders’ perception financial performance of
a company. Respondents perceived that CSR reporting did not have a significant relation with financial performance.

With respect to other statements, following significant perceptions were found. As per the statement 1, it was highly perceived that businesses have a responsibility to publish the impact their decisions on employees, local communities and the country, while generating profits.

Accordingly, the majority (79% of the sample) strongly agreed with the statement 1. Only 12 respondents (around 10%) either disagreed or strongly disagreed with the same statement. It revealed that profit making has not been perceived by shareholder as the sole responsibility of a firm thus showing wider understanding on corporate responsibilities.

However, shareholders had not perceived that business organizations in Sri Lanka are really engaged in such CSR activities to address social issues for the betterment of society. 85% of the respondents were in that view. Contrary to that idea, 70% gave their agreement that they were not familiar with the concept of CSR.

With respect to the corporate image and reputation built, 84% was in the view that what matters in buying decisions of customers were mainly the price and the quality of the product and not the image or the reputation of the company. However, they perceived the fact that CSR related activities carried out by firms will indirectly increase the level of reputation over time as highly positive. Further, majority representing 56% of respondents either agreed or strongly agreed on the fact that financial performance of firms has a positive relation on buying behaviour of products and services of customers. However, shareholders are in the view that customers are not ready to pay a premium price for goods and services even when firms have shown high financial performances. 42% of respondents strongly disagreed on the fact the customers will pay a higher price when the firms are showing high financial performance.

In order to test the perception on social conciseness and ethical aspects, it was asked whether customers should reject the goods and services of companies which do not engage in CSR activities. The result was significantly negative perception and 56% of respondents either strongly disagree or disagree to the statement thus showing CSR engagement and disclosure should not be a determinant of buying decision. However, 20% perceived that they strongly agree on the fact that customers should reject the products of companies which do not engage in CSR.

The perception on the awareness of CSR engagement and CSR reporting through annual report indicated that only very few respondents had come to know about CSR engagement of firms through annual reports. Around 93% of shareholders mentioned annual reports are not regarded as a mode of communication of CSR engagement. On the other hand, majority of shareholders had revealed that newspaper articles, TV programs, TV advertisements and viral communications were the modes of communication through with they know about CSR engagement of firms. Accordingly 68% agreed on the above mode of communication on CSR activities.

On the reliability of the information provided in financial reporting, it was found that more than 70 of respondents mentioned that publicly available information provided through annual reports is not reliable. This raises a question as to why firms are tend to disclose more CSR related information in annual reports and creates a research opportunity to further explore on it.

The question on the reason as to why firms report CSR, 78% of respondents were in the view that it was mainly due to internal or external pressure from stakeholders of the company thus supporting the stakeholder theory.
The perception on the fact that whether firms engage in CSR activities really with an objective of making good to the society was tested and it was revealed that around 60% of respondents were in the view that it was not and rather firms may have had some other ulterior motives. Hence, the respondents believe that firms have other reasons to engage in CSR. This perception further supports the idea of stakeholder theory.

With respect to the relationship between CSR reporting and financial performance, the majority, 58% of respondents believe that there is a positive relation.

On exploring the context specific relevance and variables affecting on CSR reporting, it was asked whether firms have a significant role to play in relation CSR engagement within Sri Lankan context. 93% of respondents strongly agreed on the statement thus perceiving that it is highly a relevant concept. Finally it was asked whether financial performance depend on CSR reporting and it was revealed that more than 90% of respondents expressed their strong disagreement or disagreement thus showing very low perception on the dependency of financial performance on CSR reporting.

The summary of descriptive analysis of the perception can be summarized as follows. Accordingly, the majority of shareholders perceived that;

- profit should not be the sole responsibility of a company and some societal activities should also be engaged while making profits
- Sri Lankan firms are not very likely engaged in CSR activities
- Company image is built over time by engaging in CSR activities
- Buying behavior does not depend on disclosure of CSR activities but rather is based on the price & quality of products
- Information on CSR activities made available publicly by firms is reliable
- Firms engage in CSR are regarded as socially friendly, because of pressure from stakeholders but they really do not want to bring some good to the society
- Major sources of obtaining information on CSR activities are newspaper articles, TV programmes, TV advertisements and viral communication but not the annual reports
- Despite the fact that there is a relationship between CSR reporting and financial performance and financial performance is not decided by the level of CSR engagement

**RESULTS OF THE REGRESSION ANALYSIS**

Reliability tests are carried out to examine the stability and consistency of data used. Accordingly, “Cronbach's alpha is the most common measure of internal consistency. Further, it is found that Cronbach’s Alpha is commonly used when scale date found in multiple Likert questions which need to determine if the scale is reliable” (Kvale,1996).

The value of Cronbach’s alpha of the data of the sample is 0.805 and the value on standardized item is 0.796. This indicates a high level of internal consistency of the scale data. Therefore, all the data from the sample was used in the study as the valued have confirmed high reliability through internal consistency. In order to analyse the relation among shareholder perception on CSR, linear regression model was used. Model and the variables used in developing the model are explained as given below.
where:

\[ Y_{it} = \alpha_i + \beta_1X_{it} + u_{it} \]

\( \alpha_i(i=1, \ldots, n) \) is the unknown intercept for each entity (n entity-specific intercepts).

\( Y_i \) is the dependent variable (DV) where \( i \) = entity and \( t \) = time.

\( X_{it} \) represents one independent variable (IV),

\( \beta_1 \) is the coefficient for that IV,

\( u_{it} \) is the error term.

Question numbers 6, 7, 14 and 16 are on views regarding financial performance of firms and the rest of questions are related to perception on CSR reporting. Average values of the scores given on each question on financial performance were taken as dependent variables of the model (AVFP) whereas the average values of other questions were taken as independent variables (AVCSRR) for the purpose of analyzing data in the regression model. The average scores of the dependent variable ranged from 1.67 to 3.83 whereas the scores of independent variables ranged from 1 to 5. The output of regression analysis revealed that the model is fit for the analysis as the significant value is almost zero. The results of the normalcy test of regression analysis revealed that data distributes normally. R square and Adjusted R-square resulted 9.8% and 10.6% of the variation.

The standard error which measures the dispersion of the dependent variables stood at 0.70004. This is below the mean of the “Predicted” values of the dependent variable of 3.1739. Generally it is an accepted level if the standard error less than 10% of the mean value. The resulted standard error is well below that limit.

The output of the regression analysis is given in table 2 below. Table 2 shows reveals that the test statically significant at 95% confidence level as the p value is almost zero. the coefficient of independent variable is 0.619. Hence, independent variable, the perception on CSR reporting has significant positive impact on the performance of firm.

Table 3: Output of the Regression Analysis

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The positive relationship that is established between the perception of CSR reporting and company performance can be given in the following equation.

\[ \text{AVFP} = 1.689 + 0.619 \times \text{AVCSRR} \]

However, it is only around 60% of the financial performance is explained by the perception of CSR reporting thus indicating a fact that there are some other factors that affect on financial performance.

**SUMMERY AND CONCLUSION**

The study focused on the shareholders perception on CSR reporting and how it affects the company performance. Primary data gathered through a questionnaire was analyzed by using both descriptive and
Shareholders’ Perception on Corporate Social Responsibility Reporting (CSRR) and Financial Performance of Listed Companies in Sri Lanka

Inference statistics. Accordingly, the following could be highlighted on perception of shareholders as follows.

- It is highly perceived that profit should not be the sole intention of a firm and firms should be concerned about the societal impact of their operations while generating profits.
- The level of CSR engagement of Sri Lankan firms at present is very minimal.
- Reputation of a firm can be increased by engaging in social activities which interact with people.
- Buying behavior of customers is not dependent on mere disclosure of CSR activities by affirm and rather it is influenced by the price and the quality of the products and services offered.
- The information content released by firms and made publicly available is less reliable.
- Firms tend to engage in socially friendly activities just because of the pressure coming from stakeholders and not because of their genuine interest of doing something good for the society.
- Shareholders obtain more information on CSR activities of firms from newspaper articles, TV documentaries and advertisements and through word of mouth compared to annual reports.
- A relationship between CSR reporting and financial performance of firms can be seen but not necessarily decided by the level of CSR reporting.
- Shareholders are least aware of CSR irrespective of the fact that firms report them to shareholders through annual reports.
- Regression analysis revealed that CSR reporting has a positive significant influence on financial performance despite the fact the explanatory power is relatively less.

REFERENCES


Competitiveness and Entrepreneurship: Analysis of Global Economy with Special Reference to India and Malaysia

Keywords: Competitiveness, Entrepreneurship, Global Economy, India, Malaysia

INTRODUCTION

We define competitiveness as the set of institutions, policies, and factors that determine the level of productivity of a country. The level of productivity, in turn, sets the level of prosperity that can be earned by an economy. The productivity level also determines the rates of return obtained by investments in an economy, which in turn are the fundamental drivers of its growth rates. In other words, a more competitive economy is one that is likely to sustain growth. The concept of competitiveness thus involves static and dynamic components. Although the productivity of a country determines its ability to sustain a high level of income, it is also one of the central determinants of its returns to investment, which is one of the key factors explaining an economy’s growth potential.

Competitive economies drive productivity enhancements that support high incomes by ensuring that the mechanisms enabling solid economic performance are in place. For more than three decades, the World Economic Forum’s annual Global Competitiveness Reports have studied and benchmarked the many factors underpinning national competitiveness. From the onset, the goal has been to provide insight and stimulate the discussion among all stakeholders on the best strategies and policies to help countries to overcome the obstacles to improving competitiveness. In the current challenging economic environment, our work is a critical reminder of the importance of structural economic fundamentals for sustained growth.

THE 12 PILLARS OF COMPETITIVENESS

Many determinants drive productivity and competitiveness. Understanding the factors behind this process has occupied the minds of economists for hundreds of years, engendering theories ranging from Adam Smith’s focus on specialization and the division of labor to neoclassical economists’ emphasis on investment in physical capital and infrastructure,2 and, more recently, to interest in other mechanisms such as education and training, technological progress, macroeconomic stability, good governance, firm sophistication, and market efficiency, among others.

While all of these factors are likely to be important for competitiveness and growth, they are not mutually exclusive—two or more of them can be significant at the same time, and in fact that is what has been shown in the economic literature.

This open-endedness is captured within the GCI by including a weighted average of many different components, each measuring a different aspect of competitiveness. These components are grouped into 12 pillars of competitiveness.
First pillar: Institutions
The institutional environment is determined by the legal and administrative framework within which individuals, firms, and governments interact to generate wealth. The importance of a sound and fair institutional environment became even more apparent during the recent economic and financial crisis and is especially crucial for further solidifying the fragile recovery given the increasing role played by the state at the international level and for the economies of many countries. The quality of institutions has a strong bearing on competitiveness and growth. It influences investment decisions and the organization of production and plays a key role in the ways in which societies distribute the benefits and bear the costs of development strategies and policies. For example, owners of land, corporate shares, or intellectual property are unwilling to invest in the improvement and upkeep of their property if their rights as owners are not protected.

Second pillar: Infrastructure
Extensive and efficient infrastructure is critical for ensuring the effective functioning of the economy, as it is an important factor in determining the location of economic activity and the kinds of activities or sectors that can develop in a particular instance. Well-developed infrastructure reduces the effect of distance between regions, integrating the national market and connecting it at low cost to markets in other countries and regions. In addition, the quality and extensiveness of infrastructure networks significantly impact economic growth and reduce income inequalities and poverty in a variety of ways. A well-developed transport and communications infrastructure network is a prerequisite for the access of less-developed communities to core economic activities and services.

Third pillar: Macroeconomic environment
The stability of the macroeconomic environment is important for business and, therefore, is important for the overall competitiveness of a country. Although it is certainly true that macroeconomic stability alone cannot increase the productivity of a nation, it is also recognized that macroeconomic instability harms the economy, as we have seen over the past years, notably in the European context. The government cannot provide services efficiently if it has to make high-interest payments on its past debts. Running fiscal deficits limits the government’s future ability to react to business cycles and to invest in competitiveness-enhancing measures. Firms cannot operate efficiently when inflation rates are out of hand. In sum, the economy cannot grow in a sustainable manner unless the macro environment is stable.

Fourth pillar: Health and primary education
A healthy workforce is vital to a country’s competitiveness and productivity. Workers who are ill cannot function to their potential and will be less productive. Poor health leads to significant costs to business, as sick workers are often absent or operate at lower levels of efficiency. Investment in the provision of health services is thus critical for clear economic, as well as moral, considerations. In addition to health, this pillar takes into account the quantity and quality of the basic education received by the population. Basic education increases the efficiency of each individual worker. Lack of basic education can become a constraint on business development, with firms finding it difficult to move up the value chain by producing more sophisticated or value-intensive products with existing human resources.

Fifth pillar: Higher education and training
Quality higher education and training is particularly crucial for economies that want to move up the value chain beyond simple production processes and products. In particular, today’s globalizing economy requires countries to nurture pools of well-educated workers who are able to perform complex tasks and adapt rapidly to their changing environment and the evolving needs of the economy. This pillar measures secondary and tertiary enrollment rates as well as the quality of education as evaluated by the business community.
Sixth pillar: Goods market efficiency
Countries with efficient goods markets are well positioned to produce the right mix of products and services given their particular supply-and-demand conditions, as well as to ensure that these goods can be most effectively traded in the economy. Healthy market competition, both domestic and foreign, is important in driving market efficiency and thus business productivity by ensuring that the most efficient firms, producing goods demanded by the market, are those that thrive.

Seventh pillar: Labor market efficiency
The efficiency and flexibility of the labor market are critical for ensuring that workers are allocated to their most effective use in the economy and provided with incentives to give their best effort in their jobs. Labor markets must therefore have the flexibility to shift workers from one economic activity to another rapidly and at low cost, and to allow for wage fluctuations without much social disruption.

Eighth pillar: Financial market development
The recent economic crisis has highlighted the central role of a sound and well-functioning financial sector for economic activities. An efficient financial sector allocates the resources saved by a nation’s citizens, as well as those entering the economy from abroad, to their most productive uses. It channels resources to those entrepreneurial or investment projects with the highest expected rates of return rather than to the politically connected. A thorough and proper assessment of risk is therefore a key ingredient of a sound financial market.

Ninth pillar: Technological readiness
In today’s globalized world, technology is increasingly essential for firms to compete and prosper. The technological readiness pillar measures the agility with which an economy adopts existing technologies to enhance the productivity of its industries, with specific emphasis on its capacity to fully leverage information and communication technologies (ICT) in daily activities and production processes for increased efficiency and enabling innovation for competitiveness. ICT has evolved into the “general purpose technology” of our time, given the critical spillovers to the other economic sectors and their role as industry-wide enabling infrastructure. Therefore ICT access and usage are key enablers of countries’ overall technological readiness.

Tenth pillar: Market size
The size of the market affects productivity since large markets allow firms to exploit economies of scale. Traditionally, the markets available to firms have been constrained by national borders. In the era of globalization, international markets can to a certain extent substitute for domestic markets, especially for small countries. Vast empirical evidence shows that trade openness is positively associated with growth.

Eleventh pillar: Business sophistication
There is no doubt that sophisticated business practices are conducive to higher efficiency in the production of goods and services. Business sophistication concerns two elements that are intricately linked: the quality of a country’s overall business networks and the quality of individual firms’ operations and strategies. These factors are particularly important for countries at an advanced stage of development when, to a large extent, the more basic sources of productivity improvements have been exhausted. The quality of a country’s business networks and supporting industries, as measured by the quantity and quality of local suppliers and the extent of their interaction, is important for a variety of reasons.

Twelfth pillar: Innovation
Innovation can emerge from new technological and non-technological knowledge. Non-technological innovations are closely related to the know-how, skills, and working conditions that are embedded in organizations and are therefore largely covered by the eleventh pillar of the GCI. The final pillar of competitiveness focuses on technological innovation.
RELATIONSHIP OF ENTREPRENEURSHIP AND COMPETITIVENESS

Entrepreneurship is a very important activity for a country’s competitiveness and growth and a significant source of social mobility. New ventures have become an important aspect of countries’ economic development, especially in terms of their contributions to new job creation (Birch 1979, 1987). However, going beyond the relevant function of entrepreneurship in job generation, there is an important debate about the real impact that entrepreneurship has on countries’ economic and competitiveness development (Acs and Storey 2004; van Stel et al. 2005; Acs and Amorós 2008). Ever since Schumpeter’s (1934) seminal work on the role of entrepreneurs in identifying opportunities to create value by introducing innovation in the market, a considerable part of the literature suggests that entrepreneurship contributes to economic performance by introducing innovation, bringing about market changes, enhancing rivalry, and creating competition (Wong et al. 2005, p. 337).

Different countries or regions have varying relationships between their degree of entrepreneurial dynamics and their competitiveness stages. The influence of entrepreneurial dynamics on countries’ competitive development (and consequently on their economic growth) presents a complex relationship (Spencer and Gómez 2006). For many emerging economies, such as that in Latin America, spurring economic growth through new business creation can be problematic at times (Fritsch and Mueller 2004). Vignolo and Wechsler (1992) say that “In any serious consideration of the factors of competitiveness and the power of the countries in the international arena, it is necessary to bear in mind that nowadays having or not having natural resources appears as a completely irrelevant factor. To this must be added the fact that having natural resources with comparative advantages has become, for many underdeveloped countries, a real curse, against what common sense leads us to expect”.

AIM OF THE STUDY

The aim and objective of the study is to analyse the 12 pillars of competitiveness with entrepreneurship by compiling the 3 years data of world economic forum report (2012-2013, 2013-2014, 2014-2015) of top 15 countries and India and Malaysia and framing a model of entrepreneurship development taking into account the 12 pillars in these countries.

RESEARCH METHODOLOGY


Table 1: Tabular Analysis of 3 Years of WEF Report on the Basis of the 12 Pillars

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10. Japan 10 9 6
11. Qatar 11 13 16
12. Denmark 12 15 13
13. Taiwan, China 13 12 14
14. Canada 14 14 15
15. Norway 15 11 11
16. India 59 60 71
17. Malaysia 25 24 20

Note: A new entrants at number 12th position was United Arab Emirates in 2014-2015

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Proceedings of the 12th AGBA World Congress, Malaysia, November 2015
Page 146 of 1173
## Analysis of Global Economy with Special Reference to India and Malaysia

### Higher Education & Training

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A long way to go for India

Despite its immense potential and promise, India continues to suffer from poverty. A third of its population still lives in extreme poverty and many people still lack access to basic services and opportunities, such as sanitation, healthcare, and quality schooling. Improving the standards of living of the Indian population will require the country to accelerate its growth. Yet, since 2011, India has experienced a slowdown. In 2013, its economy grew by a modest 4.4 percent. Improving competitiveness in order to put growth on a more stable footing should therefore be a priority for the new government.

Dropping for the sixth consecutive edition, India ranks 71st (down 11) out of 144 economies in the Global Competitiveness Index (GCI) 2014-2015. It is the lowest ranked among the BRICS economies. The rank differential with China (28th) has grown from 14 places in 2007 to 43 today; while India’s GDP per capita was higher than China’s in 1991, today China is four times richer. This competitiveness divide helps to explain the different trajectories of these two economies. India’s slide in the competitiveness rankings began in 2009, when its economy was still growing at 8.5 percent (it even grew by 10.3 percent in 2010). Back then, however, India’s showing in the GCI was already casting doubt about the sustainability of this growth. Since then, the country has been struggling to achieve growth of 5 percent. The country has declined in most areas assessed by the GCI since 2007, most strikingly in institutions, business sophistication, financial market development, and goods market efficiency. Shedding light on the main strengths and weaknesses of India’s competitiveness and presents the country’s performance along the 12 dimensions of the GCI. Overall, India does best in the more complex areas of the GCI: innovation (49th) and business sophistication (57th). In contrast, it obtains low marks in the more basic and more fundamental drivers of competitiveness. For instance, India ranks 98th on the health and primary education pillar. The health situation is indeed alarming: infant mortality and malnutrition incidence are among the highest in the world; only 36 percent of the population have access to improved sanitation; and life expectancy is Asia’s second shortest, after Myanmar. On a more positive note, India is on track to achieve universal primary education, although the quality of primary education remains poor (88th) and it ranks a low 93rd in the higher education and training pillar of the GCI.

Transport and electricity infrastructure are in need of upgrading (87th). In 2012, a working group appointed by the Planning Commission of India had recommended that a trillion US dollars—or almost

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10 percent of India’s GDP. Given the country’s strained public finances, addressing the infrastructure gap will require very strong participation on the part of private and foreign investors through public-private partnerships. But for these types of investments to materialize, the institutional framework needs to improve. There are encouraging signs. India has achieved spectacular progress in various measures of corruption and now ranks 65th. Red tape seems to be less of an issue than it had been, and government efficiency is equally improving. However, the overall business environment and market efficiency (95th, down 10 places) are undermined by protectionism, monopolies, and various distortionary measures, including subsidies and administrative barriers to entry and operation.

The World Bank estimated that it takes 12 procedures (130th) and almost a month to register a business (106th). In addition, it calculated that taxes for a typical registered firm amount, on average, to 63 percent of its profits (130th). Furthermore, the labor market is inefficient and rigid (112th). These factors contribute to the high cost of integrating more businesses into the formal economy. Some estimates find that the informal sector accounts for half of India’s economic output and 90 percent of its employment. It is therefore urgent that the government create the right incentives for businesses to register and contribute their fair share to the provision of public services.

India achieves its lowest rank among the 12 pillars in technological readiness (121st). Despite mobile telephony being almost ubiquitous, India is one of the world’s least digitally connected countries. Only 15 percent of Indians access the Internet on a regular basis. Broadband Internet, if available at all, remains the privilege of a very few. India’s knack for frugal innovation should contribute to providing cheap solutions for bridging this digital divide. The financial resources required for delivering basic services, including sanitation and healthcare, and for improving India’s physical and digital connectivity are considerable. But India’s fiscal situation remains in disarray, as evidenced by the country’s 101st rank in the macroeconomic environment pillar of the GCI. With the exception of 2007, the central government has consistently run deficits since 2000. Because of the high degree of informality, its tax base is relatively narrow, representing less than 10 percent of GDP.

In addition, over the past several years India has experienced persistently high, in some years near double-digit, inflation, which reached 9.5 percent in 2013. The Reserve Bank of India is torn between keeping interest rates low to stimulate the faltering economy and tightening monetary policy to stem inflation. Improving competitiveness will yield India huge benefits. In particular, it will help rebalance the economy and move the country up the value chain so as to ensure more solid and stable growth; this in turn could result in more employment opportunities for the country’s rapidly growing population. Despite the abundance of low-cost labor, India has a very narrow manufacturing base. Manufacturing accounts for less than 15 percent of India’s GDP. Agriculture represents 18 percent of output and employs 47 percent of the workforce. Low productivity in the sector means very low wages and a life of mere subsistence for many. The services sector accounts for just 28 percent of employment but for 56 percent of the economy. Most services jobs are low-skilled and poorly paid ones, though. White collar jobs remain rare. For example, the vibrant business-process outsourcing sector employs 3.1 million workers, or 0.6 percent of India’s 482 million strong labor force (but accounts for 6 percent of GDP). India needs to create jobs in the “missing middle” for the 610 million youths under 25—half of India’s population—who have recently entered or will soon enter the workforce. In a parliamentary address in June 2014, President Mukherjee outlined the government’s economic agenda. It envisages building smart cities, establishing world-class industrial zones, and transforming the country into a manufacturing hub. It remains to be seen whether the new administration will succeed in convincing the public opinion, mobilizing the resources, and passing the reforms necessary to achieve this vision.

**Malaysia on the path of progress**

Malaysia makes its way into the top 20 for the first time since the current GCI methodology was introduced in 2006. The country remains the highest ranked among the developing Asian economies.
Malaysia advances nine positions in the institutions pillar, which largely drives this year’s progress. It ranks no lower than 60th in any of the 12 pillars of the GCI. It ranks an outstanding 4th in the financial market development pillar, which reflects its efforts to position itself as the leading center of global Islamic finance. And it ranks 7th in the efficiency of its goods and services markets and a business-friendly institutional framework (29th). In a region plagued by corruption and red tape, Malaysia stands out as one of the very few countries that have been relatively successful at tackling these two issues, as part of its economic and government transformation programs. The country, for instance, ranks an impressive 4th for the burden of government regulation, although its score differential with the leader in this area, Singapore, remains large. Malaysia ranks a satisfactory 26th in the ethics and corruption component of the Index, but room for improvement remains. Furthermore, Malaysia ranks 11th for the quality of its transport infrastructure, a remarkable feat in this part of the world, where insufficient infrastructure and poor connectivity are major obstacles to development for many countries. Finally, Malaysia’s private sector is highly sophisticated (15th) and already innovative (21st). All this bodes well for a country that aims to become a high-income, knowledge-based economy by the end of the decade.

Amid this largely positive assessment, the government budget deficit, which represented 4.6 percent of GDP in 2013 (102nd); the low level of female participation in the workforce (119th); and the still comparatively low technological readiness (60th) stand out as some of Malaysia’s major competitive challenges.

Table 2: Stages of Development

<table>
<thead>
<tr>
<th>Stage of Development</th>
<th>Stage 1: Factor-driven</th>
<th>Transition from stage 1 to stage 2</th>
<th>Stage 2: Efficiency-driven</th>
<th>Transition from stage 2 to stage 3</th>
<th>Stage 3: Innovation-driven</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP per capita (US$) thresholds*</td>
<td>&lt;2,000</td>
<td>2,000–2,999</td>
<td>3,000–8,999</td>
<td>9,000–17,000</td>
<td>&gt;17,000</td>
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<tr>
<td>Weight for basic requirements</td>
<td>60%</td>
<td>40–60%</td>
<td>40%</td>
<td>20–40%</td>
<td>20%</td>
</tr>
<tr>
<td>Weight for efficiency enhancers</td>
<td>35%</td>
<td>35–50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Weight for innovation and sophistication factors</td>
<td>5%</td>
<td>5–10%</td>
<td>10%</td>
<td>10–30%</td>
<td>30%</td>
</tr>
</tbody>
</table>

Note: See individual country/economy profiles for the exact applied weights.
* For economies with a high dependency on mineral resources, GDP per capita is not the sole criterion for the determination of the stage of development.

Table 3: Stages of Development for the Top 20 Countries

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Transition from stage 1 to stage 2</th>
<th>Stage 2</th>
<th>Transition from stage 2 to stage 3</th>
<th>Stage 3</th>
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<td></td>
<td>United Arab Emirates</td>
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<td>Japan, Sweden, Taiwan, China</td>
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<td>Denmark, United Kingdom, United</td>
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Table 4: Comparative Analysis of India and Malaysia

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<th>Malaysia</th>
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<td>Population(millions)</td>
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<td>29.6</td>
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<tr>
<td>GDP (US$BILLIONS)</td>
<td>1870.7</td>
<td>312.4</td>
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<tr>
<td>GDP PER CAPITA(US$)</td>
<td>1505</td>
<td>10548</td>
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<tr>
<td>GDP (PPP) AS SHARE(%) OF WORLD TOTAL</td>
<td>5.83</td>
<td>0.60</td>
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<tr>
<td>GCI 2014-015 (RANK, SCORE)</td>
<td>71/144, 4.2</td>
<td>20/144, 5.2</td>
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<td>INSTITUTIONS</td>
<td>70/144</td>
<td>20/144</td>
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<td>60/144</td>
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<td>MARKET SIZE</td>
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<td>57/144</td>
<td>15/144</td>
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<td>INNOVATION</td>
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<td>21/144</td>
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<td>STAGE OF DEVELOPMENT</td>
<td>STAGE 1</td>
<td>Transition from stage 2 to stage 3</td>
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REFERENCES

INTRODUCTION

The importance of measuring Employee Attitude in enhancing Organizational Performance
This research examined the perception and attitude of the employees of a Malaysian organization on the performance management system and its effectiveness on the organisation. Many business companies nowadays are using various methods of Performance Management Systems to enhance the efficiency and the productivity of the employees. Some of the methods used are Six Sigma, Balance Scorecard (BSC), Social Return on Investment (SROI) and others. Hence, it is critical for the employer to analyse the effects and the implication of the measurement towards the attitude of their respective employees. This is because the organization needs to raise the performance and productivity in order to generate the desirable profits.

OBJECTIVES OF THE STUDY

Based on the research questions and hypothesis, this research has two objectives:

i) To identify the effects of implementing Performance Management System on employees’ attitude in pursuit for better performance; and

ii) To investigate the pervasiveness of balanced scorecard Learning and Growth’s perspective approach in the development of effective performance management system.

LITERATURE REVIEW

The traditional management control systems have been obsolete because of the inability to provide the relevant information for decision-making (Johnson & Kaplan 1987). Hence, a new performance management system which could be relevant, timely and able to produce the necessary information has been found to be critical in this information era (Otley 1999). However, Otley (1999) proposed that there are two major roles for the Performance Management (PM) as follows; Firstly, PM must ensure that the employees usually follow the policies and procedures at all times in order to protect the interests of the organisation all the time. Secondly, the new PM must have the ability to motivate the employees to act in accordance with the organisational goal.

Moreover, some scholars have claimed that performance management has been found to involve some processes of quantifying action that should lead to performance (Neely et. al 1995). The limitation of the
The Effect of Performance Management System Implementation: The Case of A Malaysian Service Organization from BSC Learning and Growth’s Perspective

A top-down approach was discovered and suggested that the PM should include conscious reflection of the strategy, objective, and organisational culture (Smith & Goddard 2002).

**BSC as a Strategic Management System**

Strategy and vision are situated at the core of Balanced Scorecard. The necessary action or behaviour must be taken by the employees in order to achieve the agreed goals. Kaplan and Norton (1996) have highlighted four important processes in linking BSC with the strategy as follows:

i. Overcoming the vision barriers through the translation of strategy
ii. Cascading the Balanced Scorecard to overcome the employee`s barriers
iii. Strategic resource allocation to overcome the resource barriers
iv. Strategic learning to overcome the management barriers

**i. Overcoming the vision barriers through translation of strategy**

The usage of BSC in this research is to provide guidance to the organisation on the overall strategy that has translated nebulous declarations into measurable achievement. The mission, vision and core values of the organisation would only be established if the organisation took a necessary action or behave accordingly and thus, BSC acts as a tool to transform vision based on the management’s strategy.

**ii. Cascading the scorecard to overcome the people`s barriers**

Norton (2001) stated that 95 percent of the workforce did not understand the organisation’s strategy. BSC elaborates on the mission and the strategy by providing “line of sight” from the director’s office to the front line (Azhar, 2008). Thus, employees would be able to know specific functions and contributions to the overall outcome of the organisations. Hence, the employees could agree to emphasize on the performance drivers that could lead to the desired outcomes by the management.

**iii. Strategic resource allocation to overcome the resource barriers**

The resources and processes are the two critical elements that BSC could assist in ensuring the success of managing the organisation (Kaplan & Norton 2002). The missed opportunity on recruitment and the inability of the firm to realize the processes would affect the final outcome.

**iv. Strategic Learning to overcome barriers**

This research will identify the processes carried out in the course of implementing the performance management system by ABC Manufacturing. The lack of information had caused the obtained knowledge to be short term in nature and obsolete. Hence, it is critical to gain the accurate information combined by the vision, resources and people`s barriers in the organisation.

**Employee Attitude**

Employee attitude play a vital role in determining organisational performance in the long run because it could lead to the desired employees’ behaviour and attitude that are needed in order to achieve the objective, mission and vision of the organisation (Moorhead & Griffin, 1992). Kreitner and Kinicki (1992:98), stated that attitude could be defined as ‘a learned predisposition to respond in consistently favourable and unfavourable manner with respect to a given object’. Moreover, Moorhead and Griffin (1992) outlined that attitude could arise from three major factors namely organisational factors, group factors and personal factors.

Employee attitudes are associated with many vital aspects of organisational behaviour such as job performance. Nevertheless, despite the increasing attention among scholars on employee attitude, the research by Mowday et. al (1982), shows a negative relationship between job satisfaction, absenteeism and turnover. However, positive attitudes should occur when the workers have high job satisfaction towards job factors such as opportunity for promotion and recognition (Du Brin 2005). Saari and Judge...
(2004) stated that management must be able to understand the relationship between business performance and work environment through the employee attitude. The internal and external factors that affect the work situation or working environment that include cultural influences would enhance the employees’ capabilities to the fullest.

Hypothesis for this Research
To achieve the objectives of this research, the following hypothesis was tested in the course of this research. The hypotheses analysed the effect of the Performance Management System on the employees’ attitude in ABC.

Hypothesis 1: There is evidence of a positive significant relationship between the BSC Learning and growth Perspective and the Employees’ Attitude in ABC.

METHODOLOGY

This research uses a positivist paradigm, which is a quantitative approach, because of the main strengths: generating precise, quantitative, numerical data from large survey sizes. Furthermore, the findings are reliable and can be generalised and replicated on many different populations (Maxwell & Delaney 2004).

The objectives of this research, however, were largely directed at understanding the effects of organisational culture and performance management system towards the employees’ attitude in government agencies. For this reason only the quantitative or deductive approach is being applied in this research.

Research design must be suited with the purpose of the research (Cavana et al. 2001; Neuman 2006). Thus, hypothesis testing, exploratory, descriptive are some of research designs that have been used in social science research (Neuman 2006). The type of investigation, time horizon, researcher interference and unit of analysis could be the elements in research design depending on the purpose of the research. Sekaran (2001) stated that critical choices, point to each component of the research design.

A research is conducted as a quantitative research due to the application of a more quantitative design for well-known subjects (Ward, Pearson & Entrekin 2002). Furthermore the research was conducted in a natural environment of the organisation, thus, the interference could be minimized by the researcher. Moreover, this research is concerned with the statistical significance and effect size for an overall model, hence, the correlation and regression analyses were appropriate to be implemented. The Social science research could be made available through case research, exploratory, descriptive or hypothesis testing (Cavana et al. 2001). However, Morgan, Gliner and Harmon (1999) comment that if there is no or little information available about the subject, the researcher must perform an exploratory research so that the grasp of the phenomena or interest on the subject matter could be obtained. Hypothesis testing is applicable to establish and understand further the relationship between variables (Cavana et al. 2001; Morgan 1999).

A total of 1000 respondents were randomly selected and surveyed in the particular organization. The respondents represented a variety of management levels specifically junior, middle as well as upper level. Prior to the fieldwork, a pilot testing was conducted with a sample of 50 individuals to ensure the validity of the questionnaire. To analyse the data, regression analysis was used in order to determine the relationship between the studied variables.
ANALYSIS OF FINDINGS AND DISCUSSION

From a total of 1000 questionnaires distributed, 507 of them were collected out of which only 400 (response rate of 40%) were usable. Of the 400 respondents, 256 (64%) were males and 144 (36%) were females. In terms of age composition, 150 (37.5%) of them were found to be less than 30 years, 127 (31.7%) were between the age of 30 to 40, whilst the remaining (30.8%) were of the age of 40 and above. In the context of educational background, a total of 150 or 37.5% of the respondents were degree holders, another 187 or 46.8% were diploma holders, 49 of them or 12.3% hold school certificates, whereas 10 or 2.5% were post-graduate and 4 or 1% of the remaining respondents hold professional qualifications. The breakdown composition of respondents in terms of positions were as follows: 226 (38.2%) constitutes of junior level, another 150 (37.5%) represent middle level, and the remaining 24 (6%) were from upper management level. In terms of working experience, a total of 153 (38.2%) had less than 5 years, another 172 (43.0%) were between 5 to 15 years and the remaining 75 (18.8%) were senior staff with more than 15 years.

Reliability Test for This Research

<table>
<thead>
<tr>
<th>Questions Category</th>
<th>Cronbach’s Alpha</th>
<th>No of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning and Growth Perspective</td>
<td>0.701</td>
<td>5</td>
</tr>
</tbody>
</table>

Testing the reliability of the questions that used Likert’s Scale showed that data from this research was reliable with Cronbach’s alpha value of at least 0.70 as shown in Table 1.1. Sekaran (2003) states that the closer the alpha value to 1 means the data is more reliable. In general, reliabilities less than 0.60 are considered to be poor or not good, those in the 0.70 are acceptable, and those over 0.80 are considered good. Therefore we can conclude that the data collected in this research was reliable and acceptable.

The Cronbach’s alpha for the 5 items in BSC Customer perspective components was .701 in this research. According to Hair et al. (1998, p.118), ‘the generally agreed upon limit for Cronbach Alpha is .70 although it may decrease to .60 in exploratory research’. Thus, all components in BSC Customer perspective have been found reliable in this research.

<table>
<thead>
<tr>
<th>Variables</th>
<th>R Value</th>
<th>R-Square</th>
<th>F-Statistic</th>
<th>Std Error Estimate</th>
<th>P-value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC Learning &amp; Growth</td>
<td>0.02</td>
<td>0.01</td>
<td>0.24</td>
<td>0.34</td>
<td>0.627</td>
<td>Not Significant at p&lt;0.001</td>
</tr>
</tbody>
</table>

Result of the Pearson Correlation Analysis (PCA)

Referring to Table 1.3, the PCA evaluated the BSC Learning and Growth perspective and was not significant with a p value > 0.001 (0.627) and with Pearson’s R value as 0.02. Thus, BSC Learning and Growth was not a significant predictor of EA because the R value was 0.02 and R square was 0.001 with p value more than 0.001. Each component of BSC Learning and Growth perspective had no significant
The Effect of Performance Management System Implementation: 
The Case of A Malaysian Service Organization from  
BSC Learning and Growth’s Perspective

proportion of its variance explained by Employee Attitude components. Hypothesis 1, which states that  
there is evidence of a significant positive relationship between the BSC Learning and Growth and  
Employees’ Attitude in MARA was not supported in this research.

Regression Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>R Value</th>
<th>R-Square</th>
<th>β</th>
<th>Std Error of Estimate</th>
<th>P-value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC Learning &amp; Growth</td>
<td>0.02</td>
<td>0.01</td>
<td>0.008</td>
<td>0.34</td>
<td>0.627</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

A standard regression was performed between employee attitude as the dependent variable and BSC  
Learning and Growth as the Independent variable. The correlation coefficient (R=.24) was significantly  
different from zero, F(1,398) = 0.236, p>0.001, and 0.1% of the variation in the dependent variable was  
not explained by the sets of independent variables (R² = .001). BSC Learning and Growth, β=.008, t=.48,  
p>0.001, was found not to significantly contribute to prediction of Employee Attitude.  
The overall result of the regression model is significant as p=0.627, is more than the threshold of 0.05.  
This indicates that BSC Learning and Growth as the independent variable does not significantly affect the  
dependent variable, the Employee Attitude (EA). The result also indicates that R square for 4 BSC  
Perspectives is 0.0001 which means the independent variable contributes only 0.01% towards the  
dependent variable (Employee attitude) and the significant value more than the alpha value of 0.05. The  
value of standardized coefficient also indicates the relative importance of this independent variable in the  
Regression analysis. Referring to Table 4.9, for BSC Learning and Growth, it is a negative relationship  
(β=-0.24).The result of the standardized coefficient (beta) reveals that BSC Learning and Growth (β=-  
0.08) is relatively not an important predictor towards Employee Attitude (EA) as the variable is  
significant. Therefore, Hypothesis H1 is not supported.

DISCUSSION AND CONCLUSION

In Malaysia, the use of BSC Learning and Growth’s perspective is gaining attention in line with the  
global push towards performance management systems as a means to enhance the agency’s growth and to  
maintain organisational discipline and focus. A Balanced Scorecard is useful to translate strategy into  
realisable goals with KPIs measuring performance (Bourne & Bourne 2007). It is a necessity especially  
for larger organisations such as ABC which has outgrown more informal means of managing resource  
allocation and goals. Thus, the challenge is in the implementation (The Star, 17 July 2009). However, the  
literature was silent on these research Hypotheses especially on several key issues on policies and practice  
pertaining to this research.

Examining the relationship between BSC Learning and Growth and employee attitude, it was revealed  
that BSC Learning and Growth is not significantly related to the employee attitude. Based on the path  
coefficient (standardised regression weight), BSC Learning and Growth has no positive significant  
relationship with EA.

Findings

The insignificant relationship of the BSC learning and growth found in this research proved that ABC  
would need to improve its organisational development (OD) drastically. The career development of the  
employees as well as the talent management in the organisation should be enhanced in order to improve
the level of productivity of the agency. This research found that the level of teamwork should need to be enhanced as well as staff mentoring and coaching.

The on-job training for ABC employees was seen important and thus, the communication and teamwork among the employees should be enhanced. The expectation of the management should be realized by the employees and thus, the rapport building among the supervisors and subordinates should be emphasized by ABC. Katz, R. (1974), in his research stated that the understanding of feelings and emotion of the employees could provide a high degree of self-awareness which could enhance the human skills of the managers.

a) The leadership in ABC was found not to fully understand the working conditions and the work situation in using the BSC as the yardstick to determine the performance of their subordinates. Ilgen, Fisher and Taylor (1979) noted that feedback could enhance performance due to the fact that it would serve as a reinforcer of appropriate work behaviour. This research also found that the employees in ABC favoured a more cognitive orientation that focused on informational value rather than reinforcement value.

b) The result of this research also indicates that the JDI (Smith, Kendall and Hulin 1969) and affective organisational commitment (Meyer & Allen 1991) model of employees’ attitude have been found to provide useful information in order to predict the various facets of job performance. Furthermore, the JDI model could represent a significant variance of the employees’ attitude in evaluating work performance. However, the research methodology and design of this research did not authorize for any statements of causality to be made in this research.

Furthermore, empirical studies reveal that the work-related attitude is vital and contributes significantly to increase the level of performance and productivity in the organisation (Misener et al. 1996; Moorhead & Griffin 1992). The Customer’s perspective in BSC has affected the attitude of the ABC employees and this finding shows that this perspective has been neglected or overlooked by the management. Overall, the universal perspective which provides the empirical basis for the behavioural-based theory has been supported in this research. The PMS practices were found to be significantly related to the work related attitude which consisted of job satisfaction and the organisational commitment. The results of this research underlines the values of creating enriched and challenging activities such as open communication and power sharing to change the firms’ management style in order to improve the effectiveness of Human Resources practices and consequently performance (Guerrero & Barraud-Didier 2004). This research has also supported the findings of Moorhead and Griffin (1992), the work of Aldag and Kuzuhara in 2002 and the research by Messersmith, Patel and Lepak in 2011 which prescribe that the work related attitude or employees’ attitude could positively influence the work outcome or organisational performance.

REFERENCES


Proceedings of the 12th AGBA World Congress, Malaysia, November 2015
Page 159 of 1173
The Effect of Performance Management System Implementation: The Case of A Malaysian Service Organization from BSC Learning and Growth’s Perspective


The Effect of Performance Management System Implementation: The Case of A Malaysian Service Organization from BSC Learning and Growth’s Perspective

Keywords: Business Strategy, Management Control Systems, Performance

INTRODUCTION

Evidence finds that Management Control Systems (MCS) and Business Strategies (BS) affect company performance which is defined in terms of financial and non-financial measures (Peljhan, D. & Tekav, M. 2008, Govindarajan, V. & Gupta, A. K. 1985, Gani, L. & Jermias, J. 2012). Therefore, the need for an appropriate fit between a company’s MCS, and its business strategy (BS) is crucial to perform well in its industry (Langfield-Smith, 1997, Simon, 1987, Simon, 1990).

It seen that the emergence of the service industry as a prominent contributor to economic development. Sri Lanka, as an emerging market has been experiencing a significant growth in the service sector in the last few decades (CBSL, 2011). Among others, Sri Lanka’s telecommunications industry contributes significantly to the country’s development. Notably, the domestic telecommunications sector has been charting an exponential growth, and continues to enjoy promising prospects. The landscape of the telecommunication industry in Sri Lanka has changed drastically since the deregulation of the telecommunication sector in the early 1990s. The number of service providers has increased from one, i.e., the state monopoly, to seven. The challenge in the sector is therefore, to determine, what BS is to follow in changing emerging market conditions, and how to use efficient and effective MCSs to support these targets to achieve good performance.

Studies have found mixed results. Some have found that, in the designing of MCSs and BS influenced by the organizational context, there is a one-way relationship between MCSs and BSs and a two-way impact of the relationship between MCSs and BS on the performance (Davilia 2008, Dekker 2006, Simons 1990, Otely 2004, Kober 2007).

Traditionally, the fit between the MCS and the BS has been viewed as a passive one, suggesting that the MCS is an outcome of organisational strategy. However, some studies found that the relationship between MCS and BS is two-way. Most of the previous studies were found to have been limited to study the relationship between MCS and BS and no attention has been paid to the impact of the fit between MCS and BS on performance.

The existing literature indicates that there is a gap in the performance impacts of the MCS – BS fit. Also there is no empirical evidence of it in a Sri Lankan context. Therefore, this study focuses on investigating the fit between MCSs and BSs on company performance in the telecommunication industry in Sri Lanka.

THEORETICAL BACKGROUND

Evidence is found to explain the effectiveness of MCS through the contingency theory. Interaction between control sub-systems (or mechanisms), and organisational performance (or individual-based
outcome variables such as motivation or satisfaction) when contingent variables are well connected (Soobarroyen, 2007).

Pock’s (2007) argues that contingent environment is a core-element and both internal and external context of a system or an organisation has a strong impact on the performance and efficiency of the system. According to Otley (1999), a firm’s strategy and objectives are the central contingent variables. These variables are likely to heavily influence the design of a firm’s MCS, as well as act as the criteria against which the resulting contingent choices can be evaluated. In other words, the relationship between the strategy undertaken and the MCS adopted will determine the ‘goodness of fit’ of the system.

Chenhall (2003) in his critical review of findings from contingency-based studies over the past 30 years, he remarked that researchers have attempted to explain the effectiveness of MCSs by examining designs that best suit the nature of the environment, technology, size, structure, strategy and national culture. Lawrence and Miller (1976) examined contingency approach to identify the impact of environment, organisational attributes, and managerial decision variables requisites of the Accounting Information System (AIS).

The core theme of the study the “Fit” between strategy and MCS has been viewed (Drazin and Van de Ven,1985) an elements which positively correlated with performance. Venkatraman and Prescott (1990) identifies six perspective of “fit” as moderation, fit as mediation, fit as matching, fit as profile deviation and fit as co-variation.

Drazin and Van de Ven (1985) further identified three different forms of fit namely selection, interaction, and the systems approach. The selection approach assumes that fit is the congruence between the task environment and the organisational structure, and mostly leaves out the explicit impact on organisational performance. The interaction approach regards fit as being the interaction of paired environment and organisational structure factors which affects organisational performance. However, in complex organisations, it is disputable which pairs really affect the performance. Further, in system approach fit can be tested statistically by using Profile Deviation Analysis, Euclidian distance and Cluster Analysis. The Euclidean Distance (ED) is based on the Pythagoras’ theorem. Accordingly, the concept of distance between two samples or between two variables is fundamental in multivariate analysis. As a consequence, squared distances between two vectors in multidimensional space are the sum of squared differences in their coordinates. This multidimensional distance is called the Euclidean distance (Anon., 2013, Deza and Deza, 2009). There are two common types of ED that are found in the literature i.e. standardized Euclidean distance and weighted Euclidean distance. In Standardized Euclidean distance, variables are on different measurement scales, standardization is necessary to balance the contributions of the variables in the computation of distance, and in Weighted Euclidean distance, the standardization in the calculation of distances is equivalently thought of as weighting the variables – this leads to the notion of Euclidean distances with any choice of weights. In the present study Weighted Euclidean Distance was applied.

Drazin and Van de Ven (1985) have described that there are three approaches to the measuring of performance: i.e. selection, interaction and system to examine the fit between the variables. Under the system approach they have further emphasized the importance of identification of ideal organizations, the deviation from the ideal situation could be measured using Euclidean distance, and a typical equation was proposed to measure the fitness.

\[
\text{Mis fit} = \sqrt{\sum_{j=1}^{n} (b_j \cdot (X_{aj} - \bar{X}_{ej}))^2}
\]
where

\[ X_{ij} = \text{the } j^{th} \text{ MCS variable score for the organisation in the study sample} \]

\[ X_{ij} = \text{the mean score for the “Ideal” configuration for the } j^{th} \text{ MCS variable} \]

\[ b_j = \text{standardised beta weight of the OLS regression equation for the } j^{th} \text{ MCS variable in the specific type of strategy } j = 1 \ldots n \text{ where } n \text{ is the number of MCS variables in the specific types of strategy} \]

**OBJECTIVES OF THE STUDY**

In addressing the research question “What are the existing situations between MCSs and adopted BSs and how such situation affects a firm performance?” in the research, the following objectives are expected to be achieved.

1. To identify the adopted competitive BSs.
2. To determine the range of possible score for MCS variables.
3. To examine the relation between BSs and MCS
4. To evaluate performance implications of BS – MCS misfit

**METHODOLOGY**

The misfit of the adopted BS and its MCS is identified by calculating and comparing the values in a model influenced by the Euclidian theory of distance (ED). Data was collected through a survey method. Accordingly, three econometric models were used to analyse and interpret the results.

**Model 1**

\[ \text{Performance} = \beta_0 + \beta_{\text{type1}*\text{Strategy Type1}} + \beta_{\text{type2}*\text{Strategy Type2}} + \beta_{\text{type3}*\text{Strategy Type3}} + \beta_{\text{type4}*\text{Strategy Type4}} \]

where, \( \beta_0 \) is the constant

**Model 2**

\[ \text{Performance} = \beta_{\text{mcs}} + \beta_{\text{pe}}*\text{PE} + \beta_{\text{com}}*\text{Com} + \beta_{\text{comp}}*\text{Comp} + \beta_{\text{pm}}*\text{PM} + \beta_{\text{commit}}*\text{Commit} \]

where, \( \beta_{\text{mcs}} \) is the constant

**Model 3**

\[ \text{Performance} = \beta_0 + \beta_{\text{type1}*\text{Strategy Type1}} + \beta_{\text{type2}*\text{Strategy Type2}} + \beta_{\text{type3}*\text{Strategy Type3}} + \beta_{\text{type4}*\text{Strategy Type4}} + \beta_{\text{pe}}*\text{PE} + \beta_{\text{com}}*\text{Com} + \beta_{\text{comp}}*\text{Comp} + \beta_{\text{pm}}*\text{PM} + \beta_{\text{commit}}*\text{Commit} \]

where, \( \beta_0 \) is constant

PE- Performance evaluation
Com-Communication
Comp-Compensation
Commit- Commitment
PM- Product and market policy

Data for the study was obtained from focus groups of respondents by using a questionnaire with multi scale preferences. The study covers telecommunication industry focusing on middle level managers to collect data. The questionnaire contained three parts namely BS information, MCS information and information about performance with a total of 44 questions. The respondents are middle level managers as

*Proceedings of the 12th AGBA World Congress, Malaysia, November 2015*

*Page 164 of 1173*
they implement the policies and design of MCS. Ninety questionnaires were distributed and 62 were returned signifying a response rate of 69%.

In addition, data was obtained from publications of Telecommunication Regulatory Council of Sri Lanka (TRCSL), Annual reports, newspaper articles, marketing research reports, web sites of each company and the annual report of the Central Bank as well.

Four variables namely, Type 1 (Defender), Type 2 (Prospector), Type 3 (Analyzer) and Type 4 (Reactor) were used with respect to business strategies. The questionnaire contained a list of characteristics that represent Miles & Snow’s (1978) strategic typology of defender, prospector, analyser and reactor. The respondents were asked to indicate whether the characteristics described represent their firms on a scale of 1 to 5 with disagreement to highest agreement respectively. Following the multi-item scale approach, firms were identified into their strategic typology by running Ordinary Least Square (OLS) considering BS type as the independent variable and performance as the dependent variable.

With respect to MCS, five variables namely performance evaluation, product and marketing policy, communication, commitment and compensation were considered (Drazin and Van de Ven, 1985). Respondents were instructed to rate the degree of importance attached to each system used on a five point Likert scale. (1= the statement does not suit my organisation at all and 5= the statement suits my organisation to a very high degree).

Returns on Assets (ROA), Net Cash Flow from operating activities on Assets (CROA) and profit for the year was taken the common modes of measuring the performance. Performance level relative to their leading competitors were asked to indicated on a five point Likert scale (1= significantly below average, 5= significantly above average). Three constructs were developed to derive the financial performance measure by summing up the scores of the three constructs.

**Hypotheses Tested**

Inferential analysis includes testing hypotheses in relation to each objective of the study. The researcher has used multiple regression analysis to test the effect of independent variables in dependent variables. After running the regression $R^2$ value and probability value of F statistics on the ANOVA table was used to accept or reject the hypotheses. $R^2$ explains the percentage explanation of the dependent variable done by the independent variables. If probability value of F statistics is less than 0.05, then reject $H_0$.

Therefore, following hypotheses could be proposed to identify how the fitness between the adopted BS and MCSs have effect on the performance.

**Hypothesis 1:** Whatever strategy is adopted the mean value of performances are equal, if there is a fit or misfit between the adopted BS and MCS.

$$H_0: \mu_1 = \mu_2 = \mu_3 = \ldots$$

Where, $\mu_x$ - mean values of performances of a particular company

It is assumed that fit or misfit between adopted BS and MCS does not affect company performances.

**Hypothesis 2:** Whatever strategy is adopted, the mean value of performances is equal if there is a fit (correlation coefficient is closer to 1) between the adopted BS and MCS.

$$H_0: \mu_1 = \mu_2 = \mu_3 = \ldots$$

Where, $\mu_x$ - mean values of performances of a particular company
It is assumed that fitness of adopted BS and MCS affect better performances of a company.

**Hypothesis 3:** The mean value of performances of companies is equal, if there is a fit or misfit between the adopted BS and MCSs.

\[ H_0: \mu_1 = \mu_2 = \mu_3 = \ldots \]

Where, \( \mu_s\) - mean values of performances of a particular company

It is assumed that performances of companies are equal if they show a fit or misfit between the adopted BS and MCSs.

**Hypothesis 4:** The mean value of performances of companies is equal, if there is a fit (correlation coefficient is closer to 1) between the adopted BS and MCSs.

\[ H_0: \mu_1 = \mu_2 = \mu_3 = \ldots \]

Where, \( \mu_s\) - mean values of performances of a particular company

It is assumed that performances of companies are equal if they show a fit between the adopted BS and MCSs.

**DATA ANALYSIS, FINDINGS AND INTERPRETATION**

**Categorization of companies based on the strategy**

The strategy types were regressed against performance and results were obtained for each company. Table 1 shows the results of OLS regression and it is found that one or more strategies are only significant for a particular company. One of the four BSs was significant for the performances of Dialog, Hutch, Mobitel, Airtel, and Sri Lanka Telecom (SLT). This implies that these companies run their business activities based on one clear strategy. Three strategies were significant for Etisalat and Lanka Bell. Etisalat runs its business under three BSs and among them ‘prospector’ strategy is more significant for their business performances. For Lanka Bell, ‘defender’ strategy is more significant compared to other strategies. The analyser strategy was only significant for performance of SLT. Hutch and Airtel could be considered as Reactor as that strategy was significant for their company performance.

The ‘prospector’ strategy was significant was successful for performances of ‘Dialog’ and Mobitel. Meanwhile, ‘Dialog’ company indicated the highest mean performance (4.64), and the significant strategy and its correlation with MCS is higher than that of Mobitel. Dialog has shown the highest correlation with performance having a 0.94 correlation coefficient.

Secondary data too supports this finding as it has the highest numbers of subscribers maintains the highest mobile network coverage by capturing the market through Dialog TV and CDMA. Hence, ‘Dialog’ could be considered as the leader.

**Table 1: Identification of Significance of BS Types on Company Performances**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Hutch</th>
<th>Mobitel</th>
<th>Airtel</th>
<th>Dialog</th>
<th>Etisalat</th>
<th>SLT</th>
<th>LB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defender</td>
<td>-0.0950</td>
<td>0.236</td>
<td>-0.233</td>
<td>0.964</td>
<td>0.362*</td>
<td>-0.232</td>
<td>0.971***</td>
</tr>
<tr>
<td></td>
<td>(0.127)</td>
<td>(0.609)</td>
<td>(0.120)</td>
<td>(0.690)</td>
<td>(0.0561)</td>
<td>(0.340)</td>
<td>(0.240)</td>
</tr>
<tr>
<td>Prospector</td>
<td>-0.179</td>
<td>1.615**</td>
<td>0.0431</td>
<td>3.119*</td>
<td>0.785***</td>
<td>-0.206</td>
<td>-0.0935</td>
</tr>
</tbody>
</table>

*Proceedings of the 12th AGBA World Congress, Malaysia, November 2015 Page 166 of 1173*
The relationship between company performance and applied business strategy

Table 2 shows the mean performance mentioned by respondents in each company. The highest performance values were recorded from Mobitel and Dialog companies in terms of MCS and BS. Airtel, Etisalat and SLT showed the middle level performances, Hutch and Lanka Bell showed the lowest performances. The lowest performance was recorded from ‘Lanka Bell’, and the lowest co-relation coefficient for BSs against MCS was resulted for ‘Lanka Bell’. The correlation between BS type and MCS were clearly shown in Table 3.

### Table 2: Performance and Co-relation between BS and MCS

<table>
<thead>
<tr>
<th>Company</th>
<th>Mosty applied BS</th>
<th>Corelation between BSs and MCS</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hutch</td>
<td>Reactor</td>
<td>0.369</td>
<td>2.85</td>
</tr>
<tr>
<td>Mobitel</td>
<td>Prospector</td>
<td>0.894</td>
<td>4.29</td>
</tr>
<tr>
<td>Dialog</td>
<td>Prospector</td>
<td>0.939</td>
<td>4.64</td>
</tr>
<tr>
<td>Airtel</td>
<td>Reactor</td>
<td>0.362</td>
<td>3.45</td>
</tr>
<tr>
<td>Etisalat</td>
<td>Prospector</td>
<td>0.784</td>
<td>3.31</td>
</tr>
<tr>
<td>SLT</td>
<td>Analyzer</td>
<td>0.786</td>
<td>3.89</td>
</tr>
<tr>
<td>Lanka Bell</td>
<td>Defender</td>
<td>0.284</td>
<td>2.37</td>
</tr>
</tbody>
</table>

**Source:** survey data

### Table 3: Correlation Coefficients for the Adopted BS

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Company</th>
<th>Co-relation co-efficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>Lanka Bell</td>
<td>-0.064</td>
</tr>
<tr>
<td>Type 2</td>
<td>Mobitel and Etisalat</td>
<td>0.75</td>
</tr>
<tr>
<td>Type 3</td>
<td>Sri Lanka Telecom</td>
<td>0.72</td>
</tr>
<tr>
<td>Type 4</td>
<td>Hutch and Airtel</td>
<td>0.34</td>
</tr>
</tbody>
</table>

**Source:** survey data

**Identification of critical and non-critical MCS variables under each strategy**

The OLS regressions were made for the BS type versus MCS, and results were given in Table 4. The MCS variables like performance evaluation and commitment are significant for ‘Defender’ strategy, and the variables performance evaluation and product & market policy are significant for the ‘Prospector’ strategy. In the ‘Reactor’ strategy, MCS variables of compensation and communication are significant. The analyzer strategy is applied by Sri Lanka Telecom and it has showed that there are three variables; they are performance evaluation, compensation and commitments which are highly significant. ‘Dialog’ was considered as the ‘Ideal’ company.
The significant variables could be considered as the critical variables and other variables could be considered as non-critical MCS variables. Therefore, based on the above results, the critical and non-critical MCS variables under each BS could be identified and categorized in Table 5.

### Table 5: Categorization of MCS Variables as Critical and Non Critical under Each BS

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Critical MCS</th>
<th>Non Critical MCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defender</td>
<td>Performance Evaluation, Commitment</td>
<td>Compensation, Product &amp; Market Policy, communication</td>
</tr>
<tr>
<td>Prospector</td>
<td>Performance Evaluation, Product &amp; Market policy</td>
<td>Compensation, commitment, communication</td>
</tr>
<tr>
<td>Reactor</td>
<td>Compensation, communication</td>
<td>Performance Evaluation, Product &amp; Market policy, Commitment</td>
</tr>
<tr>
<td>Analyser</td>
<td>Performance Evaluation, compensation, commitment</td>
<td>Product &amp; Market policy</td>
</tr>
</tbody>
</table>

Source: survey data

**Calculation of Euclidean distance for misfit**

Performance versus MCS variables was regressed and significant MCS variables and non significant variables were found. Only Performance evaluation MCS variable was significant and others were not significant. The results of OLS regression are given in Table 6.

‘Dialog’ was considered as the ideal company, and the Euclidean distance for misfit of variables was also calculated and the results are given in Table 7. The Strategies, Prospector (Mobitel, Etisalat) and Analyzer (SLT) showed the lowest Euclidean distance under critical variables. BSs adopted companies like...
Mobitel, Etisalat and SLT are closer to the performances of Ideal situation (Dialog). The misfit of these companies and ideal situation is the minimum.

BSs of Reactor (Hutch, Airtel) and Defender (Lankabell) showed the highest Euclidean distances and these companies are highly misfit with the ideal situation. In other words, when the ideal situation showed the highest performances, these companies showed the least performances.

### Table 6: OLS Regression on Performance vs MCS Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Performance</th>
<th>Beta coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Evaluation</td>
<td>0.339*</td>
<td>0.407</td>
</tr>
<tr>
<td></td>
<td>(0.186)</td>
<td></td>
</tr>
<tr>
<td>Compensation</td>
<td>0.208</td>
<td>0.254</td>
</tr>
<tr>
<td></td>
<td>(0.152)</td>
<td></td>
</tr>
<tr>
<td>Product &amp; Market policy</td>
<td>-0.144</td>
<td>-0.161</td>
</tr>
<tr>
<td></td>
<td>(0.243)</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>-0.188</td>
<td>-0.218</td>
</tr>
<tr>
<td></td>
<td>(0.237)</td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>-0.325</td>
<td>-0.314</td>
</tr>
<tr>
<td></td>
<td>(0.210)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>3.932***</td>
<td>(0.497)</td>
</tr>
</tbody>
</table>

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Source: survey data

### Table 7: Calculated Euclidean Distance for Misfit for Critical and Non Critical Variables

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Euclidean distance for variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall</td>
</tr>
<tr>
<td>Defender</td>
<td>1.07</td>
</tr>
<tr>
<td>Prospector</td>
<td>0.11</td>
</tr>
<tr>
<td>Analyzer</td>
<td>0.06</td>
</tr>
<tr>
<td>Reactor</td>
<td>0.47</td>
</tr>
</tbody>
</table>

Source: survey data

The overall misfit, misfit of critical and non-critical variables showed that BS ‘Defender’ (Lankabell) had overall highest misfit with the ideal situation and the lowest misfit was recorded for analyzer (SLT). However the critical variables for prospector showed the lowest misfit with ideal situation but the non-critical analyser recorded the lowest. Reactor has somewhat moderate misfit with the ideal situation for critical and non critical MCS variables.

Based on the results, it could be concluded that as suggested by Govindarajan and Gupta (1985) the MCS should be tailored (designed and used) explicitly to support the strategy of the business to lead to competitive advantage and superior performance. Further, prospector and defender strategies require quite different designs and uses of MCS. This was also emphasized by Langfield-Smith (1997) and states that, “the MCS should be tailored explicitly to support the strategy of the business”. Therefore, strategy is an important factor in the design and use of MCS.
Testing of hypotheses
The following hypotheses were tested to identify how misfit or fit between the adopted BS and MCS affects on performance. Table 8 shows the hypotheses and obtained results under each ANOVA regression.

<table>
<thead>
<tr>
<th>Hypothesis no.</th>
<th>Null hypothesis</th>
<th>F value</th>
<th>P value</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Whatever strategy is adopted, the performances are equal if there is a fit or misfit between the adopted strategy and MCS.</td>
<td>10.79</td>
<td>0.000</td>
<td>Null hypothesis is rejected</td>
</tr>
<tr>
<td>2</td>
<td>Whatever strategy is adopted, the performances are equal if there is a fit (correlation coefficient is closer to 1) between the adopted strategy and MCS.</td>
<td>0.15</td>
<td>0.7013</td>
<td>Null hypothesis is accepted</td>
</tr>
<tr>
<td>3</td>
<td>The performances of companies are equal if there is a fit or misfit between the adopted strategy and MCS.</td>
<td>6.66</td>
<td>0.000</td>
<td>Null hypothesis is rejected</td>
</tr>
<tr>
<td>4</td>
<td>The performances of companies are equal if there is a fit (correlation coefficient is closer to 1) between the adopted strategy and MCS.</td>
<td>0.09</td>
<td>0.9635</td>
<td>Null hypothesis is accepted</td>
</tr>
</tbody>
</table>

Source: survey data

Table 8 shows the results of ANOVA regression for all companies. The performance values of all strategy types were regressed and F and Probability values were obtained.

In the first ANOVA regression, for companies Hutch, Mobitel, Lanka Bell and SLT were considered and they adopted different strategies i.e ‘reactor’, ‘prospector’, ‘defender’ and ‘analyzer’ respectively. In this regression the fit or misfit between strategy type and MCS were not considered and equality of performances of all companies were tested. The F and P values are 10.79 and 0.000 respectively. The F value is greater than the probability, and null hypothesis is rejected. That means the performances of all the companies were not equal, because in some companies i.e. Hutch and Lanka Bell did not show a fit (high correlation) between the adopted strategy and MCS variables, and Mobitel and SLT had a significant fit between the adopted strategy and MCS variables.

In the second regression, two companies Mobitel and SLT were considered, and they adopted strategies ‘prospector’ and ‘analyzer’. Further, both these companies showed that their adopted BS and MCS variables are highly fitted. The correlation coefficients were closer to 1. Therefore the results showed that the F value (0.15) is lower than probability (0.7013), and null hypothesis could be accepted.

In the third regression, all seven companies were considered. Some of companies had a fit between the adopted BS and MCS variables and some companies did not have such a fit between the adopted BS and MCS variables. The ANOVA results showed that the F value (6.66) was greater than P value (0.00) and therefore, null hypothesis was rejected. This means if there is a fit between the adopted BS and MCS variables, performances will be almost same.
Companies Mobitel, Dialog, Etisalat and SLT showed that there is a significant correlation (correlation coefficient is more than 0.72) between the adopted BS and the MCS variables (correlation is more than 0.78) (Table 3). The resulted P value (0.9635) is greater than F value (0.09) and this ANOVA regression shows that their performances are almost equal. That means null hypothesis is accepted, if the BS and MCS are fitted, the performances of companies are almost same.

CONCLUDING NOTE

This study examined the fit between MCS and BS on performance. It is noted that for better performance of a particular company, their strategy and MCS should highly fit. Further, study also highlights the benefits of examining seven similar organizations over the same period of time to compare their ways of using the same type of MCS to achieve the same type of organizational change in performance.

This research makes a contribution to the management control literature in three different ways. First, it documents some management control practices in telecommunication industry in Sri Lanka. Secondly, the study identifies some of the strengths and weaknesses of the companies involved. Finally, the research adds to available research tools by proposing an extended framework for the study of the operation of performance management and control systems.

REFERENCES


Adopting Building Information Modeling to Achieve Dynamic Capability

Keywords: Building Information Modeling, Construction Industry, Dynamic Capability, Information Technology, Coordination, Competitive Advantage

INTRODUCTION

The construction industry has been criticized for its relatively slower adoption of advanced techniques than other industries such as information technology and manufacturing. Operational inefficiency and sub-optimization at the macro level are among the areas of concern (Cox & Thompson, 1997; Gann, 1996). However, one of the recent developments is the introduction of Building Information Modeling (BIM), which may be considered a major evolution in the architecture, engineering, and construction (AEC) industries.

The American National Institute of Standards and Technology (NIST) released a report in 2004 that estimated the efficiency losses in the capital facilities industry (Eastman, 2011). The report estimated that $15.8 billion was being lost every year due to inadequate interoperability resulting from the fragmented nature of the industry. AEC firms continued to rely on paper-based business practices with less attention to standardization and technology adoption.

This paper evaluates the incorporation of BIM as a project requirement that serves as a catalyst to advance the construction industry. The strategic perspective of this evolution is realized by considering BIM as providing a capability enhancement tool to provide a competitive advantage at the project level. Being a multifaceted capability with various effects, this is viewed in the context of a dynamic capability, which is critical for achieving and sustaining a competitive advantage in a highly competitive industry.

BACKGROUND

In this paper, project competitive advantage refers to the ability of a project to meet the owner’s business objectives in terms of cost, time, and quality. One indicator of the successful completion of a project is its potential to replicate the same network. Recent research on aligning resources in time-bound networks reveals that network replication is not practiced in the construction industry. In other words, upon project completion, there is very limited re-alignment of the same resources and capabilities under the same firms. Certain dyadic replications are witnessed, but not at a level that would indicate a competitive advantage that is carried forward into new projects.

The construction industry revolves around stakeholders focusing on short-term business objectives driven by the completion date of a project. The main effect of this short-lived objective has been felt in the industry’s delayed improvement in technical innovation (Alabdulrazzak 2013). Dubois and Gadde (2002) suggested that the loosely coupled system at industry level causes innovation to suffer. However, they argue that this loose coupling provides the grounds to support the tight coupling at the project level. Dubois and Gadde (2002) therefore concluded that the coupling dynamics at the project and industry levels are a convenient match for the inherent complexity in the construction sector. According to this perspective, the project level resembles short-term resource engagement, while the industry level corresponds to longer-term interaction that exceeds a single project. Dubois and Gadde (2002) evaluated
Adopting Building Information Modeling to Achieve Dynamic Capability

The patterns of system couplings in the construction sector. They described a construction project as a “specific temporary network” that operates within a “more permanent network” (Dubois & Gadde, 2002: 624).

The purpose of interaction between members of a construction network is for firms to supplement their resources and capabilities to jointly execute a project. Loasby (1998) posits that a firm is a specialized system of limited internal resources and competences that is embedded in and relies on a network of external resources and competences. Early perspectives on firm assets by Penrose (1959) and later by Teece (1984) suggest that unique competitive advantages are driven by internal strategies that require acquisition and development of resources to achieve ongoing advantages.

According to the industrial marketing and purchasing (IMP) discipline developed by European scholars (Axelsson & Easton, 1992; Hakanson & Snehota, 1995; Johanson & Mattsson, 1988), no single entity controls a network. In a construction project, centrality of command is disclaimed in favor of the decentralized and loosely coupled structure of a network (Hakansson & Johanson, 1993). This view contradicts the perception of the more dominant research work of scholars in supply chain management, where the main client is considered the commander of the tightly coupled network, and downstream entities weather out factors external to the network (Faria, 2004).

In a construction project the building owner represents the ultimate client who usually has all the power to act as the main commander of the network. The owner has the contractual power to determine all members of the network. In other words, the project owner has the authority to align all resources and capabilities to execute the project. This view takes us back to treating a construction project as a network that fits into the supply chain network with a central commanding firm (Lamming, 1993). The downside of this privilege is that this power comes with a great liability placed on the owner rather than on downstream network entities.

The fragmented links between firms working within the same project demonstrate the industry’s fragmented nature, which leads to the general inefficiency of the industry. Incorporating BIM as a binding tool could be one major step in the direction of advancing the AEC industries.

Enhancing Information Flow Through BIM

BIM systems can enable leaner construction methods if adopted across an organization or through the entire project network (Eastman et al., 2011). BIM is a data-rich intelligent digital representation of a building in three dimensions (Lan & Omran, 2015). The modeling system allows users to add costs, schedules and sustainability parameters among other useful information. BIM modelers use such information at various levels of a construction project from concept to completion, as well as after project handover for maintenance. Data is compiled through various modules involving different firms working on the project, with each member contributing to the scope of work.

Initial project perspective drawings are detailed enough to represent the look and capabilities of the building to the project owner. However, designs are not thoroughly detailed to show how to construct the building. This is where BIM coordinates various design details to allow for an efficient execution of the project. The amalgamation of various pieces of the model is done to provide a multitude of analyses and interpretations of the best practices to execute the project in the most efficient way.

Most common applications of BIM include building structure, architecture, and electromechanical. For example, building a hospital with advanced technologies involves various complexities such as providing medical gas systems, piping networks, complex cabling networks, and other structural elements. Documentation of design requirements and coordination between the various contractors on the project could be challenging tasks. Incorporating BIM as a design platform (see Figure 1) that allows the sharing...
of data among all project network members may be of paramount importance to maintain investor’s objectives on time, cost, and quality.

BIM allows the setting of standards and operating procedures that simplify collaboration through data sharing (Klaschka, 2014). BIM may be viewed as a democratic tool that allows information transparency after all parties have contributed to the system to enhance project governance.

**Figure 1: Example for Incorporating BIM as a Design Platform**
Adopting Building Information Modeling to Achieve Dynamic Capability

Proceedings of the 12th AGBA World Congress, Malaysia, November 2015
Page 177 of 1173

Dynamic Capability Enhanced by BIM

Although the construction industry has been labeled inefficient compared to other disciplines, standardization has been a principal target for its participants through significant advances in construction technology over the past two decades. Childress (2014) believes that one of these advancements is BIM, which can organize the design and construction sequence into a manageable system. BIM being one of the most sophisticated advances in construction recently, its growing adoption is resulting in significant improvements to the industry in terms of material saving, cost reductions, and quality.

Mandating BIM by a project owner standardizes the information flow. When two-dimensional designs are generated for a project they follow standards set by the dyadic relationship between limited parties. For example, the façade contractor producing and installing the glass for a tower is following designs generated by the architect, with limited regard to other trades involved in the building. On the other hand, when each subcontractor is obliged to follow BIM standards, all their models are coordinated in a master model that detects any potential clashes. This is one the primary advantages of BIM.

Childress (2014) supports the view that a major advantage of BIM is its ability to develop three-dimensional models and two-dimensional details during the design process prior to execution. The dynamic capability provided to each firm using BIM allows it to capitalize on the resources and capabilities possessed by other firms in the network. The power of coordination and information sharing builds a synergy among project network members that would not be harnessed without a standard platform such as that provided by BIM.

Members of a project network posses various internal resources that qualify them to participate in a project. According to Daft (1983), firm resources include system and procedures, know-how, and information technology. Network firms may also possess certain capabilities that give them a competitive edge, such as social capital (Putnam, 1995), alliance management (Helfat et al., 2007), or managerial capabilities (Griffith et al., 2010). These resources and capabilities come at various levels of development within each firm.

Also of significant interest in academic research is dynamic capability. Teece et al. (1997: 516) define dynamic capability as a “firm’s ability to integrate, build and reconfigure internal and external competencies to address rapidly changing environments”. Pavlou (2004) differentiated dynamic capabilities from functional or static competencies. Functional competencies perform basic operational
activities, such as logistics and marketing, while dynamic capabilities capture the creative capacity to enhance ineffective functional competencies in dynamic environment.

The dynamic capabilities view (DCV) provides a theoretical basis for evaluating the competitive advantages of BIM in the context of strategic management. Since we are viewing BIM as a comprehensive tool encompassing various firms within a project network, we should consider DCV a source for developing resources through interdependency on external factors. For example, Eisenhardt and Martin (2000) refer to the managerial ability of forming alliances as a dynamic capability. Zollo and Winter (2002) attribute organizational learning to dynamic capabilities, and, recently Chen and Lee (2008) found that external links and previous experience contribute to developing dynamic capabilities. The commonality in the dynamic capabilities view is that time presents an essential factor in building such capabilities, and that capabilities create competitive advantages that help to accumulate value over time. However, business transactions that are time-bound, such as construction projects, challenge the theoretical perspectives built around the longevity of inter-organizational relations.

Rapidly changing or dynamic environments in the context of this paper may be attributed to construction projects that evolve over the life of execution, from concept to building handover. During this time many factors contribute to deviations from the original plan. Such factors could be internal such as shortage of building material, or external such as new statutory requirements set by local authorities. These deviations could have significant impacts on budgets and timely completion.

Elaborating on dynamic capabilities, Eisenhardt and Martin (2000) specified examples of processes characterized as dynamic capabilities, including business alliances, resource allocation and knowledge transfer. They present the dynamic capabilities perspective as an enhancement of the resource-based view with a focus on long-term competitive advantage, especially in dynamic markets. They view organizational capabilities as common across firms; these capabilities may be labelled as “best practices” that evolve over time through learning. According to Eisenhardt and Martin (2000) the specific sets of organizational strategies that are addressed in the dynamic capabilities perspective include formation of alliances and decision-making strategies that reconfigure resources into value creation. They concluded that dynamic capabilities are not the source of sustainable competitive advantage; rather, it is the timing and effective use of these capabilities to configure resources ahead of competition.

Several other studies have enriched our understanding of dynamic capability, including that of Zollo and Winter (2002) who identified organizational learning as a source of dynamic capability. Over time, this capability may lead to what Adner and Helfat (2003) refer to as “dynamic managerial capability”, which encompasses management’s capacity to align a firm’s resources. Teece et al. (2002) highlighted this capability as a mechanism to sense business opportunities.

Helfat et al. (2007: 29) later fine-tuned the definition of dynamic capability as “the capacity of an organization to purposefully create, extend, or modify its resource base”. The broad term “resource base” includes not only tangible and intangible assets, but also dynamic capabilities as part of the resource structure. Based on this definition, and through their attempt to measure the performance of dynamic capabilities, Helfat et al. (2007) build upon the concept of evolutionary fitness that describes the extent to which a dynamic capability enables a firm to operate by configuring its resource base. The key in linking dynamic capabilities to evolutionary fitness is the dependence of evolutionary fitness on external environment factors that enable a firm to survive and grow in the market.

Evolutionary fitness presents a pretext to link a firm’s resources with external entities through the four influencing factors on the evolutionary fitness of a dynamic capability: “quality, cost, market demand, and competition” (Helfat et al., 2007: 52). Competition entails cooperation with other firms through alliances that will increase evolutionary fitness. At the same time, a greater competitive environment with

Proceedings of the 12th AGBA World Congress, Malaysia, November 2015
Page 178 of 1173
similar dynamic capabilities will decrease the evolutionary fitness of a firm. Helfat et al. (2007) conclude that dynamic capabilities will not lead to competitive advantages unless the following prerequisites are met:

- Heterogeneity of the cost and quality of a dynamic capability. The cost and quality of the dynamic capability should be heterogeneous.
- Demand for the application of the dynamic capability. There should be strong demand for application of the dynamic capability.
- Rareness of the dynamic capability. The dynamic capability should be rare.

While these prerequisites share similar themes as attributed to the resource-based view (i.e., valuable, rare, imitable, un-substitutable), Helfat et al. (2007) attribute the sustainability of competitive advantage to the external environment. In a dynamic environment, needs might change, rendering imitation barriers insignificant as capabilities will no longer be required. A key dynamic capability identified by Helfat et al. (2007) is relational capability, which has the potential to provide competitive advantages that provide long-term success through external growth mechanisms, including alliance and acquisition capabilities.

Pavlou (2004) studied the impact of information technology (IT) on dynamic capabilities based on the concept that IT enhances a firm’s agility. Pavlou (2004) described ‘IT competence’ as the “ability to acquire, deploy, and leverage IT functionality in combination or co presence with other resources to shape and support business processes”.

BIM is an IT based evolution of architecture and design. The information sharing platform and data processing capabilities allow for rapid transfer of data among members of a project network. Resources and capabilities are rapidly and efficiently aligned towards the timely execution of construction activities. The anticipation of clashes that may occur between different trades during construction saves substantial time that could otherwise result in unnecessary rework.

Decision making at various levels of the project becomes more structured when evaluated at the design stage, prior to resource allocation and mobilization. The improved communication, including across the network, forms a cooperative environment. BIM enhances the dynamic capability of each firm by allowing each to strengthen its dyadic links, and the links are then expanded to the whole network for a more structured project flow. BIM is ideally consolidated into a single platform to coordinate all trades within a project. With this understanding, we may perceive BIM as the single tool to create a project-level dynamic capability built up from a firm-level dynamic capability. Dynamic capabilities are of great importance in rapidly changing environments, such as in a construction project where network members have to face various turbulent internal and external conditions. These conditions have direct impacts on resources and capabilities that may in many cases be reconfigured based on scientific analysis driven by BIM. The impact of BIM on dynamic capabilities may also be assessed from a contractual perspective.

A recent development in construction contracts is Integrated Project Delivery (IPD). IPD is a new deviation from the conventional design-bid-build contracts. IPD integrates the core activities of a project in such a way that fewer decisions are made by each network member acting in isolation and influenced by each member’s distinct economic and risk management motivations (Circo, 2014). This form shares many characteristics of the alliance format, but more comprehensively. IPD contracts include powerful incentives to encourage teamwork and to avoid decisions made without regard for the best interests of the project in general. Key features of the IPD contract are multi-party umbrella contracts rather than dyadic agreements. Furthermore, IPD agreements show a highly structured team management style that gives each of the major network members a voice in decisions related to scope of work, cost, and schedule. The overall environment created by IPD contracts is better managed with a BIM-based project. Although BIM and IPD are mutually exclusive, they still follow the same trend of project integration, which is also
following the drive of dynamic capabilities to improve the alignment of resources and capability for an efficient project delivery.

CONCLUSION AND FUTURE RESEARCH

BIM is gaining popularity as firms in the construction industry become more aware of this useful technology. Lee et al. (2015) proposed an acceptance model for BIM in the construction industry using structural equation modeling. The model is based on technology acceptance behavior theories, along with interviews with industry professionals and case studies. Lee et al. (2015) categorized the acceptance parameters into internal (e.g., perceived ease of use and usefulness), and external (e.g., organizational competence and technology quality) variables. As the technology advances we expect to see more individuals and organizations adopting BIM.

Property developers are becoming increasingly encouraged to set BIM as a project requirement to be implemented. In fact, the major driver for BIM acceptance in the construction industry is local governing authorities. BIM is currently adopted by the construction industry in south east Asia, Europe, North America, and recently the Gulf Cooperation Council. The higher adoption level is contributing to a faster and more productive proliferation of BIM technologies.

This paper demonstrates a novel view of BIM from a strategic perspective. Individuals and firms that are accepting BIM as a tool may consider this to be a dynamic capability. The advantage of this dynamic capability at the firm level enhances resources and capabilities within the firm as well as the overall capabilities of the project. The improved communication between network members provides potential savings by reducing rework and ensuring timely delivery of project specifications.

Developments in BIM are not the only major contributors to the advancement of the construction industry. The growing technological leaps in 3D manufacturing are now showing progress in 3D construction. Practitioners of BIM are demonstrating the advantage of incorporating BIM into construction projects. Given the continuous evolution of this technology, each project will enhance the means of application by adding new tools. Perhaps 3D modeling develops into a more readily available 3D fabrication or 3D construction.

Advancements in 3D construction are already being witnessed, while Europe, USA, and China have publicized their efforts to develop 3D printing for the construction industry. Researchers in University of Southern California are envisaging the future use of ‘Contour Crafting’ for building structures in outer space. In the Netherlands, construction experts are building the first fully inhabited building out of blocks printed on site. In a more aggressive attempt to expand into customized mass production, Chinese engineering firms have already started commercializing 3D construction to build small units that would soon become suitable for living in.

Besides the economic benefits in 3D construction that are realized from customizing mass production, this technology allows architects to achieve new levels of creativity in their designs, allowing architects to optimize space. Environmental advantages are also important factors when considering the savings on material through better control of waste that usually results from conventional construction techniques. Moving a factory to the final site of application is also a major contributor to improving the carbon footprint through reduced emissions from transport.

As described already, 3D printing techniques have started finding their way into the construction industry, and BIM technology is supportive in that direction. Increased understanding of BIM in the context of dynamic capabilities would help expand the adoption of this promising technology across the value chain of the construction industry.
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Consumers’ Perceived Interactivity of Mobile Banking Usage: A Conceptual Review

Keywords: Technology Acceptance Model, Diffusion of Innovation Model, Perceived Interactivity, Perceived Risk, Perceived Cost

INTRODUCTION

According to Wikipedia, the Mobile banking is a system that allows customers of a financial institution to conduct a number of financial transactions through a mobile device such as a mobile phone or tablet. Similarly, Drexelius & Herzig (2001) elucidated mobile banking as the ability to conduct bank transactions via a mobile device, or more broadly to conduct financial transactions via a mobile terminal. However, Barnes & Corbitt (2003) defined mobile banking as “a channel whereby the customer interacts with a bank via mobile device, such as a mobile phone or personal digital assistant (PDA)”.

In tandem with the mobile banking evolution, innovative mobile applications are developed. Maybank became the first financial institution in Malaysia to introduce a free banking application, M2UMap, in May 2009 on the newly launched iPhone (Maybank2u, 2009). Later, CIMB Bank Berhad introduced CIMB Clicks which became the most popular and widely used banking app in Malaysia. Apparently, almost all the banks in Malaysia such as Al Rajhi Banking & Investment Corporation (Malaysia) Berhad, AmBank (M) Berhad, Bank Islam Malaysia Berhad, Bank Simpanan Nasional, CIMB Bank Berhad, Citibank Berhad, Hong Leong Bank Berhad, Malayan Banking Berhad, OCBC Bank (Malaysia) Berhad, Public Bank Berhad, RHB Bank Berhad, and Standard Chartered Bank Malaysia Berhad offers mobile banking services (Masrek et al., 2012). Later in 2014, Maybank launched Maybank2u App which created success with more than one million downloads. In 2015, Maybank launched another App known as Quick Balance which accommodates customers to only view their account and card balances on mobile devices which serves customers who purely want to check balances (Thestar.com.my, 2015).

There are numerous researchers that have studied the technology adoption but not many studies are carried out on the intention to use mobile banking within the Malaysian perspective. Mobile banking in Malaysia is still in its infancy stages and unpopular to Malaysians that leads to underutilization of this feature (Amin et al., 2006). This is consistent with the findings of Bank Negara Malaysia in 2014 that reported that there are 5.639 million subscribers of mobile banking services in Malaysia while Malaysian Communications and Multimedia Commission reported that Malaysia’s mobile phone penetration rate is as high as 145% in the Q3 2014. Comparing the mobile banking services’ subscribers to the mobile phone penetration rate, the former is relatively low. Interchangeably, the transaction volume via mobile banking per capita is comparatively low with other payments methods (Bank Negara Malaysia, 2014).

Hence, this conceptual paper determines the factors influencing the intention to use mobile banking services in the Malaysian telecommunication industry perspective by incorporating Technology Acceptance Model (TAM) with Diffusion of Innovation Model (DOI).
LITERATURE REVIEW

Technology Acceptance Model (TAM)
Technology Acceptance Model (TAM) was proposed by Fred Davis. Davis advocated that external stimulus comprising actual system's features and capabilities influences the users’ motivation to use the system which predict the usage of the system. He further proposed that users' motivation of actual usage are determined by three factors that are perceived ease of use, perceived usefulness and attitude towards using a system which is mediated by their behavioural intention to use as shown in Figure 1. Perceived usefulness is the degree to which a person believes that using a particular system would enhance his or her job performance. On the other hand, perceived ease of use is explained as the degree to which a person believes that using a particular system would be free of effort (Davis et al, 1989).

![Figure 1: Technology Acceptance Model (Davis et al, 1989)](image)

Amin (2007) analyzed the mobile credit card usage intentions in Sabah, Malaysia. The result shows that perceived ease of use has a significant effect on the perceived usefulness of mobile credit card and both these variables effects the Malaysian bank customers’ mobile credit card usage intentions. Gounaris and Koritos (2008) investigated the drivers of internet banking adoption decision in Greece which revealed that ease of use influences the decision of internet banking adopters. Rezaei et al (2008) investigated the external factors that may affect the intention to use e-learning by graduate students of agriculture in University of Tehran, Iran which found strong influence of perceived usefulness on students’ intention to use e-learning. In spite of that, perceived ease of use neither influences perceived usefulness nor intention to use e-learning.

Jayasingh & Eze (2009) examined customers’ behavioral intention towards mobile coupons in Malaysia which found that perceived usefulness and perceived ease of use influences the behavior and intention of consumers in using mobile coupons. Selamat et al (2009) examined the determinant factors and acceptance of information technology in the Malaysian banking industry. The result demonstrates that perceived usefulness and perceived ease of use influences bankers’ acceptance of new technology. Hill & Troshani (2009) examined the adoption of personalisation type of mobile services among young Australians that revealed that perceived usefulness has a significant effect on the intention to adopt these services. Tang & Chiang (2009) studied the behavioral intention to use mobile knowledge management in Taiwan that revealed that perceived usefulness had significant effect on behavioral intention to use it. Consistently, perceived ease of use influences behavioral intention on the mobile knowledge management significantly.
Yousafzai & Yani-de-Soriano (2012) examined customers’ actual internet banking behaviour in United Kingdom which revealed that intention to use internet banking significantly predicts its actual use. Besides that, they found that perceived usefulness significantly influences the intention to use internet banking but perceived ease of use failed to do so. However, perceived usefulness is significantly influenced by perceived ease of use. Fu et al (2012) examined the ignored concept on development of Educational Information Technology among students in a Taiwanese university that revealed that perceived usefulness and perceived ease of use has significant effect on their attitude. Furthermore, attitude influences the intention to use Educational Information Technology. On the other hand, perceived ease of use displayed significant influence on perceived usefulness. Moreover, perceived usefulness significantly influences their intention to use too.

Tung et al (2014) explored the consumer behavioral intentions to use the internet banking in Taiwan and found that perceived ease of use affects perceived usefulness which affects behavioral intention to use the internet banking. In addition, perceived ease of use affects the behavioral intention too. Shahsavari & Sajadi (2013) investigated the enterprise resource planning acceptance drivers in Iran which revealed that perceived ease of use positively influences perceived usefulness and both these variables have significant relationship with the intention to use of enterprise resource planning systems. Nikas & Argyropoulou (2014) investigated the impact of collaborative tasks on individuals’ perceived performance in ICT enabled project teams which revealed that perceived ease of use of collaborative technology has a positive effect on their attitudes toward the intention to use the collaboration technology.

Yang et al (2014) investigated the effects of availability in alternative media and trust on the relative importance of perceived usefulness and ease of use on the adoption of mobile self-service technologies in Korea. The result shows that perceived ease of use and perceived usefulness has great impact on users’ intention to adopt mobile self-service technologies. Karuppiah et al (2014) examined the customer acceptance of internet banking in Brunei Darussalam and found that perceived ease of use affects significantly the intention to use the internet banking service. Moorthy et al (2014) investigated the e-filing behaviour among academics in Perak state in Malaysia which revealed that perceived use of use and perceived usefulness influences the academic’s e-filing adoption intention.

Li et al (2014) investigated the influence factors and the influence mechanism which effect Chinese adaption intention of mobile payment. The result shows that perceived usefulness affects significantly the attitude which affects itself the adoption intention of intention mobile payment. Besides that, perceived ease of use influences perceived usefulness too. Xiao et al (2014) examined the key motivators for consumers’ attitude towards continuing the reception of existing e-book reading in northern Taiwan which found that perceived ease of use and perceived usefulness influences attitude towards use whereby perceived ease of use effects significantly perceived usefulness.

Özbek et al (2015) examined the tourists’ risk and cost perceptions affect their adoption level of online booking among Russian tourists visiting Antalya, Turkey that revealed that perceived ease of use has a positive effect on perceived usefulness. On the other hand, both perceived ease of use and perceived usefulness displayed significant effect on behavioral intention to use online booking too. Batkovic & Batkovic (2015) examined the consumer acceptance of mobile-retail among undergraduates and graduates enrolled at school of business, economics and laws in Gothenburg that revealed that perceived ease of use has a significant effect on perceived usefulness which exhibited influence on consumers’ intention to use mobile-retail. Wu et al (2015) investigated the factors that affect consumer co-design experience of online apparel mass customization in the Midwest region of the US. The result shows that consumers’ attitude towards co-design experience and their behavioural intention towards the mass customization site is significantly affected by its perceived usefulness and perceived ease of use. Furthermore, consumers’ attitude towards co-design experience significantly influences their behavioural intention towards the mass customization site.
Martínez-Torres et al (2015) examined the intention of using ubiquitous technology in urban environments in Spain that revealed that usefulness has a significant correlation with both the intention to use and ease of use. Chung et al (2015) examined the factors related to Taiwanese EFL college students’ behavioral intention to use mobile English vocabulary learning resources which revealed that perceived usefulness and perceived ease of use has significant relationships with their behavioral intention to use mobile English vocabulary learning resources.

**Diffusion of Innovation model (DOI)**

Diffusion of Innovation Model (DOI) is a theory proposed by Everett Rogers in 1962 that seeks to explain how, why and at what rate new ideas and technology spread through cultures (Wikipedia, n.d.). According to Rogers (2003), the innovation-diffusion process is an uncertainty reduction process that envelops five characteristics of innovations that are knowledge, persuasion, decision, implementation and confirmation as shown in Figure 2. Rogers describes the knowledge as awareness knowledge, how to knowledge and principles knowledge. It’s when a person becomes aware of an innovation and has some idea of how it functions. In the persuasion stage a person forms a favorable or unfavorable attitude towards the innovation which consists of five attributes that are relative advantage, compatibility, complexity, trialability and observability. Rogers explains relative advantage as the degree to which an innovation is perceived better than the ideas it supersedes, compatibility is the degree to which an innovation is perceived as consistent with the existing values, past experiences, and needs of potential adopters, complexity as the degree to which an innovation is perceived as relatively difficult to understand and use, trialability is the degree to which an innovation may be experimented with on a limited basis, observability as the degree to which the results of an innovation are visible to others. Next is the decision stage whereby the person engages in activities that lead to a choice to adopt or reject the innovation. This is followed by implementation by which a person puts an innovation into use. Finally the person evaluates the results of an innovation decision already made in the confirmation stage (Rogers, 2003).
Gerrard and Cunningham (2003) investigated the diffusion of internet banking among Singapore consumers which revealed that compatibility and complexity influences the internet banking adopters. Joubert & Belle (2009) found that compatibility is a significant factor of intention to participate in mobile commerce in Africa. Schierz et al (2010) found that there is a positive relationship between the perceived compatibility and the attitude towards using mobile payment services. Furthermore, Wessels & Drennan (2010) found that compatibility has a significant effect on consumer’s attitude towards and intention to use mobile banking adoption among Australian consumers aged 18 years. Arvidsson (2014) found that relative advantage as a significant predictor of consumers’ attitudes to adopt the mobile payment services in Sweden.

### Perceived Risk of Mobile Banking

Cox and Rich (1964) defines perceived risk as the nature and amount of risk perceived by a consumer in contemplating a particular purchase decision. Basically, perceived risk by the consumer is a function of the amount at stake in the purchase decision, and the individual’s feeling of subjective certainty that he or she will win or lose all or some of the amount at stake. In 1967, Cunningham modeled perceived risk into six facets that are performance, financial, opportunity/time, safety, social and psychological loss. Kolodinsky et al (2004) found that risk is significantly related to the intention to adopt electronic banking in the United States of America. Similarly, perceived risk significantly impacts on behavioral intention to use (Wu & Wang, 2005). Eriksson et al (2008) found that perceived risk significantly influences the
consumers’ adoption decisions of internet banking in Estonia. Aldás-Manzano et al (2009) examined the role of consumer innovativeness and perceived risk in online banking usage among Spanish internet banking users which found a negative significant influence of perceived risk on the adoption of internet as a banking channel. In addition, Li (2013) found that perceived risk affects attitude toward using the internet banking. Hsieh (2015) examined the physicians’ acceptance of electronic medical records exchange system in Taiwan that revealed that perceived risk is a significant predictor of physicians’ intention to use an electronic medical records exchange system. On the other hand, physicians’ attitudes toward using the system influences their intention to use it. Furthermore, both perceived usefulness and perceived ease of use of the exchange system correlates significantly with the physicians’ attitude toward using it.

**Perceived Cost of Mobile Banking**

Luarn & Lin (2005) defined perceived cost as the extent to which a person believes that using mobile banking will cost money. They empirically identified perceived cost as a negative effect on behavioral intention to use mobile banking by interviewing consumers in person. Kuo & Yen (2009) found that perceived cost had a significantly negative effect on attitude. Cruz et al (2010) found that perceived cost is a significant barrier on the Brazilian’s adoption intention of mobile banking services. Yu (2012) investigated factors affecting individuals to adopt mobile banking in Taiwan. The result shows that individuals’ intention to adopt mobile banking was significantly influenced by perceived financial cost. The behavioral intention to use the internet banking is effected by the perceived financial cost (Tung et al, 2014). Amberg et al (2015) investigated the user acceptance for web based aptitude tests among university students in Germany and found that perceived costs induces the users’ acceptance of web based aptitude tests. Additionally, perceived usefulness and perceived ease of use influences users’ acceptance of web based aptitude tests too.

**Perceived Interactivity of Mobile Banking**

In 1980, Guedj defined interactivity as a style of control and interactive systems that exhibit that style. However, Ha and James (1998) constituted that interactivity should be defined in terms of the extent to which the communicator and the audience respond to or are willing to facilitate, each other’s communication needs. Basically, interactivity means two-way communication between source and receiver. Wu (1999) examined the perceived interactivity and attitude toward web sites among university students which found a positive significant influence of perceived interactivity on the attitude toward web sites. Teo et al (2003) investigated the effects of interactivity level on web user’s attitude towards commercial web site among undergraduate students of National University of Singapore which found interactivity on a web site exhibited positive effects on user’s attitude towards a web site. Sundar & Kim (2005) found that level of interactivity is positively associated with ad and product attitudes among undergraduate students. Li et al (2015) investigated the effect of website interactivity, promotional framing on consumer attitudes toward online advertising among students from a national university in Southern Taiwan which revealed that website interactivity can enhance consumer attitudes.

**Demographic Characteristics**

Many researchers uses demographic characteristics to improve the explanatory power of consumer’s intention to use new technologies. As a matter of fact, Consumers vary in various ways. Education level and age is one method to categorize them. An undergraduate will make decisions in a different manner than a doctorate (Paul & Rana 2012; Darmesh et al, 2014). Gounaris and Koritos (2008) found that consumer’s education level influences their internet banking adopting decision of in Greece. Kolodinsky et al (2004) found that age has significant chain reaction on users’ intention to adopt electronic banking technologies in the United States of America. Persistently, the age of consumers displayed significant effect on individual’s attitudes to adopt mobile payment services in Sweden (Arvidsson, 2014).
Conceptual Framework

Based on established relationships found by previous literatures, a conceptual framework is developed for these variables involved in this study which consists of Usefulness, Easefulness, Relative Advantage, Perceived Interactivity, Perceived Risk, Perceived Cost, Age and Education as the independent variables, Attitude Towards Using Mobile Banking as the mediating variable and Intention to Use Mobile Banking as the dependent variable as shown in Figure 3. Simultaneously, nine hypotheses is devised as shown in Table I.

![Conceptual Framework Diagram]

**Figure 3: Conceptual Framework**

**Table I: List Of Hypotheses**

<table>
<thead>
<tr>
<th>List Of Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: There is a relationship between Usefulness and Attitude Towards Using mobile</td>
</tr>
<tr>
<td>banking.</td>
</tr>
<tr>
<td>H2: There is a relationship between Easefulness and Attitude Towards Using mobile</td>
</tr>
<tr>
<td>banking.</td>
</tr>
<tr>
<td>H3: There is a relationship between Relative advantage and Attitude Towards Using</td>
</tr>
<tr>
<td>mobile banking.</td>
</tr>
<tr>
<td>H4: There is a relationship between Perceived Cost and Attitude Towards Using</td>
</tr>
<tr>
<td>mobile banking.</td>
</tr>
<tr>
<td>H5: There is a relationship between Perceived Risk and Attitude Towards Using</td>
</tr>
<tr>
<td>mobile banking.</td>
</tr>
<tr>
<td>H6: There is a relationship between Perceived Interactivity and Attitude Towards</td>
</tr>
<tr>
<td>Using mobile banking.</td>
</tr>
<tr>
<td>H7: There is a relationship between Attitude Towards Using and Intention to Use</td>
</tr>
<tr>
<td>mobile banking.</td>
</tr>
<tr>
<td>H8: There is a relationship between Age and Intention to Use mobile banking.</td>
</tr>
<tr>
<td>H9: There is a relationship between Education and Intention to Use mobile banking.</td>
</tr>
</tbody>
</table>
CONCLUSION

This research meets the requirements of mobile banking backdrop. Furthermore, it is an addition to the limited number of literatures in the mobile banking context. It also fills the gaps of previous studies. From the findings of this comprehensive literature review, mobile banking service providers and mobile banking app developers will have to realize the importance of knowing and understanding consumer behaviour. In addition, both these mobile banking service providers and mobile banking app developers can use these findings of this research as a reference to meliorate their market share. This can be done by stages with the concept of personalisation of services to the consumers. Apart from that, marketing strategies can be coined to suit to consumers’ attitude and behavioural intentions. Therefore, the findings of this research could be used banks, mobile banking service providers and mobile banking app developers in their marketing. Fundamentally, it will contribute to a country’s economic growth.

REFERENCES


Consumers’ Perceived Interactivity of Mobile Banking Usage: A Conceptual Review


Maybank Introduces First Ever Mobile Banking Services Information for iPhone Applications in Malaysia (2009, August 7) Retrieved September 1, 2014, from http://www.maybank2u.com.my/mbb_info/m2u/public/personalDetail04.do?channelId=Personal&cntTypeId=0&cntKey=AU09.08.10&programId=AU02.02ArchiveNews&newsCatId=/mbb/AU-AboutUs/AU02 Newsroom/2009/08&chCatId=/mbb/Personal


INTRODUCTION

Over the past few years, companies look for ways to gain competitive advantage against their competitors. In the past, when the focus was on production goods and services as much as possible without considering exact demand companies started to look for efficient ways to manage customers and sales.

Customer relationship management (CRM) is a system for managing a company’s interactions with current and future customers. It often involves using technology to organize, automate and synchronize sales, marketing, customer service and technical support.

The study by Reinartz, Krafft & Hoyer (2004) revealed that retail banks face a big challenge in providing the high level of service that is now expected while still improving their profitability and market share. They emphasize that today’s competition is based on differentiated service rather than a differentiated product. The adoption of CRM is widely seen as a way to achieve this objective.

Companies that implement CRM can make better relationships with their customers, improve customers’ loyalty, increased revenue and reduced cost (Blery & Michalakopoulos, 2006).

Davis (1986) proposed the technology acceptance model (TAM) to explain and predict user acceptance of information systems or information communication technology. In TAM, cognitive beliefs such as perceived usefulness and perceived ease of use are counted as key factors for technology acceptance. This paper is organized as follow: the next section surveys literature for similar studies, section 3 builds the modified TAM to be used by this paper, section 4 contains research methodology, section 5 presents the details of data analysis, and the final section presents conclusions of the paper and its recommendations.

LITERATURE REVIEW

The original Technology Acceptance model (TAM)

TAM is an information system theory that models how users accept and use a technology. The model, as developed by Davis (1989), suggests that when users are presented with a new technology, a number of factors influence their decision about how and when they will use it, as shown in Figure 1. In TAM, perceived usefulness (PU) factor refers to "the degree to which a person believes that using a particular system would enhance his or her job performance", while perceived ease of use (PEOU) is defined as "the degree to which a person believe that using a particular system would be free from effort". Both factors are considered distinct factors influencing users' attitude towards using the technology, though perceived ease of use is also hypothesized to influence perceived usefulness and attitude towards using the
technology. In Figure 1, the relationships between factors affecting actual use of a technology are represented by the arrowed lines.

The technology acceptance and the technology acceptance model (TAM) has become the most important model for the forecasting of the extent to which a new information technology will be used (Gefen, 2003). Previous findings from the field of technology acceptance research suggest that for the advantages of a technology to be attained, the technology must be accepted and used (Venkatesh, et al., 2003).

![Figure 1: The generic technology acceptance model (TAM)](image)

**Related work**

Notionally studies exist on the use of CRM in Jordanian banks. For example, in Awwad & Al-akailah (2012), authors emphasized the importance of the factors for successful implementation of CRM, namely interactive management (1), customer prospecting (2), partnerships (5), Customer Surveying (3), and Responsiveness to Customers (4). (Numbers indicate the rank of the factor). The research, however, did not study the actual use of the CRM system. At the same time the emphasis on interactive management as the number one rank supports the factor used in this study “top management support”. In another study, the authors concluded that further analysis of the findings indicated that the CRM concept did not seem to be well incorporated in the business strategy of most Jordanian banks and financial institutions (Alsmadi & Alnawas, 2011). The conclusions of the previous study support the evidence demonstrated by this paper and the need for awareness campaign regarding the use of CRM in Jordanian banks.

Internationally, several studies published research on CRM deployment in industries. Rootman, Tait & Bosch (2007) highlighted the influence of bank employees on bank customer relationship management and concluded that significant positive relationships exist between both the knowledgeability, and attitude of bank employees and a bank’s CRM. These relationships imply that more extensive knowledgeability and more positive attitudes of bank employees lead to improved, maintained relationships between a bank and its clients. Employees play an important role in banks’ client relationships. This further support the findings of this paper that banks employees of all level must be aware of the benefits of CRM to their operations. In Mishra, et al., (2011) authors studied several activities and services related to customer relationship with the private and public banks in India. The paper concluded that private banks chose aggressive sales promotion and door-to-door campaign to attract new customers than their public sector counterparts, while rural branches focus more on distributing bulletins, motivating employees and door-to-door campaign as methods to attract new business. All banks, at the same time, deploy the core activities of personal contact, personal attention to customer needs and improving service quality to attract new customers. In addition, few public section banks believe that more advertisements, increasing number of employees and improving the ambiences is important for attracting new customers. The preceding paper provides a micro view of the use of CRM-based activities, but did not use any model to test these results. Another study concluded that CRM activities affect customer loyalty (KOÇOĞLU & KIRMACI, 2012).
These activities and variables in the above studies can be incorporated as variables questions related to factors in this paper in future studies.

**STEP ONE: DEVELOPING THE MODEL USED BY THIS PAPER**

This paper attempts at identifying several external factors/variables that affect the adaptation of CRM in banking institutions. In this section the paper first identifies five external factors, then draws the modified TAM model as used in this paper, and finally lists related hypotheses based on the figure.

**The external factors**

Researchers have progressively developed the TAM by proposing and testing specific antecedent factors to its two use-belief constructs. Without considering antecedent factors, the TAM provides only very general information on users opinions about a system and does not yield “specific information that can better guide system development” (Mathieson, 1991). In search of new factors that affect the adaptation of new technology such as CRM, the following 5 factors are suggested. Another research on customers' use of internet banking in Jordan banks based on TAM list the following factors: subjective norms, security and trust, Internet experience and enjoyment (Abbad, 2013).

**Subjective norms**

Subjective norm is a person's perception of what others around them believe that the individual should do. In its purest essence, subjective norm is a type of peer pressure whether or not a person participates or intends to participate in any behavior is influenced strongly by the people around them. These people may include friends or a peer group, family, co-workers, church congregation members, community leaders and even celebrities. In this paper we try to explore the impact of subjective norm factor to adopt a CRM system in the banking sector.

**Computer experience**

Individual characteristics will play an important role in the acceptance of an information system. Computer experience refers to an individual's perception of his/her experience with computers. It is assumed that computer experience will positively influence a person belief structure regarding an information system. This paper explores the impact of computer experience factor to adopt a CRM system.

**Training**

Training is the acquisition of knowledge, skills, and competencies as a result of the teaching of vocational or practical skills and knowledge that relate to specific useful competencies. Training has specific goals of improving one's capability, capacity, productivity and performance. Prior training is a determinant of perceived usefulness (Igbaria, Iivari, & Maragahh, 1995). The previous study also found that computer experience and user training were positively related to perceived ease of use.

**Self-Efficacy**

Self-Efficacy, coined by Albert Bandura (www.Wikipedia) is a person's belief in his or her ability to complete a future task or solve a future problem. For example, if a person believes he is a brilliant scientist and can complete any scientific experiment, he has a high self-efficacy in science because a person believes in his competency to perform a future experiment. Self-efficacy can also influence individual’s goals, actions, and successes (or failures) in life. The study by Al-Hedir (2013) found the positive effect of self-efficacy on the intention behavior to use towards the actual usage for the technology through the positive effect on perceived usefulness and ease of use.
Top Management Support
Top management support is the degree to which senior management understanding the importance of IS function and the extent to which it is involved in IS activities. Top-management support is on everyone’s list of critical success factors (CSFs). In fact, it is usually at the very top of the list. Fail to get it, we are told, and the acceptance stands little chance of succeeding. Indeed, without top level support the acceptance may never be approved, or if it is approved at all it may take forever for it to get through the process. Without support, cooperation from other departments may be impossible to obtain, and commitment from team members will be unenthusiastic. A scenario for the latter situation will be trying to complete the acceptance team with a representative from marketing, yet top management has offered only minimal support. This paper explores the impact of top management support factor to adopt a CRM system.

The modified TAM model as used in this paper
Figure 2 below incorporated the six external factors as discussed above with the generic TAM model.

![TAM CRM model](image)

Figure 2: TAM CRM model as proposed in this paper.

Research hypotheses
The following table lists acronym definition of the factors.
Table 1: Acronym Definitions

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PU</td>
<td>Perceived Usefulness</td>
</tr>
<tr>
<td>PEOU</td>
<td>Perceived Ease of Use</td>
</tr>
<tr>
<td>BI</td>
<td>Behavioral Intention to Use</td>
</tr>
<tr>
<td>TS</td>
<td>Top management support</td>
</tr>
<tr>
<td>CE</td>
<td>Computer Experience</td>
</tr>
<tr>
<td>SN</td>
<td>Subjective Norm</td>
</tr>
<tr>
<td>TR</td>
<td>Training</td>
</tr>
<tr>
<td>SE</td>
<td>Self-Efficacy</td>
</tr>
<tr>
<td>AU</td>
<td>Actual Use</td>
</tr>
</tbody>
</table>

Based on the above figure, the paper derived the following 14 hypotheses, as referenced on each connection between the factors:

H1: a subjective norm (SN) will have a positive influence on behavioral intention to use (BI).
H2: a subjective norm (SN) will have a positive influence on perceived usefulness (PU).
H3: a subjective norm (SN) will have a positive influence on perceived ease of use (PEOU).
H4: computer experience (CE) will have a positive influence on perceived usefulness (PU).
H5: computer experience (CE) will have a positive influence on perceived ease of use (PEOU).
H6: training (TR) will have a positive influence on perceived usefulness (PU).
H7: training (TR) will have a positive influence on perceived ease of use (PEOU).
H8: self-efficacy SE will have a positive influence on perceived usefulness (PU).
H9: self-efficacy (SE) will have a positive influence on perceived ease of use (PEOU).
H10: top management (TS) support will have a positive influence on perceived usefulness (PU).
H11: top management (TS) support will have a positive influence on perceived ease of use (PEOU).
H12: perceived ease of use (PEOU) will have a positive influence on perceived usefulness (PU).
H13: perceived ease of use (PEOU) will have a positive influence on behavioral intention to use (BI).
H14: perceived usefulness (PU) will have a positive influence on behavioral intention to use (BI).
H15: behavioral intention to use (BI) will have a positive influence on actual use (AU).

However, initial reviews of the questionnaires found no evidence of Banks’ use of CRM. Therefore, H15 was dropped from further analysis.
RESEARCH METHODOLOGY

The study includes banks in two major cities, Amman- the capital of Jordan and Zarqa- the third largest city. The data were collected by distributing questionnaires to employees in a number of banks. Three hundred questionnaires were distributed and 205 questionnaires were retrieved. 36 questionnaires were rejected due too many missing data, leaving 169 usable questionnaires with a ratio of 56.3%.

The questionnaire contains three parts, each measuring a construct in the proposed CRM model, and designed to test a study hypothesis. The first part contains personal information, such as gender, age, working position, level of education, place and status. The second part contains questions for each of the factors affecting the use of CRM system, and finally the third part contains the actual use of the CRM system.

Questions in the second and third parts are attached to each of the factors in Figure 2 are designed to ask respondents to rate their degree of agreement using a 7-point Likert scale. The scale runs from “strongly disagree”, which is the lowest end of the scale and takes the value “1” up to “strongly agree”, which is the highest end of the scale and takes the value “7” leaving a scale mid-point of “4”, labeled as “neutral” and so on.

Data collected from the questionnaires were analyzed using SPSS. For the first section, frequency tables were generated for respondents’ background. Sampling adequacy is tested using Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity. Following this analysis factors analysis among the 5 external factors was conducted using Rotated Component Matrix. Next, the paper conducted factor correlation and regression analysis among the factors of the modified TAM as used in this paper. Finally, the demographic variables are correlated to the factors using Chi-square statistics.

STEP TWO: DATA ANALYSIS FOR MODEL VALIDATION

Demographic description of the sample
As Table 5.1 indicates, 64.5% of the respondents were male and 35.5% were female. 30.8 % of the respondents had more than 6 years of job experience. Respondents held a variety of positions and department in the job. They included marketing, 3.6%; customer relationship management, 13.0%; customer service, 49.7%; and others, 33.7 %. In terms of education levels, 1.2% of the respondents had graduated from high school, 6.5% held diploma degree, 83.4% held bachelor degrees, and 8.9% had master or PhD degrees. The majority of the respondents of 59.8% were in the age group 20 – under 30 years. In terms of place the respondent live, 9.7% of the respondents live in Amman, 47.9% live in Zarqa, 1.8% live in Irbid, and 0.6% respondents live in other cities. About status, single respondents represented 42% while the percentage of married respondents was 58%. Overall respondents reflects male, with varied experience levels, worked mainly in customer service department, with the majority having Bachelor degrees, with the vast majority falls between 20-40 years of age, and with about equally divided respondents in the last two variables: living in Amman and Zarqa and married and single.
<table>
<thead>
<tr>
<th>Variable</th>
<th>#</th>
<th>%</th>
<th>Graph</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td><img src="https://example.com/gender_chart.png" alt="Gender Pie Chart" /></td>
</tr>
<tr>
<td>Male</td>
<td>109</td>
<td>64.5</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>60</td>
<td>35.5</td>
<td></td>
</tr>
<tr>
<td><strong>Experience</strong></td>
<td></td>
<td></td>
<td><img src="https://example.com/experience_chart.png" alt="Experience Bar Chart" /></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>25</td>
<td>14.8</td>
<td></td>
</tr>
<tr>
<td>1-3 years</td>
<td>52</td>
<td>30.7</td>
<td></td>
</tr>
<tr>
<td>3-6 years</td>
<td>40</td>
<td>23.7</td>
<td></td>
</tr>
<tr>
<td>More than 6 years</td>
<td>52</td>
<td>30.8</td>
<td></td>
</tr>
<tr>
<td><strong>Job</strong></td>
<td></td>
<td></td>
<td><img src="https://example.com/job_chart.png" alt="Job Bar Chart" /></td>
</tr>
<tr>
<td>Marketing</td>
<td>6</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>CRM</td>
<td>22</td>
<td>13.0</td>
<td></td>
</tr>
<tr>
<td>Customer service</td>
<td>84</td>
<td>49.7</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>57</td>
<td>33.7</td>
<td></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td><img src="https://example.com/education_chart.png" alt="Education Pie Chart" /></td>
</tr>
<tr>
<td>High school or less</td>
<td>2</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td>11</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>Bachelor</td>
<td>141</td>
<td>83.4</td>
<td></td>
</tr>
<tr>
<td>Master or PhD</td>
<td>15</td>
<td>8.9</td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td><img src="https://example.com/age_chart.png" alt="Age Pie Chart" /></td>
</tr>
<tr>
<td>under 20 years</td>
<td>1</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>20 – under 30 years</td>
<td>101</td>
<td>59.8</td>
<td></td>
</tr>
<tr>
<td>30 – under 40 years</td>
<td>55</td>
<td>32.5</td>
<td></td>
</tr>
<tr>
<td>Above 40 years</td>
<td>12</td>
<td>7.1</td>
<td></td>
</tr>
<tr>
<td><strong>Place</strong></td>
<td></td>
<td></td>
<td><img src="https://example.com/place_chart.png" alt="Place Bar Chart" /></td>
</tr>
<tr>
<td>Amman</td>
<td>84</td>
<td>49.7</td>
<td></td>
</tr>
<tr>
<td>Al-Zarqa</td>
<td>81</td>
<td>47.9</td>
<td></td>
</tr>
<tr>
<td>Irbid</td>
<td>3</td>
<td>1.8</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td><strong>Status</strong></td>
<td></td>
<td></td>
<td><img src="https://example.com/status_chart.png" alt="Status Pie Chart" /></td>
</tr>
<tr>
<td>Single</td>
<td>71</td>
<td>42.0</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>98</td>
<td>58.0</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>169</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Factor analysis

Factor Analysis is a statistical method used to explain the correlation between a large set of variables by reducing them to a small number of underlying factors. It is used to find a way to summarize the information contained in a number of original variables into a smaller set of new, composite dimensions or variants (factors) with a minimum loss of information.

The Bartlett’s Test of Sphericity, a statistical test for the presence of correlations among the variables, is one such measure. It examines the correlation matrix for significant correlations among at least some of the variables. Bartlett’s Test of Sphericity should be significant (p < 0.05) for factor analysis to be considered appropriate. The Bartlett’s test of Sphericity (chi-square) was found to be 6587.287, p < 0.001. This indicates that correlations were adequate to conduct factor analysis. Kaiser-Meyer-Olkin’s (KMO) measure of sampling adequacy tests whether the partial correlations among variables are small and ranges from 0 to 1, the minimum value of KMO for good factor analysis being 0.6 and large values for the KMO measures indicate that a factor analysis of variables would be potentially valid (Tabachnick & Fiddle, 2001). The Kaiser-Meyer-Olkin’s (KMO) measure of sampling adequacy was used to check for partial correlations with a value equal 0.939 and this exceeds the recommended minimum value of KMO which is 0.6. This suggests the existence of correlations among variables.

Table 3: KMO and Bartlett’s Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .939 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 6587.287 |
| Df | 741 |
| Sig. | .000 |

Exploratory factor analysis for external factors

In this paper, an extension to TAM model was proposed (Figure 2). Five factors (subjective norm, computer experience, training, self-efficacy, and management support) were added to TAM as external factors that may affect the adoption of CRM system in Jordanian banks.

Exploratory factor analysis (EFA) was used as an initial step to be sure that all the a priori factors differ from each other. This can be assessed through principal component analysis (PCA). Using Varimax rotation, PCA was used in an attempt to reconstruct four composite factors. When interpreting the rotated factor pattern, an item was said to load on a factor if the factor loading is 0.4 or greater (Nunnally, 1978). Using this criterion, the rotated pattern matrix was examined for items that from the same scale. Items that cross loaded on multiple factors were also examined and deleted. An Eigenvalue greater than 1 and/or Scree plot were used as criteria to determine the number of factors that can be extracted from the data. The results of the PCA for each of the factor are given in Table 5.3. These results show that the loading of individual items on factor exceeded 0.4 (Nunnally, 1978). In addition, the Scree plot (figure 3) shows the shape of the curve changes direction to horizontal at point 6. As a result, all the factors added to TAM as external factors that may affect adoption CRM in Jordanian banks except the subjective norm (SN).

Table 4: Rotated Component Matrix ((All External Factors))

<table>
<thead>
<tr>
<th>Component</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>UT1</td>
<td>.396</td>
<td>.627</td>
<td>.212</td>
<td>.037</td>
<td>.316</td>
</tr>
<tr>
<td>UT2</td>
<td>.449</td>
<td>.575</td>
<td>.258</td>
<td>.198</td>
<td>.254</td>
</tr>
<tr>
<td>UT3</td>
<td>.191</td>
<td>.815</td>
<td>.243</td>
<td>.268</td>
<td>.091</td>
</tr>
</tbody>
</table>
Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.a
a. Rotation converged in 9 iterations.

Subjective norms (SN) did display coherent coefficients for its variables in relationship to the other factors. The final table after removing SN is as follow.

Table 5: Rotated Component Matrix

<table>
<thead>
<tr>
<th>Component</th>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS1</td>
<td>.603</td>
<td>.229</td>
<td>.278</td>
<td>.361</td>
<td></td>
</tr>
<tr>
<td>TS2</td>
<td>.575</td>
<td>.271</td>
<td>.303</td>
<td>.439</td>
<td></td>
</tr>
<tr>
<td>TS3</td>
<td>.843</td>
<td>.243</td>
<td>.189</td>
<td>.196</td>
<td></td>
</tr>
<tr>
<td>TS4</td>
<td>.894</td>
<td>.103</td>
<td>.161</td>
<td>.195</td>
<td></td>
</tr>
<tr>
<td>TS5</td>
<td>.852</td>
<td>.221</td>
<td>.202</td>
<td>.123</td>
<td></td>
</tr>
<tr>
<td>CE1</td>
<td>.299</td>
<td>.776</td>
<td>.194</td>
<td>.176</td>
<td></td>
</tr>
<tr>
<td>CE2</td>
<td>.229</td>
<td>.792</td>
<td>.236</td>
<td>.159</td>
<td></td>
</tr>
<tr>
<td>CE3</td>
<td>.131</td>
<td>.855</td>
<td>.220</td>
<td>.228</td>
<td></td>
</tr>
<tr>
<td>CE4</td>
<td>.170</td>
<td>.824</td>
<td>.245</td>
<td>.262</td>
<td></td>
</tr>
<tr>
<td>TR1</td>
<td>.157</td>
<td>.427</td>
<td>.604</td>
<td>.399</td>
<td></td>
</tr>
<tr>
<td>TR2</td>
<td>.119</td>
<td>.349</td>
<td>.682</td>
<td>.288</td>
<td></td>
</tr>
<tr>
<td>TR3</td>
<td>.231</td>
<td>.275</td>
<td>.816</td>
<td>.159</td>
<td></td>
</tr>
<tr>
<td>TR4</td>
<td>.283</td>
<td>.167</td>
<td>.801</td>
<td>.269</td>
<td></td>
</tr>
<tr>
<td>TR5</td>
<td>.468</td>
<td>.172</td>
<td>.656</td>
<td>.375</td>
<td></td>
</tr>
<tr>
<td>SE2</td>
<td>.328</td>
<td>.092</td>
<td>.272</td>
<td>.744</td>
<td></td>
</tr>
<tr>
<td>SE3</td>
<td>.280</td>
<td>.207</td>
<td>.192</td>
<td>.789</td>
<td></td>
</tr>
<tr>
<td>SE4</td>
<td>.142</td>
<td>.317</td>
<td>.346</td>
<td>.739</td>
<td></td>
</tr>
<tr>
<td>SE5</td>
<td>.169</td>
<td>.384</td>
<td>.271</td>
<td>.739</td>
<td></td>
</tr>
</tbody>
</table>
Figure 3: The Scree plot

As shown in table 5.4, factor correlation coefficients, ranging from 0.530 to 0.809, all indicated that the eight constructs were correlated yet statistically distinct constructs. Generally a factor correlation of 0.85 or higher indicates that the two factors might be the same factor in measurement terms.

**Regression analysis**

Linear regression is used when we want to predict the value of a variable based on the value of another variable. The variable we want to predict is called the dependent variable (or sometimes, the outcome variable). The variable we are using to predict the other variable's value is called the independent variable (or sometimes, the predictor variable). In this context we made the regression for three dependent factors intention to use (BI), perceived usefulness (PU), and perceived ease of use (PEOU), respectively as listed below.

<table>
<thead>
<tr>
<th>Factor</th>
<th>PU</th>
<th>PEOU</th>
<th>BI</th>
<th>TS</th>
<th>CE</th>
<th>SN</th>
<th>TR</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PU</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEOU</td>
<td>0.809</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BI</td>
<td>0.726</td>
<td>0.684</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TS</td>
<td>0.709</td>
<td>0.725</td>
<td>0.674</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CE</td>
<td>0.664</td>
<td>0.662</td>
<td>0.590</td>
<td>0.542</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SN</td>
<td>0.601</td>
<td>0.673</td>
<td>0.530</td>
<td>0.649</td>
<td>0.632</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR</td>
<td>0.776</td>
<td>0.645</td>
<td>0.654</td>
<td>0.577</td>
<td>0.639</td>
<td>0.776</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SE</td>
<td>0.694</td>
<td>0.745</td>
<td>0.608</td>
<td>0.669</td>
<td>0.618</td>
<td>0.783</td>
<td>.768</td>
<td>1</td>
</tr>
</tbody>
</table>
### Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.776&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.603</td>
<td>.585</td>
<td>.83186</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), SE, CE, TS, PU, TR, SN, PEOU; BI is the dependent factor

### Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.847&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.718</td>
<td>.707</td>
<td>.72930</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), SE, CE, TS, TR, PEOU, SN; PU is the dependent factor

### Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.866&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.750</td>
<td>.740</td>
<td>.64606</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), SE, CE, TS, PU, TR, SN; PEOU is the dependent factor

The above statistics reveal that overall the original factors are related to external variables, with BI as the lowest and PEOUS as the highest.

- **Model** - SPSS allows you to specify multiple models in a single regression command. This states the number of the model being reported.

- **R** - R is the square root of R-Squared and is the correlation between the observed and predicted values of dependent variable.

- **R-Square** - This is the proportion of variance in the dependent variable which can be explained by the independent variables. This is an overall measure of the strength of association and does not reflect the extent to which any particular independent variable is associated with the dependent variable.

- **Adjusted R-square** - This is an adjustment of the R-squared that penalizes the addition of extraneous predictors to the model. Adjusted R-squared is computed using the formula 1 - ((1 - Rsq) ((N - 1) /( N - k - 1)) where k is the number of predictors.

- **Std. Error of the Estimate** - This is also referred to as the root mean squared error. It is the standard deviation of the error term and the square root of the Mean Square for the Residuals in the ANOVA table (see below)

The **Coefficients** table provides us with the necessary information to predict the effect of the dependent variable on the independent (by looking at the "Sig." column). Furthermore, we can use the values in the "B" column under the "Un-standardized Coefficients" column, as shown in Tables 5.5, 5.6, and 5.7. Shaded areas reflect significance of the relationship between the dependent variables and independent variables.
Table 7: Coefficients<sup>a</sup>

<table>
<thead>
<tr>
<th>Model</th>
<th>Un-standardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>.866</td>
<td>.292</td>
<td>.355</td>
<td>2.961</td>
</tr>
<tr>
<td>PU</td>
<td>.341</td>
<td>.090</td>
<td>.101</td>
<td>3.801</td>
</tr>
<tr>
<td>PEOU</td>
<td>.109</td>
<td>.101</td>
<td>.107</td>
<td>1.082</td>
</tr>
<tr>
<td>TS</td>
<td>.250</td>
<td>.077</td>
<td>.261</td>
<td>3.236</td>
</tr>
<tr>
<td>CE</td>
<td>.120</td>
<td>.069</td>
<td>.130</td>
<td>1.746</td>
</tr>
<tr>
<td>TR</td>
<td>.047</td>
<td>.083</td>
<td>.051</td>
<td>5.63</td>
</tr>
<tr>
<td>SE</td>
<td>.056</td>
<td>.090</td>
<td>.060</td>
<td>6.21</td>
</tr>
</tbody>
</table>

a. Dependent Variable: BI (Note: BI is correlated to PU and TS only)

Table 8: Coefficients<sup>a</sup>

<table>
<thead>
<tr>
<th>Model</th>
<th>Un-standardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>.210</td>
<td>.256</td>
<td>.470</td>
<td>6.285</td>
</tr>
<tr>
<td>PEOU</td>
<td>.500</td>
<td>.080</td>
<td>.211</td>
<td>3.218</td>
</tr>
<tr>
<td>TS</td>
<td>.211</td>
<td>.066</td>
<td>.188</td>
<td>3.086</td>
</tr>
<tr>
<td>CE</td>
<td>.181</td>
<td>.059</td>
<td>-.151</td>
<td>-1.967</td>
</tr>
<tr>
<td>SN</td>
<td>-.144</td>
<td>.073</td>
<td>-.112</td>
<td>1.473</td>
</tr>
<tr>
<td>TR</td>
<td>.107</td>
<td>.072</td>
<td>.119</td>
<td>1.461</td>
</tr>
<tr>
<td>SE</td>
<td>.115</td>
<td>.078</td>
<td>.119</td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: PU (Note: PU is positively correlated to PEOU, TS, CE, and negatively to SN)

Table 9: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Un-standardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>.361</td>
<td>.225</td>
<td>.417</td>
<td>1.604</td>
</tr>
<tr>
<td>PU</td>
<td>.392</td>
<td>.062</td>
<td>.202</td>
<td>6.285</td>
</tr>
<tr>
<td>TS</td>
<td>.189</td>
<td>.058</td>
<td>.133</td>
<td>3.262</td>
</tr>
<tr>
<td>CE</td>
<td>.120</td>
<td>.053</td>
<td>.110</td>
<td>2.283</td>
</tr>
<tr>
<td>SN</td>
<td>.098</td>
<td>.065</td>
<td>-.122</td>
<td>1.509</td>
</tr>
<tr>
<td>TR</td>
<td>-.109</td>
<td>.064</td>
<td>-.247</td>
<td>-1.709</td>
</tr>
<tr>
<td>SE</td>
<td>.224</td>
<td>.068</td>
<td></td>
<td>3.311</td>
</tr>
</tbody>
</table>

a. Dependent Variable: PEOU (Note PEOU is positively correlated to PU, TS, CE, and SE; and relatively positively correlated to TR)

-Model - SPSS allows you to specify multiple models in a single regression command. This tells you the number of the model being reported.

-un-standardized coefficients std.error: this is the standard error for the coefficient – it is used in the calculation of significance.
-standardized coefficients beta:

-t: This is the t-test to see if the coefficients are significantly different from 0. A value over 1.96 indicates significance at the 5% level.

-Sig.: This is the p-value. If it is under 0.05 then the variable is significant.

From shaded areas of the three tables, the paper concludes that perceived ease of use (PEOU) is the most affected by the other factors, while intension to use (BI) has the smallest number of related factors. This latter observation leads to the idea that perhaps preceding variables may sequentially affect BI.

**Demographics correlation to the factors of the study**
Chi square testing was conducted between the demographic variables and the 8 factors in the research model. The following table summarizes the results of the analysis.

<table>
<thead>
<tr>
<th>Demographic Factors of the model variables</th>
<th>SN</th>
<th>TR</th>
<th>CE</th>
<th>TS</th>
<th>SE</th>
<th>PU</th>
<th>PEOU</th>
<th>BI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Experience</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Job</td>
<td>-</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Education</td>
<td>-</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
</tr>
<tr>
<td>Age</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Place</td>
<td>-</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Status</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The table shows that education has the highest number of affected factors of 5.

**CONCLUSIONS AND RECOMMENDATIONS**

Sample respondents are mainly male, with ages between 20-40, residing in two major cities, equally divided between married and single, showing varied experience, working mainly with customer relations, and with the vast majority holding Bachelor degree. Subjective norms (SN) factor did not display coherent coefficients for its variables in relationship to the other factors, and as such, will be excluded from future studies. And this is consistent with recent research by Kholoud, et al. (2015). Analysis shows an acceptable reliability measure for the sample. Factor correlation exhibited an acceptable level of significance among all factors. The model was validated using regression analysis, which showed that, the three main original factors: behavioral intention to use (BI), perceived ease of use (PEOU), and perceived usefulness (PU) are significantly related to all other factors invariably. Correlation coefficients matrix demonstrated that all factors are related and independent of each other, meaning each contribute to the validation of the model. Based on these analysis, all hypotheses of the paper are accepted except H1 and H2 related to subjective norm (SN) and H15 related to actual use (AU), as stated earlier. At the same time, perceived ease of use (PEOU) was negatively related to training (TR), indicating the need to emphasize training and awareness of the importance of CRM to Jordanian banks. On addition, another negative relationship is demonstrated between subject norms (SN) and perceived usefulness (PU) indicating peer relationship does not create perception of usefulness. Finally demographic variable has limited effect of the factors of the model, except education.
Since the main objective of this paper is to develop and validate a proposed research model, individual hypothesis were not specifically tested. Our future research will explore extended research in TAM, as well as the use of advance statistical analysis such as structured equation model.

Rejecting hypotheses led to the following recommendations:
- Conduct seminars for top and middle management banks’ executive on the benefits of CRM. This hopefully will lead to incorporate CRM in the strategic plan of Jordanian banks.
- Conduct demonstration of how to use CRM in banks by experienced trainers to employees working with customer relations.
- Conduct technical workshop on CRM systems to banks’ IT professional working.
- Encourage universities to do research and awareness activities on CRM uses in Jordanian banks.
- Encourage local societies, such as Jordan Computer Science Society; and international local chapter, such as IEEE and ACM to highlight the importance of CRM for Jordanian banks through their newsletters, lectures, and conferences.

While not every hypothesis is tested individually, the validation process revealed that overall the model is consistent and further analysis is warranted. Such further research will be based on structure equation model (SEM) which allows testing each hypothesis separately using current research trends in TAM framework.

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A Framework for Social Media at Entry Mode of Indian Small Enterprises

Keywords: Entry Mode, Small Enterprises, Social Media

INTRODUCTION

In today's competitive era of globalisation, developing economies like India must focus on service based small businesses because they are essential element for growth & development of an economy. Service based small enterprises are the generator of employment in era of e-commerce, social media and globalization. But the issue is how small enterprises can stand in between aggressive competitors. For growth & development of small businesses in developing country like India, necessary elements like financial assistance, infrastructure & technology is required but for long term success of small business, social media based marketing strategy has become an essential element for promotion of service based small enterprise promotion and marketing. As stated by Julia Cronin Gilmore (2009), general problem in small businesses is marketing of product & services i.e. the business owners have knowledge about products or services but are not experts in the field of marketing and therefore, struggle takes place while implementing effective strategic planning and effective marketing plan based on level of digitization of social media, external and internal factors of small enterprises.

Small Business Enterprises has been one of the major bases of India's economic development strategy. India accorded high priority to small and medium enterprises (SMEs) from the very starting and pursue sustain policies to make these firms viable and exciting and over time, these have become major contributors to the GDP. Although numerous protection and policy process for the past so many years, SMEs are still mostly small, technologically backward and lacking in competitiveness. With help of proper marketing and networking success can be achieved.

SOCIAL MEDIA

A simpler definition of social media refers to online websites where users can share their experiences and ideas (Green, 2007). More and more people are using social media channels to connect to others in a wide variety of ways— including dating, meeting others with common interests, and sharing information (Stankov et al, 2010).

Technology and particularly social media, is changing rapidly. Companies without media coverage can use social media to reach larger audiences, not generally accessible through communication channels. Social Media provides a low cost solution. With a large reach Social media can be used as an amplifier of message across multiple channels & across all borders.

LITERATURE REVIEW

Peterson, 1985; Miller and Toulouse, 1986; Covin & Slevin 1989; and Alfred 1999 suggest that such general environmental dimensions as industry stagnation or dynamism affect small firm performance. Strategy’s resource-based theorists (Phillips, Chang, and Buzzell, 1983; Murray, 1988) contend that successful implementation of generic strategies is contingent on competitive environment characteristics.
Porter (1980) offers generic strategies that may be appropriate for small manufacturing firms under certain industry conditions: (1) differentiation strategy to create a unique product/service, customer loyalty, price-inelasticity, competitive barriers, and higher margins; and (2) low-cost strategy to create a sustainable competitive advantage by offering the lowest prices in an industry segment based on low-cost producer status. The success of these strategies may be contingent on general industry environment characteristics studied by (Dess and Beard, 1984; Keats and Hitt, 1988; and Miller, 1988).

In their different studies (Freeman, 2000; Simpson et al., 2004; Hisrich, 2008; Gilmore, 2009) focused on reason for failure of small business is lack of marketing knowledge & recommended that marketing education & training can be part of marketing strategies for improvement small businesses.

Paliwoda and Thomas (1998); Root (1994); Van Fleet (1991), focused on what circumstances (similar enough, dissimilar) the company (or its competitors) have used any particular market entry mode, their relevant success rates and degrees all these factors obviously influence both market entry selection process and the choices themselves.

Foster Marry (2011) in research paper explored social media user segmentation and online brand profiles provides a deeper understanding of the use of social media technologies among young adults by developing a pyramid of social media user’s and also assesses perceived profiles provides a deeper understanding of the use of social media technologies among young adults by developing a typology of social media users and also assesses perceived profiles of brands reported as connecting well with customers in the online space.

Jorge M. Oliveira (2008), uncovered the relation between consumer-based brand equity and brand performance was investigated across 15 product categories in Brazil and the UK. Brand equity was conceptualized as related to the level of social benefit offered by each brand and was measured with a simple questionnaire that asked consumers to rate brands with respect to their familiarity and quality levels. These measures were then related to brand market share and revenue. Results showed that the relation between consumer-based brand equity and brand performance varies across product categories, indicating that products differ with respect to their level of brand ability and suggesting ways to measure it.

Uncles (2008), Consumers are differentially adopting new social media technologies, enabling them to interact with a brand on various levels and access a numerous of information sources in order to make informed purchase choices with enhanced confidence. As a result of these technological abilities, brand strategies now focus more on response stimulus communication as embodied in traditional advertising (Christodoulides, 2008).

According to Ekeledo and Sivakumar (2004), published studies on the classification of international services have focused on explaining why entry mode concepts and practices developed for the manufacturing sector may not fully apply to service firms (e.g., Ekeledo and Sivakumar 1998; Erramilli and Rao 1993). In addition, many of the studies involved individual service industries, such as banking, equipment leasing, and advertising (e.g., Agarwal and Rama swami 1992; Nigh, Cho, and Krishnan 1986; Sabi 1988; Terssptra and Yu 1988); little research involving broad categories of service industries has been conducted. Cross-industry studies in the service sector are needed because they may suggest ways that marketing concepts and strategies can be extended across service Industries (Lovelock 1996; Lovelock and Wirtz 2004).

Ridder de Martijin (2010) mentioned that market entry strategy for foreign markets can be divided in three phases: market selection, entry mode selection, and operationalizing the market strategy. Essential aspects of the market selection are: the figure of associations in a market, and the psychic distance to a
market. At entry mode selection, relationships and the level of internationalization are of significance. During the operationalization of the market strategy it is essential to set up and sustain relationships with partners. The internet or social media is an important tool used at some point in this last stage. (Lopez-Navarro et al., 2013) presented that the entry mode decision well thought-out such a key strategic decision and the “success of SMEs under globalization depend on large parts of the planning, formulation and implementation of strategy. Along with this country market potential is a common criterion used in market selection (Hodgson and Uyterhoeven, 1962; Johansson, 1997; Moyer, 1968; Root, 1994)

The lower the target rates of return, the more likely it is for the company to select countries or state or market that show greater long-term prospects and promise to enhance the firm's capabilities (Johansson, 1997)

**RESEARCH OBJECTIVE**

To develop a conceptual framework for Social Media at Entry Mode level of Indian Small enterprises.

**RESEARCH METHODS**

This research Paper is mainly based on the literature review based on the evidences of social media, e-commerce and its impact on service marketing of Indian small enterprises. Secondary data are the major sources of the evidences collected from various sources of research journals, article and government reports. On the basis of various literature sources the proposed framework has been developed which reflects the strategic Information System as a driver of marketing performance for Indian small enterprises.

**THEORETICAL MODEL AND CONCEPTUAL FRAMEWORK**

This conceptual framework attempts in understanding the impact of e-commerce on the entry-mode strategies of service firms. The framework posits that the level of digitization of the service act influences the location of the service platform for the foreign market and the choice of level of control. The level of control that a firm desires determines entry mode, because each entry mode is associated with a certain level of control. E-commerce technologies influence entry-mode strategies by determining the level of digitization for the service act along with the external and internal factors.
A Framework for Social Media at Entry Mode of Indian Small Enterprises

PROPOSED CONCEPTUAL FRAMEWORK

This is proposed framework based on the literature survey. This framework reflects that how social media impacts on the marketing Indian small enterprises. With the help of this framework the role of social media can be analysed.

Figure 1: E-Commerce and Entry-Mode Strategies

Figure 2: V.KYadav & S.Medhavi (2015) proposed framework, Integration of Social Media with Indian Small Businesses at Entry Mode

Proceedings of the 12th AGBA World Congress, Malaysia, November 2015
Page 215 of 1173
DISCUSSION

Above framework formed on the basis of evidences from the sources literature. This framework works on the basis of level of digitization of social media and it is also works on the internal and external influence of both factors. Along with the influence of external and internal factors it is then entry mode of marketing of Indian small businesses is decided with help of entry mode criteria and entry mode choice. With the help of all the factors evolved in the framework the marketing Indian small enterprises works.

CONCLUSION

It is well known that in India small enterprises are categorised in two categories that is manufacturing and services. But the era of globalization, digitalization and industrialization has rises the importance of manufacturing & service based Indian small enterprises both. For the purpose of the employment generation small enterprises are playing very important role. Now days service industry has become most the emerging rapid business in last decades in India too. So the role of social media has also playing very significant role in business and human life. Social media can help in promotion and marketing of Indian small enterprises at the entry mode level as shown in above proposed framework.

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Keywords: Consumer Protection, Consumer Protection Act 1999, Sale of Goods Act 1957, Malaysia

INTRODUCTION

Consumer protection is designed to promote and protect interests of consumers. As consumers always have a weak bargaining power, there is every need to protect them through adequate and effective laws (Yusoff, Ismail, Markom, & Zakuan, 2015). In today’s challenging environment, consumers have to deal with current technology, mass-marketing tactics, high-pressure salesmanship and sharp advertising (Sabri, 2014). Malaysian market is not free from these challenges. Consumer protection is aimed at upholding justice and fairness in all commercial transactions between purchaser-consumers and sellers or manufacturers. Consumer protection seems to alleviate the sufferings of consumers who are at a disadvantage in the market place.

In view of the importance of protecting the basic rights of a consumer, the United Nations Assembly adopted the United Nations Guidelines for Consumer Protection on 9 April 1985 (Wan Jusoh, Othman, Nuruddin, & Ahmad, 2001). Since then, United Nations member countries have used these guidelines as their reference and have passed consumer protection or related legislations. In Malaysia, the main legislations governing the supply of goods are the Sale of Goods Act 1957 (SOGA) and the Consumer Protection Act 1999 (CPA). Despite the availability of such protection, nevertheless in the area of supply of goods, freedom of contract and caveat emptor still remain predominantly the underlying concepts in consumer contracts in Malaysia.

The objective of this paper is to examine the existing Malaysian laws dealing with the sale of goods mainly SOGA and CPA, especially in terms of their adequacy in protecting consumers. The paper argues that the existing Malaysian laws, especially SOGA is not a consumer protection oriented piece of legislation. Many of its principles are based on the common law principles during the 18th and 19th centuries during which freedom of contract and laissez faire were widely practiced (Yusoff et al., 2015). Hence, this Act contains provisions which defeat consumer protection expectations and interests. On the other hand, the CPA being supplemental and without prejudice to any other law regulating contractual relations has indeed reduced the effectiveness of this long awaited legislation (Yusoff, Ismail, Aziz, Isa & Talib, 2013).

SALE OF GOODS IN MALAYSIA

Malaysia generally follows the British “Caveat Emptor” (let the buyer be aware) principal. This means parties are allowed to conduct business dealings with each other on term agreeable between them. The parties are deemed to be knowledgeable and able to take care of their respective interests. Generally, the
parties involved in the transaction do not owe any duty to look after the interest of the other party to the transaction i.e. the buyer takes care of himself. However, it is important to note that consumers are always parties of weaker bargaining power as far as the marketplace is concerned. For instance, with the emerging era of new computer technology, consumers need more protection.

Within this general concept, the Malaysian government has enacted several legislations and set up institutions to protect specific interests of consumers. Therefore, is is important to note that the statute applicable for sale of goods in Peninsular (West) Malaysia is the Sale of Goods Act 1957 (Revised 1990). There is no equivalent statute for the states of Sabah and Sarawak (East Malaysia) and the law in these two states is governed by section 5(2) of the Civil Law Act 1956 which provides, among others, that ‘the law to be administered shall be the same as would be administered in England in the like case at the corresponding period’. Consequently, these two states are bound by statute to continue to apply principles of English law relating to the sale of goods (Vohrah & Aun, 1991). This discrepancy in the application of the law on the sale of goods between West Malaysia on the one hand and East Malaysia, on the other, has the potential to raise difficult conflict of law issues within the country. Hence, it is highly desirable that a degree of uniformity should prevail and a simple method would be to extend the Sale of Goods Act 1957 to the other two states (East Malaysia) as had been done in the case of the Contracts Act 1950.

Still on the sale of goods in Malaysia, there are a number of specific statutes dealing with some elements of consumer protection and these are administered by various Ministries. Among the statutes which are under the purview of the Ministry of Domestic Trade and Consumer Affairs are the Price Control Act 1946, the Trade Descriptions Act 1972, the Hire Purchase Act 1967, Weight and Measures Act 1972, the Consumer Protection Act 1990 etc. With all these statutes in place, there is no doubt that the consumer market or the supply of goods in Malaysia is regulated. Perhaps the issue to address in the context of this paper is that of the adequacy of these statutes, i.e. the Sale of Goods Act 1957 and the Consumer Protection Act 1999.

**THE SALE OF GOODS ACT 1957**

The Malaysian Sale of Goods Act 1957 was originally enacted in 1957 and revised in 1990 to include the states of Malacca and Penang. The earlier laws were largely modeled on the United Kingdom Sale of Goods Act 1893. The SOGA is the main piece of legislation serving consumers in obtaining a remedy when their acquisition ‘go wrong’. Modeled upon the Indian Sale of Goods Act 1930 which also has its origin in the English Sale of Goods Act 1893. The Sale of Goods Act 1957 applies to contract for the sale of goods as defined in section 4 of the Act:

*A contract of sale of goods is a contract whereby the seller transfers or agrees to transfer the property in goods to the buyer for a price. There may be a contract of sale between one party and another.*

Section 2 defines goods to mean ‘every kind of movable property other than actionable claims and money’, and includes stock and shares, growing crops, grass, and ‘things attached to or forming part of the land which are agreed to be severed before sale or under the contract of sale’. It follows from this definition that sales of land or chattels real (leaseholds) are not sales of goods. Also excluded are actionable claims, which are, rights to sue another person for a debt or for any other reason (Vohrah & Aun, 1991).

According to section 6(1), the ‘goods which form the subject of a contract of sale may either be existing goods, owned or possessed by the seller, or future goods’. Existing goods may be either specific or unascertained goods. Goods are specific if they are ‘identified and agreed upon at the time a contract of sale is made’. Uncertain goods is mentioned in section 18 but it is not expressly defined; by inference it
means ‘goods not identified and agreed upon at the time a contract of sale is made (Vohrah & Aun, 1991). SOGA does not address the issue of services. It only focuses on the sale of goods.

**Protections Accorded to Buyers under the Sale of Goods Act 1957**

The Sale of Goods Act 1957 offers various forms of protection to a buyer. The following are some of the relevant provisions of SOGA offering protection to buyers:

Section 14(b)- implied warranty as to quiet possession: This section provides that, unless a different intention is shown, there is ‘an implied warranty that the buyer shall have and enjoy quiet possession of goods’. Section 14(b) will cover against wrongful interference by a stranger claiming a lawful right by virtue of a better title than the seller as well as the wrongful act of the seller himself. This implied stipulation is merely a warranty and not a condition. Therefore, a breach of this stipulation will not entitle the innocent party to repudiate the contract. However, if the seller fails to comply, the buyer is entitled to claim for damages since the matter is being constituted as an implied warranty.

Section 14(c)- implied warranty that the goods are free from encumbrance: The section provides that there is ‘an implied warranty that the goods shall be free from any charge or encumbrance in favour of any third party not declared or known to the buyer before or at the time when the contract was made’. Again, if the seller fails to comply with this statutory requirement, the buyer is entitled to claim for damages since the matter is being constituted as an implied warranty.

Section 15- implied condition that goods correspond with description: This section states that where there is a contract for the sale of goods by description there is an implied condition that the goods shall correspond with the description; and, if the sale is by sample as well as by description, it is not sufficient that the bulk of the goods corresponds with the sample if the goods do not also correspond with the description. The obligation of the seller under this section is absolute and it is no defence that the defect in the goods is latent.

In analysing section 15, it is pertinent to note that all contracts for the sale of unascertained goods are sales by description and in respect of specific goods, it applies particularly where the buyer has not seen the goods such as mail order and sale from a catalogue. But it is still possible where specific goods have been seen can still be considered as a case of a sale by description (Grant v Australian Knitting Mills Ltd (1936) AC 85).

In addition, in *Nagurdas Purshotumdas & Co v Mitsui Bussan Kaisha Ltd* ((1911) 12 SSLR 67), previous contracts between the parties for the sale of flour had been sold in bags bearing a well-known trade mark. Further flour was ordered described as ‘the same as our previous contracts’. Flour identical in quality was delivered, but it did not bear the same well-known trade mark, and it was ruled that it did not comply with the description.

Section 16(1)(a)- implied condition as to fitness: The section provides that where goods are sold in the course of a business and the buyer expressly or by implication makes known to the seller the purpose for which he is buying the goods, then there is an implied condition that the goods will be reasonably fit for that purpose, even if it is a purpose for which such goods are not commonly bought. This section may be invoked where the purpose for which the goods are required is made known to the seller unless it is implied, but where a buyer purchases goods without saying anything, the situation may be covered by section 16(1)(b). It appears that section 16(1)(a) excludes a private sale.

Section 16(1)(b)-implied conditions as to merchantable quality: The section provides that where goods are bought by description from a seller who deals in goods of that description, there is an implied condition that the goods shall be of merchantable quality provided that if the buyer has examined the
goods, there shall be no implied condition as regards defects which such examination ought to reveal. This section means that the goods must be as fit for the purpose for which they are commonly used as it is reasonable to expect, taking into account any description attached to them, their price and all other circumstances. Thus, radio must be fit to use, clothes must be fit to wear, and cars must be fit to drive.

In dealing with section 16(1)(b), it is important to look into the meaning of ‘merchantable quality’. Generally, it means the goods sold are fit for the particular use to which they were sold (Vohrah & Aun, 1991). If they are defective for the purpose, they are unmerchantable. In *David v Jones* ((1934) 52 CLR 110), a pair of shoes whose heels came off on the third occasion was held unmerchantable. Furthermore, in *Reveex International S.A v Maclaine Watson Trading (M) Sdn Bhd* ((1991) 2 CLJ 1388), the plaintiffs sold various pharmaceutical veterinary products to the defendants. The defendants did not honour the bill of exchange used to pay for the goods. The plaintiffs claimed as holders in due course of the bill. The defendants counter-claimed against the plaintiffs contending that the goods were not reasonably fit for the purpose for which they were intended and were not merchantable, therefore breaching a condition of the contract as statutorily implied by section 16 of the Sale of Goods Act 1957. The court ruled in favour of the defendants. In other words, the defendants succeeded in their counter-claim. Basically, the test of ‘merchantable quality’ needs to be examined in relation to the description of the goods sold.

**THE CONSUMER PROTECTION ACT 1999**

The promulgation of the Consumer Protection Act 1999 has brought some light to consumers in Malaysia. Prior to that, consumers had “countless” obstacles to bring action against manufacturers for defective products under common law of tort (Abd. Karim & Wan Talaat, 2011). Similarly, it was also almost impossible to impose direct liability on manufacturer based on contract due to the doctrine of privity of contract, which necessitates a claimant to have a pre-existing contractual relationship with the manufacturer of the product in question (Abd. Karim & Wan Talaat, 2011).

The CPA came into effect on 15 November 1999 with the main objective to provide greater protection for consumers and its provisions cover areas that are not covered by the other prevailing laws (Sabri, 2014). The aim of the CPA, which is based on consumerism, is to provide a better legal protection to consumers by introducing the concept of strict liability for defective product. Although the term “strict liability” does not appear anywhere under the Act, inference to it can be made by virtue of section 68(1) which clearly provides that amongst the person who shall be liable where any damage is caused wholly or partly by a defect in the product is the manufacturer (Abd. Karim & Wan Talaat, 2011). Hence, the enactment of the CPA has brought some major changes towards improving consumers’ right against manufacturers in cases of defective products.

Section 3 defines a “consumer” as a person who ‘acquires or uses goods and services of a kind ordinarily acquired for personal, domestic or household purposes, use or consumption; and does not acquire or use the goods or services, or hold himself out as acquiring or using the goods or services, primarily for the purpose of resupplying them in trade; consuming them in the course of a manufacturing process; or in the case of goods, repairing or treating, in trade, other goods or fixtures on land’.

Under the Consumer Protection Act 1999, consumers’ rights granted cannot be taken away from them. This is by virtue of section 6(1) of the Act, which provides that the provisions of this Act shall have effect notwithstanding anything to the contrary in any agreement. Hence, to a certain extent the enactment of the Consumer Protection Act 1999 has brought some major changes towards improving consumers’ right against manufacturers in cases of defective products.
Protections Accorded to Consumers under the Consumer Protection Act 1999

Until the enactment of the CPA, Malaysia did not have a comprehensive and general statute on product liability. The law on product liability was expressed in the law of contracts, the common law principles of the tort of negligence, and several statutes, the most important of which is the Sale of Goods Act 1957 (Rachagan & Nair, 2008). The CPA comprises of 14 parts and a total of 150 sections. It deals with selected areas of the law not yet provided for in other statutes; it does not seek to repeal or replace existing law. The following are some of the protections accorded to consumers under the Act:

Part II deals with Misleading and Deceptive Conduct, False Representations, and Unfair Practices. For example, section 9 deals with misleading conduct and section 10 deals with false or misleading representation. Part II also deals with misleading indication of price (section 12), bait advertising (section 13), gifts, prices, and free offers (section 14). The Act now covers any transactions carried out by electronic means as a result of its amendment in 2007. Hence, the Act provides for the protection of e-consumers against misleading and deceptive conduct, false representations and unfair practices (Amin & Mohd Nor, 2012).

Part III deals with Safety of Goods and Services. It provides for the declaration of safety standards and compliance with them (section 20). Also provided for is a general safety requirement of goods (section 21). However, a special defence section is included-compliance with a requirement imposed by law or a standard determined in accordance with the Act (section 22). Part III also confers the Minister the power to declare any goods or class of goods to be prohibited where such goods are likely to cause injury to any person or property or otherwise unsafe (section 23). Such a prohibition order may additionally require the supplier to undertake remedial measures including the recall of the unsafe goods at the supplier’s own cost (section 23(2)).

Part IV deals with Offences, Defences and Remedies in relation to Parts II and III of the Act. Under Part IV, offences attract fines in the case where the defendant is a body corporate and fines and or imprisonment in the case where the defendant is not a body corporate (section 25(1)(a) & (b)). Part IV also enables the courts to avoid or vary the offending contract and provide for ancillary relief for the consumer inter alia ordering the refund of money and property, payment of the amount of loss and expenses incurred and repair of the defective goods (section 29; Rachagan & Nair, 2008).

Part V deals with Guarantees in Respect of Supply of Goods pertaining to title, acceptable quality, fitness for particular purpose, compliance with description, and sample. Section 32 guarantees that the goods purchased by a consumer shall have an “acceptable quality”. The meaning of acceptable quality may be considered as a reworking of the “merchantable quality under SOGA (Abd. Karim & Wan Talaat, 2011).

According to section 32(2)(b) of the Act, acceptable quality is tested not only by reference to the goods, but also to the consumer’s expectation: whether “a reasonable consumer fully acquainted with the state and condition of the goods, including any hidden defect, would regard the goods as acceptable”. In addressing the issue of acceptable quality, the following factors are taken into consideration: the nature of the goods; the price of the goods; any statement made about the goods on any packaging or on label; any representation about the goods by the supply or the manufacturer; and all other relevant circumstances.

Part VI deals with Rights Against Suppliers in Respect of Guarantees in the Supply of Goods. For instance, section 39 provides for consumer’s right of redress against suppliers. This section gives a consumer a right of redress against a supplier of goods where the goods fail to comply with the implied guarantees under sections 31 to 37. However, there is an exception provided under section 40. Part VI also deals with other issues related to consumer protection such as: options against suppliers where goods do not comply with guarantees (section 41); failure of substantial character in terms of guarantee (section 44); consumer’s option of refund or replacement (section 46) etc.
Part VII deals with Rights Against Manufacturers in Respect of Guarantee in the Supply of Goods. Part VII has introduced ‘contractual’ liability on the manufacturer. This is a new liability that has never been introduced under any law of Malaysia (Zakuan & Yusoff, 2013). According to section 3, ‘supply’, in relation to goods, means ‘to supply or resupply by way of sale, exchange, lease, hire or hire purchase’. Also, section 3 defines a manufacturer as ‘a person who carries on a business of assembling, producing or processing goods…’ Based on the definitions, a manufacturer is not a party in the contract of supply of goods to consumers. However, the introduction of rights under Part VII has waived the application of the doctrine of privity of contract and imposes direct liability against a manufacturer (Zakuan & Yusoff, 2013).

Parts VII and IX deal with Guarantees in Respect of Supply of Goods. It is not the intention of the authors to address Parts VII and IX since the focus here is more on services as oppose to goods whereas the focus of the paper is on the sale of goods.

Part X deals with an adoption of the strict liability regime for defective products. Thus, Malaysia has joined the increasing number of countries that have been influenced by the EC Directive on Product Liability (Rachagan & Nair, 2008). Liability can be imposed without contractual relationship and proof of fault. The claimant only has to prove three things: the damage, the defect in the product and the causal link between the two. The Act does not require for proof that the defect is caused by the producer or manufacturer. However, the onus of proving the defect in the product may create great difficulties for consumers especially in design defect cases and similarly, proof of causation will remain as difficult as establishing fault under tort especially in case involving drugs: it is not easy to show that the illness was caused by the consumption of the drug and not by other genetic or environmental factors (Abd. Karim & Wan Talaat, 2011).

Part XI deals with the establishment of the National Consumer Advisory Council. Section 73 provides that the Minister may establish the National Consumer Advisory Council to advise him on the following matters: (a) in respect of consumer issues and the operation of this Act; (b) the promotion of consumer protection and awareness in consumer affairs; and (c) any other matter which may be referred to it by the Minister for the proper and effective implementation of this Act and for the protection of consumers. Section 74 provides for the composition of the members of the council.

Part XII introduces an alternative redress mechanism styled as the Tribunal for Consumer Claims comprising a Chairperson and Deputy from among members of the Judicial and Legal Service of the public sector and other persons qualified for legal practice in the country (section 86). Under the Tribunal, a consumer may refer any dispute or claim that does not exceed ten thousand ringgit (section 98). Supplementary legislation entitled Consumer Protection (the Tribunal for Consumer Claims) Regulations 1999 now provide for the forms and other operational aspects of the Tribunal (Rachagan & Nair, 2008).

INADEQUACIES OF THE SALE OF GOODS ACT 1957 AND THE CONSUMER PROTECTION ACT 1999

Although both Acts do afford some form of protections to consumers, it is inevitable to point out that the protections accorded to consumers are not adequate. The following are some of the problems surrounding the operation of both Acts making it impossible to offer adequate protections to consumers:

The Sale of Goods Act 1957

Under the Sale of Goods Act 1957, section 15 has failed to address sufficiently the meaning of the phrase ‘sale by description’. The Malaysian courts have relied heavily on the English cases in providing answers to this question (Yusoff et al., 2015). Although this issue was addressed earlier, the paper submits that the
confusion on whether the sale of specific goods amount to sale by description could be settled by inserting into the Act a clear definition of the phrase sale by description. As compared to the English Sale of Goods Act 1979, section 13 of the Act contains an additional provision as follows:

_A sale of goods is not prevented from being a sale by description by reason only that being exposed for sale or hire, they are selected by the buyer_

The above English provision has partly resolved the problem associated with sale of specific goods and as such it is recommended for Malaysia to adopt a similar approach in order to overcome the current ambiguity.

In addition, section 15 does not apply to breaches of all words of description. It only applies to descriptive words which amount to conditions of the contract. On this note, the Act fails to provide for the test of which words of description fall within the ambit of the section (Yusoff et al., 2015). Without having a proper test in place, it would be difficult for consumers to be adequately protected under the Act. It is thus proposed that a test be inserted in the Act.

As to section 16(1)(a), the proviso provides a defence to the seller in cases of a contract of sale of specified article under its patent or other trade name. This has been interpreted to mean that if a buyer asks for specific goods under a patent or trade name with the impression that he is not relying on the seller’s skill and judgment, then he cannot later complain if the goods bought are not fit for the purpose which he requires them. Bankes L.J. in _Baldry v Marshall_ ((1925) 1 KB 260 at p.267 canvassed the following test for the operation of the proviso:

_Did the buyer specify it under its trade name in such a way as to indicate that he is satisfied, rightly or wrongly, that it will answer his purpose, and that he is not relying on the skill or judgment of the seller, however great that skill or judgment may be?_

In England, this proviso has been deleted following the recommendation by the Law Commission in their Working Paper No. 18 (Yusoff et al., 2015). It is suggested that the proviso to section 16(1)(a) be deleted in order to have an adequate regime for consumer protection.

Looking at section 16(1)(b), the section provides for goods to be of merchantable quality but fails to provide the meaning of this key phrase. The implied condition of merchantable quality is inappropriate for consumer transactions (Rachagan, 1992). Consumer buys goods for use not for sale. The current test emphasizes on fitness and usability, scant regard is given to durability, minor defects and acceptability (Yusoff et al., 2015). Due to uncertainties in the use of the phrase ‘merchantable quality’, the English Sale of Goods Act 1979 has replaced the phrase with satisfactory quality. (Yusoff et al., 2015). It is thus proposed that the phrase merchantable quality in SOGA be replaced with the phrase satisfactory quality. The Act should also provide for the test and factors to be taken into account in deciding whether the goods sold by the seller are of satisfactory quality.

Furthermore, section 62 allows the exclusion of implied terms and conditions by ‘express agreement’ or by previous dealings or by usage. Courts have made various efforts to read down exclusion clauses by construing them strictly _contra proferentem_, particularly those in contracts where the parties are not of equal bargaining strength (Vohrah & Aun, 1991). Despite this judicial approach, the average consumers faced with a wide variety of standard contracts are disadvantaged by exclusion clauses hidden in fine print. According to Rachagan (1992), consumer protection calls for the repeal of section 62. The English Sale of Goods Act 1979 does not contain a similar provision.
As to the remedial scheme provided under SOGA, it is based on the classical approach of the usage of the terms conditions and warranties as stipulated in section 12(2) and (3). The inadequacy of SOGA in terms of providing a remedial scheme to consumers can be seen from the provision of section 13(2). Section 13(2) provides for where the contract is for specific goods the property in which has passed to the buyer, the breach of any condition to be fulfilled by the seller can only be treated as a breach of warranty and not as a ground for rejecting the goods and treated the contract as repudiated. The implication of section 13(2) is that, the passing of property in the goods to the buyer affects his right to reject the goods. Also in dealing with the issue of specific goods, section 20 provides for the property in the goods to pass to the buyer when the contract is made. Hence, the effect of section 13(2) is that the buyer automatically loses his right to reject the goods even though he has not had the opportunity to use the goods (Yusoff et al., 2015). It cannot be denied that this section creates injustice to the buyer as he would not have had the opportunity to use the goods and consequently discover the defects in the goods at the time the contract is made. However, it is important to note that this provision is no longer a feature of the English Sale of Goods Act 1979. It would be a sigh of relief to the consumers if section 13(2) is deleted from the Malaysian Sale of Goods Act 1957.

Still on the inadequacy of a remedial scheme under SOGA, reference must be made to section 42. The section provides for three ways of acceptance by the buyer: (i) When the buyer intimates that he has accepted the goods (ii) when the goods have been delivered to the buyer and he does any act in relation to them which is inconsistent with the ownership of the seller (iii) When the after the lapse of a reasonable time, he retains the goods without intimating to the seller that he has rejected the goods. It is pertinent to note that the second category of acceptance has been a source of confusion. There is of course a theoretical difficulty in section 42 because it is possible and indeed common situation for the property already to have passed to the buyer, especially after delivery of the goods ((Yusoff et al., 2015). It defeats logic to use the phrase ‘an act inconsistence with the ownership of the seller’ when the property in the goods may have passed to the buyer from the very beginning based on the act of delivery itself as a form of acceptance. Perhaps section 35 of the English Sale of Goods Act 1979 could be used as a guide in amending section 42 of the Malaysian Sale of Goods Act 1957. Section 35 of the English Sale of Goods Act 1975 is an important section addressing the issue of acceptance by a buyer at length.

The other inadequacy of a remedial scheme under SOGA revolves around the issue relating to the method of calculating damages. Section 56 provides for damages for non-acceptance as one of the personal remedies of an unpaid seller. On the other hand, section 57 provides for damages for non-delivery as one of the buyer’s personal remedies. Despite this being the case, SOGA fails to provide for the methods of calculating these damages. Again, reference must be made to the English Sale of Goods Act 1979 specifically sections 50 and 51 on the method of calculating damages for both non-acceptance and non-delivery of the goods. It is important to note that the formulae contained in both sections are similar to the method of calculating damages, which the Malaysian court adopted in Lee Heng and Co. v Melchers and Co. ((1963) 1 MLJ 47). Hence, it is timely that the above formulae has to be inserted in sections 56 and 57 of the Malaysian Sale of Goods Act 1957.

The Consumer Protection Act 1999
One of the inadequacies of the CPA rests on the supplementary nature of the Act itself. Section 2(4) provides that ‘the application of this Act shall be supplemental in nature and without prejudice to any other law relating to contractual relations. What happens in the event of a conflict between the Act and the Contract Act 1950 or the Sale of Goods Act 1957 in a consumer contract, which legislation shall prevail? There are obvious discrepancies between the CPA and SOGA with regards to privity and the application of exclusion clause, which can only be resolved after litigation. Due to these discrepancies, it is not clear whether the CPA can really achieve its principal objective to provide better protection to consumers.
Professional who are regulated by any written law and healthcare services provided or to be provided by healthcare professionals or healthcare facilities are excluded from the operation of the Act (section 2(2)(e) and (f)). Based on section 2(2)(e) and (f), it is difficult to see how the Act can really afford protection to consumers who are dealing with professionals in the health sector.

Section 51 provides that no right of redress against the manufacturer if the goods fail to comply with the implied guarantee under section 50 due to (a) a default or omission of, or any representation made by, a person other than the manufacturer; or (b) a cause independent of human control, occurring after the goods have left the control of the manufacturer. If these things occur, by virtue of section 51, the consumer will be left without any contractual remedies. The operation of this exclusion clause is seen as a tool of oppression as it enables manufacturers to escape liability. This section is not in line with the main objective of the CPA and should be abolished altogether. The existence of section 51 impairs the rights conferred by the Act to the consumers in obtaining redress against the manufacturers.

The other inadequacy of the CPA is the issue of interpretation. For instance, the test of defectiveness under Part X of the Act is based on a vague safety concept provided under Part III. There will always be a scope for a debate over questions of fact, degree and standard in deciding whether or not a particular product was unsafe and therefore defective (Abd. Karim & Wan Talaat, 2011). Apart from that, it is even more problematic when safety is to be judged according to what ‘a person is generally entitled to expect (section 67(2)). On the surface, the test appears to be objective since it is based on a particular person’s expectation. However, it is the general expectation that will be taken into account and not an actual expectation of a consumer (Amin, 1999). Hence, it may preclude a plaintiff’s claim.

In addition, the consumer expectation test has also been criticised for its failure to protect consumers adequately in the event of patent danger. Also, the time of supply is relevant in deciding defectiveness (section 67(2)(f)). For example, the relevant time would be the time of supply by the producer and not the subsequent time of supply to the ultimate consumer.

Lastly, the CPA does not provide for public interest groups to bring an action on behalf of an aggrieved consumer (Rachagan & Nair, 2008). Unlike the novel feature seen in many other jurisdictions such as in Thailand, India and China that provide for consumers in obtaining legal aid and representation by consumer organizations, the Act does not provide for it (Rachagan & Nair, 2008). The concept of locus standi or ‘standing in courts’ as the term is commonly understood, being a procedural barrier created to prevent abuse of legal process should perhaps be done away with in instances involving consumer disputes (Rachagan & Nair, 2008).

**CONCLUSION**

It is evident from the foregoing discussions above that the protections accorded to consumers under the Sale of Goods Act 1957 and the Consumer Protection Act 1999 are not adequate. The Sale of Goods Act 1957 is archaic. It predominantly reflects the provisions in the Sale of Goods Act 1893 (United Kingdom). The provisions contain in the Malaysian Sale of Goods Act 1957 do not adequately protect consumers in a sale of goods transaction. Looking at the changes in the way business is now being conducted call upon a review of the present law of sale of goods as contained in the Sale of Goods Act 1957. On the other hand, the Consumer Protection Act 1999 being supplemental and without prejudice to any other law regulating contractual relations has indeed reduced the effectiveness of this long awaited legislation. Hence, the existence of the Consumer Protection Act 1999 may still be inadequate to protect consumers until and unless the weaknesses of the Act (as mentioned above) are remedied.
REFERENCES


INTRODUCTION

At present, the world economy is transiting from an industrial economy to a Knowledge Based Economy (KBE) in order to enhance the wealth creation (Abhayawansa & Abeysekera, 2009). As per this transition, to be sustaining the competitive advantage, the economy has to depend on the knowledge based capital so called the Intellectual Capital (IC). Such as: knowledge workers, design, patents, trademarks and corporate and business strategies (Rashid, 2010). Dammak (2015) stated that capacity of intangibles that are not figured in the Companies’ Statement of Financial Position to express, the reasons for the differences between market value and book value of the companies. It is often argued that firms’ spending on their employees is recognised as expense in the Statement of Comprehensive Income in the current financial accounting and reporting. This accounting treatment has been debated over decades, since employees are arguably claimed as the true value creators of firms’ intellectual capital (Vithana, 2014).

Giving the special attention to this issue, there are growing accounting debates on recognizing the IC that has not been recognized previously in the companies’ financial statements. With the remarkable increase in the number of companies relying on IC and its impact on corporate performance and firms’ value, it should be investigated in order to find out the relationship between ICD and corporate performance and firms’ value (Salmudin et al., 2010).

As far as stakeholders of the companies are concerned, the annual report is one of the primary methods used to communicate the companies’ response to stakeholder concerns. It is the right of all stakeholders to obtain all the information of the company, including ICD even though it is not required by statutory bodies. Intangible assets are very difficult to be recognized in companies’ Statement of Financial Position under the current accounting and reporting framework. Therefore, companies tend to report these resources voluntarily in their annual reports (or on websites) (Yi et al., 2012).

In the early 2002, for the companies to practice what is known as TBL reporting’, the reporting that provides information about the economic, environmental and social performance of an entity (Elkington, 1997). The provision of information as to economic, social and environmental responsibilities of an organisation is often identified as reporting about ‘profit, people and planet’. It represents a departure from the traditional ‘bottom line’ perspective, which has focused solely on an entity’s financial or economic performance, commonly known as profit. SRR is predominately a voluntary reporting process given the general lack of regulation in the area. However, many organizations publicly release information about their social and environmental performance. Hence, it is important to consider the factors that motivate the management of a company to disclose this information voluntarily. In order to address this issue, the system oriented theories - Legitimacy Theory, Stakeholder Theory and Institutional Theory can be considered. These theories focus on the role of information and disclosure in the
relationships between organisations, the State, individuals and groups. GRI is an integrated disclosure framework that enables companies and their stakeholders to assess performance along economic, environmental and social lines. Hence, GRI Guidelines are also considered as a conceptual framework for SRR. These guidelines are generally considered as representing current 'best practice' reporting on sustainability.

Nowadays, there is a greater attention on “Global Reporting Initiative (GRI) Sustainability Reporting Guidelines” initiated in 1997. It is an integrated disclosure framework that enables companies and their stakeholders to assess performance along economic, environmental and social lines. Hence, this is also considered as a conceptual framework for social responsibility reporting. The first version of GRI guidelines was introduced in 2000. It was followed by the second version (known as G2) and the third version (known as G3) issued respectively in 2002 and 2006 and also by G 3.1 Guidelines issued in March 2011. Presently, fourth version (G4) is in place from 2013. However, reporting organizations that are currently using the G3 or G3.1 Guidelines can decide when they want to move to G4 Guidelines. For this reason, GRI will continue to recognize reports based on the G3 and G3.1 Guidelines for up to two full reporting cycles. Nevertheless, the reports published after 31 December 2015 should be prepared in accordance with the G4 Guidelines.

Sri Lanka is an industrialized economy and a developing country in Asia. Sri Lanka has undergone rapid industrialization since the early 1980’s and the per capita income has almost doubled from 2006 to 2014 (Central Bank, 2014). Population of the country meanwhile has increased from 14 million in 1976 to the present 20.86 million and is expected to peak at 24 million in 2020 (Central Bank, 2014). The literacy rate in Sri Lanka is now 92% (Central Bank annual report, 2014). Sri Lankan labour force participation rate is high thus they play a vital role in value creation in Sri Lanka. Presently, there is a peace environment after defeating the war. As a result it could be seen that dramatic development processes are undertaken by the government as well as the private sector. According to Central Bank report (2013) the economy has also grown by 8.3% in 2011, which was the highest in Sri Lanka after independence, maintaining a growth rate more than 8% for the first time in two consecutive years. During the war period the economic growth rates was comparatively low as a result the pre war period the stock market performance also remained very low in Sri Lanka. The Capital market sources suggest that after the war Sri Lanka has achieved its ever highest growth rate in 2012 which is 8.6%. This very noticeably reveals that stock market growth and economic growth moving together. Majority of the sectors in Colombo Stock Exchange (CSE) have achieved a remarkable growth after the war in Sri Lanka (Dayaratne, 2014). The Global Innovation Index 2014 (GII) has ranked Sri Lanka at 105 out of 143 countries (Sunday observer, 2015/05/10).

Still there is no legislative guideline for IC disclosure in Sri Lanka including the Companies’ Act No. 7 of 2007, Lanka Accounting Standards (LKAS) and Sri Lanka Financial Reporting Standards (SLFRS)\(^1\). The convergence\(^2\) of Sri Lanka accounting standards to the international accounting standards will undoubtedly impact many areas of the business from sales and marketing to research and development to tax and strategy etc. It will carry total company wide impact and will require numerous system changes to capture the right information at source. The main aim of the convergence is to be in line with international practices as the world becomes more and more integrated and interdependent. It will definitely serve as a

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\(^1\) The Sri Lanka Accounting and Auditing Standards Act, No. 15 of 1995 authorises the Chartered Accountants (CA) Sri Lanka to issue LKASs and SLFRSs and requires “specified business enterprises” to prepare and present their financial statements in compliance with LKASs and SLFRSs.

\(^2\) LKASs and SLFRSs are applicable to the convergence with IAS and IFRS for financial periods beginning on or after 1 Jan 2012 in Sri Lanka.
positive in attracting Foreign Direct Investments (FDIs) in a post war economy in Sri Lanka by increasing comparability of investments across borders and enhanced transparency. Sri Lanka Accounting Standard LKAS 38 - Intangible assets sets out the accounting treatment, recognition and measurement of Intangible Assets of the companies’ financial statements. As per this standard, the term Intangible assets are defined as "identifiable non-monetary asset that is not physical in nature and owned to be used in generating or handling over goods and services. Most of the organizations are now being spent large amount of money as an investment on their employees. As far as human capital is concerned, the human capital still is not recognized in the Statement of Financial position as an asset. Professional bodies and academics believe that the intellectual capital has to be measured and recognized in the face of financial statements and voluntarily disclosed as information since they contribute the companies’ value addition.

In order to generalize the research issues on ICD potential researchers have to undertake as a full market study in Sri Lankan companies (Kehelwalatenna & Gunaratne, 2010). Rashid (2010) suggested that applying the generalization of developed countries’ studies on ICD to developing country is not appropriate. There are very few studies have been studied globally on ICD based on a survey or structured questionnaire (Bontis et al., 2000; Bollen et al., 2005). It is clear that there are such studies have been undertaken in Sri Lankan context on ICD based on a survey or structured questionnaire. According to Abeyekera (2007) content analysis of the 30 top Sri Lankan companies’ annual reports has been used to find out IC reporting. Subsequently, the same researcher made a comparative study of reporting pattern of Sri Lankan companies and Australian companies Major findings of the study were found that IC Reporting differences existed in these two countries because of such macroeconomic factors as political, environmental, socio-culture and technology. The findings also revealed that the theoretical framework for ICD was not available for the companies in Sri Lanka.

Based on the literature review, this research study sets out to achieve the following objectives: to examine the nature of ICD and its practices based on prior research studies and the context of annual reports in terms of text, sentences, pictures, tables and graphs, to reveal the major findings of past ICD research studies through the available literatures, to contribute to the future researcher by proposing conceptual models towards ICD and to develop a IC coding framework to measure the extent and trend of IC reporting by companies.

This research paper contributes to the existing literature with regarding to ICD. This research contributes to limited research in the context of Sri Lanka since past research repeatedly concerning on developed economies. This research employed the theoretical foundations to interpret the research findings. This research examined the extent and trend of ICD.

The remainder of this paper is structured as follows. First, a number of theoretical supports for ICD are described. Literature on ICD in terms of global and Sri Lankan context is reviewed. Next, the conceptualization, objectives of the study are given. Next, research methods and findings from literature are offered. The final section discusses the research results from literature and annual reports of those companies listed on CSE. Finally, concluding notes were given.

**REVIEW OF LITERATURE**

**Theoretical support for ICD**

Although researchers’ perspective on the components that IC comprises show to be different, it is possible to exercise a common conceptualization. According to this, IC is analyzed into two components such as: human capital and structural capital. Human capital includes employees’ capabilities, skills, knowledge, technical expertise, etc. that are currently used and can potentially be used to create value addition of the firm. Structural capital is the infrastructure companies develop to commercialize their IC (Edvinsson & Sullivan, 1996). Structural capital comprises organizational capital which includes of the embedded
knowledge the firm possesses that drive its performance, as well as relational capital which embraces all the relations the firm has established with its stakeholder groups such as customers, suppliers, the community, the government, etc.

**Human capital**
The essence of human capital is the sheer intelligence of the organizational member (Bontis, 1998). According to Mayo (2002) human capital can be further analyzed into the following three dimensions: capability and potential, motivation and commitment, and innovation and learning. Capability and potential includes concepts such as educational level, professional skills, experience, attitudes, personal networks, values, and the ability of current employees to evolve within the organization. Motivation and commitment refers to whether employees align their own interests with those of the firm. Finally, innovation and learning shows the degree to which employees are open to change.

**Internal capital (organizational capital)**
Human capital is of little value to the firm in isolation. Bearing in mind its volatile nature (employees can suddenly leave the organization), it is essential that firms develop competencies that sustain its existence beyond certain individuals. These competencies constitute the concept of organizational capital which assists employees to achieve high intellectual performance and consequently enhance the firm’s performance (Bontis, 1998). Organizational capital contains databases, organization charts, strategies, manuals, etc. It could be described as what is left in the organization when people go home in the evening (Roos & Roos, 1997). The transformation of human capital to organizational capital must be management’s main objective, as it can sustain the firm’s long term development.

**External capital (relational capital)**
Relational capital represents the potential an organization has due to extraneous intangible assets. These intangibles comprise the knowledge embedded in customers, suppliers, the government, or related industry associations (Bontis, 2002). The relationships a firm establishes with its customers constitute the most important part of relational capital known as “customer capital”. This includes customer contracts, relationships, loyalty, satisfaction, market share, image, reputation, brands, distribution networks, and channels (Mayo, 2001). It is obvious that due to its external nature it cannot be developed or codified easily.

**Theories related with ICD**
Past researchers have liked the ICD requirements with stakeholder theory and legitimacy theory. According to stakeholder theory, management of the organization is expected to undertake activities deemed important by their stakeholders and to report on those activities to them. This theory illustrates that all stakeholders have a right to be provided with information on how organizational activities impact them. Stakeholder theory suggests that organizations will choose to voluntarily disclose information about their intellectual, social, and environmental performance, over and above mandatory requirements, in order to meet stakeholder expectations. This theory can be tested by using the content analysis method. The annual report is the most efficient way for an organization to communicate with those stakeholder groups deemed to have an interest in controlling certain strategic aspects of an organization.

“Legitimacy theory assumes that organizations make sure that they operate within the bounds and norms of their societies (Deegan 2006)”. A company would be required to report on activities if the management noticed that this was what the community expected. A social contract between the company and the society is one of the bases of Legitimacy theory. The constant changes of these societal expectations require that the company to be responsive to the environment in which it operates (Deegan 2006).

Moon et al. (1994) suggest that an organization is able to set up some strategies if its legitimacy is in question. To start with, the organization can educate and inform its relevant publics about the possible
changes in the organization's performance and activities. Also, it can manipulate the perceptions of the relevant publics and deflect their attention from the issue of concern. Finally, the organization might find ways to change and influence external expectations of its performance. This perspective has been used by many empirical studies of Social and Environmental Reporting to shed light on the use of the voluntary disclosure of intellectual capital by firms. According to legitimacy theory, organizations don’t have to operate without taking into account the societal values (Guthrie and Parker, 1990). This is often achieved through the medium of company reports. Some previous studies examined voluntary annual report disclosures and considered the reporting of social and environmental information as a method used by organizations to react to public pressure (Deegan & Rankin, 1996; Guthrie and Parker, 1990; Patten, 1991, 1992). Legitimacy theory is linked to the reporting of intellectual capital and to the use of content analysis methods as a measure of such reporting. When companies find it difficult to legitimize their status on the basis of the hard assets, they are more likely to report on their intellectual capital. The extent of intellectual capital reporting is best measured using content analysis. Thus, legitimacy theory, intellectual capital reporting, and content analysis are interlinked.

Research carried out in global context

Kin and Zakiah (2008) studied a research on Intellectual Capital and Corporate Performance of Technology Intensive Companies: Malaysia Evidence with the aim of examine the association between Intellectual Capital and corporate performance MESDAQ listed companies on Bursa Malaysia by investigating whether value creation efficiency, as measured by Value Added Intellectual Capital can be explained by market valuation, profitability, and productivity. Correlation and regression analysis showed that the relationship between corporate value creation efficiency and firms’ market valuation, profitability and productivity. The findings revealed that technology intensive companies still depend very much on physical capital efficiency.

Yi and Davey (2010) reported by using content analysis of the annual reports of 49 dual listed companies in mainland China, that the level of ICD by Chinese companies was not high. Most ICD attributes were included in qualitative terms rather than quantitative terms. The average number of items disclosed was high enough to propose that there was a clear awareness of the significance of ICD. According to the authors, the disclosure quality was not considered as strong.

Ferchichi (2013) carried out a study on The effect of intellectual capital disclosure on the value creation: An empirical study using Tunisian annual reports with the aim to examine the informational value of intellectual capital on Tunisian financial markets, which appears as a highly topical issue, especially with the broadening notion of the intellectual capital and its increasing role in investment decisions. Based on the content analysis of annual reports of 50 companies listed on the Tunisian Stock Exchange selected for the period 2006–2009, and using the developed weighted disclosure index the results show that the intellectual capital information is positively and significantly correlated with the firm creation value. Reporting on intellectual capital allows resolving uncertainty about the firm, thereby improving an increase in value. This finding confirms the pivotal role of intellectual capital in the valuation of firms listed on the Tunisian Stock Exchange.

Abbasali et al (2013) carried out a research on the impact of intellectual capital on market value and financial performance of firms accepted at Tehran stock exchange by using a sample of 700 year-firm for a period of 5 years from 2006 to 2010. Results of the study revealed that there is a positive and significant relationship between investigated variables. ROA, ROE, revenue growth variables and ratio of market value to book value (M/B) which is criterion of financial performance accounting are used in this research. Results of the study also revealed that that there is positive and significant relationship between intellectual capital value added and M/B ratio and also that there is positive and significant between intellectual capitals with financial performances.
Hazianti (2014) investigated a research entitled on intellectual capital disclosure emphasis: an analysis of Malaysian companies’ annual reports with the aims to investigate the presentation of annual reports towards ICD when companies are motivated by capital-raising motive. By using top 100 Malaysian companies in 2010, the analysis revealed that steady with the motivation to offer intellectual capital information that investors will not only identify but that they will also retain and remind when making investment decisions.

Azar (2014) studied a research on the impact of intellectual capital on returns and stock prices of listed companies in Tehran stock exchange in 2007. The major findings of the study revealed that there is a significant and positive relationship between intellectual capital and ROA, ROE and Tobin's q ratio and hypothesis testing showed that intellectual capital has no significant effect on the P/E ratio and M/B ratio of listed companies in Tehran stock exchange. According to the author, analysis shows that intellectual capital has no significant effect on the P/E ratio and M/B ratio.

Yosano et al (2015) studied a research on ICD based on a disclosure index methodology on 120 IPO prospectuses from 2003 to define the nature and extent of the disclosures concerning intellectual capital in order to study the effects of information asymmetries on stock price valuation. Findings revealed that Intellectual capital information leads to significantly better long-term performance against a reference portfolio, and is thus important to the capital market. Further, superior disclosure of IC reduces bid-ask spread in the long term, indicating that such disclosures are important in an IPO setting. According to the authors, intellectual capital information always leads to better performance of the companies.

Several research scholars have considered their efforts towards the identifying, understanding and analyzing ICD and the practices of ICD in the companies’ annual reports. According to the past empirical investigation, there are relationships between ICD and the companies’ performances.

**Research carried out in Sri Lanka**

When comparing with the previous Sri Lankan studies, it is acknowledge that findings of these studies provide some insights related with IC and ICD in the context of Sri Lanka. There are some drawbacks in these studies, such as relatively small sample size, qualitative research methods i.e. content analysis and few year annual report comparison (less than five years). Abeysekara, who is a pioneer in the accounting research of IC and ICD in Sri Lanka, used the old dataset. There are some practical problems to use findings from these studies to generalize the ICD practices of listed companies on CSE in the current scenario. Given the weaknesses above, a more comprehensive accounting research into ICD practices in listed companies on CSE is essential.

Abeysekara (2007) pointed out the annual reports as vital communication tool that can deliver the adequate information for the companies’ various stakeholders. As per the annual report of Board of Investment of Sri Lanka (2000) and the Intellectual Property Act 1979 and No. 40, 2000 as cited by Kehelwalatenna and Gunaratne, 2010, Sri Lanka is now moving towards a knowledge based economy. With reference to the above undertaking a research on ICD and its impact on corporate performance of the companies in Sri Lanka will be very much important because the concept of IC has been recognizing in the annual reports by few listed companies in CSE since 2009. Abeysekara (2007) found that the companies in Sri Lanka did not have a theoretical framework for Intellectual Capital.

Abeysekara (2008) examined a research on Intellectual capital disclosure trends: Singapore and Sri Lanka based on the top 20 firms listed on CSE for the period of three years from 1998 to 2000. By using the content analysis of the annual reports, findings revealed that there are ICD disclosure differences between Sri Lankan firms and Singapore firms. The author suggested that a disclosure framework should be established towards ICD for Sri Lankan companies. According to the author, there are different extents of disclosures between these two countries.
Malawaraarachchi and Kehelwalatenna (2013) carried out a study on Intellectual capital reporting: evidence from the banking industry in Sri Lanka as a case study approach for five private banks in Sri Lanka such as Commercial Bank Ceylon Plc, Hatton National Bank Plc, Bank of Ceylon, Sampath Bank Plc and People’s Bank for the period of 2006 to 2009. As cited in Pablos (2002) and Abeysekera (2007), this study used the IC reporting index. Major findings of the study revealed that there are different levels in IC reporting of these banks. According to the analysis of IC of Commercial Bank of Ceylon PLC, IC reporting revealed that the component of internal capital reported a higher level HC and external capital. This has been determined by the reporting of processes, philosophy systems, culture, and financial relations of the company. The component of HC, employee related measurements, entrepreneurial skills and employee relations come out averagely in the annual report.

CONCEPTUALIZATION

Figure 1 proposes the conceptualization to determinants of ICD such factors as: industry type, company size, leverage, listing status, ownership structure, independent directors, stand-alone CSR report, profitability, auditor type (Yi, 2012).

![Conceptual Model (a)](source: Authors’ original construction based on prior literature review)
METHODOLOGY

For the aim of this research, terminologies in terms of InCD, ECD and HCD were adopted as a basis for the construction of an IC coding framework, which was employed as an instrument to examine the extent ICD by Sri Lankan companies. This research paper is employed the content analysis of the annual reports as a qualitative research method.

Sample

In this research, besides recent literature, several listed companies listed on CSE according to the past researchers were selected as sample. The rationale behind this is that the sample companies are the listed companies which represent different industry sectors in CSE. These are most likely to disclose IC information from 2011 onwards incorporating G3.1 guidelines. For an instance Johns Keels Holdings has been preparing its annual reports in accordance with Integrated Reporting (IR) and GRI guidelines since 2011. Finally, since all the companies are publicly listed liability companies, their annual reports can be easily downloaded via CSE website. Three years’ annual reports from 2011/2012 – 2013/2014 of sample companies were screened for the purpose of extracting the disclosures of IC information in terms of text, sentences, pictures, tables and graphs text, sentences, pictures, tables and graphs of the companies’ annual reports. Norhayati et al., (2012) suggested that future research hers should focus on ICD in terms of Previous studies unlike Kehelwalatenna and Gunaratne, (2014) other studies (such as: Abeysekara and Guthrie, 2005; Abeysekara, 2007; Abeysekara, 2008a; Abeysekara, 2010; Kehelwalatenna and Malwara Arachchi, 2010; Abeysekara, 2011), have used the outdated annual reports i.e. before 2011. At present there is increasing trend towards the disclosure of social, environmental and economic information in the annual reports as per the IR and GRI from 2011. This study enables the longitudinal analysis over a three year period. Publicly listed companies often pay attention in their annual reports to indicate what is important to their stakeholders a communication medium to discharge accountability (Yi and Davey, 2010).

Content analysis as a qualitative research method

According to Guthrie et al., (2004), content analysis, as a method for data collection, codifies both qualitative and quantitative information into pre-defined criteria on the basis of selected terms, sentences and pictures so as to develop patterns in the disclosure of information. This method becomes mostly appropriate one in disclosure studies over the prior years, specifically in the fields of Corporate Social
Responsibility (CSR) and IC (Guthrie and Parker, 1990; Unerman, 2000; Singh and Kansal, 2011). Next the authors discussed the IC coding framework which can be used as tool or the mode for content analysis.

As presented in the above figure, the IC coding framework is composed into three ICD under widely accepted IC categories such as InCD, RCD and HCD. Different thought obtained from the literature, the authors identified a total of 24 IC items which were deemed to be applicable by the Sri Lankan companies.

**ANALYSIS AND DISCUSSION**

Here, the extent of the ICD is analyzed. For an instance, John Keels Holdings PLC is preparing its annual reports in the following headings, such as: Group Highlights, Governance, Sustainability Integration and Risk Management, Management Discussion and Analysis, Financial Statements and Supplementary Information. Next, the authors present modes of intangible information or IC of the John Keels Holdings PLC using various illustrations. Such as: terms and sentences, picture images, tables, graphs and charts (refer to appendices)

**Discussion on ICD and its relevance in business operations**

Guthrie and Petty (2000) investigated the extent of IC disclosure in terms of InCD, ECD and HCD (24 items) of 20 largest listed companies in Australia by using the content analysis of 1998 annual reports. Major findings of the study reveal that IC components were poorly understood; there was no consistent reporting framework and ECD was the mostly reported item. Brennan (2001) explored the extent of IC disclosure in terms of InCD, ECD and HCD (24 items) of 11 knowledge-based listed companies in Ireland by using 1997 and 1998 annual reports. Content analysis revealed that there was a significant gap between book and market value and low level of all three kinds of disclosure.

Williams (2001) examined the trend ICD and its relationship with IC performance in UK based on 51 ICD items on the sample of 31 100 listed companies in UK in the annual reports from 1996-2000. Findings of the study shown there was an upward trend over time and inverse relationship between performance and ICD. Bontis (2003) examined the extent of ICD based on 39 items for the total sample of 10,000 firms in Canada. Based on the content analysis on annual reports, the results reveal that there was significantly low disclosure of IC items. Bozzolan et al. (2003) reported that the level of ICD and the effects of industry and size of InCD, ECD and HCD (22 items) on 30 non-financial listed companies in Italy by using the content analysis of 2001 annual report. Findings of the study shown there were extensive external capital disclosures; and no significant industry and size effects.

Abdolmohammadi (2005) conducted a study on ICD in USA with the aim of developing a framework of IC components and investigate the effect of IC disclosure on market capitalization 10 general categories in 58 randomly selected firms from Fortune 500’s annual reports from 1993 to 1997 based on content analysis method. Findings of the study reveal that there were increasing disclosures for brand and proprietary processes, significant differences between the new and old industrial sectors for disclosures of some IC elements and a highly significant effect on market capitalization. Vandemaele et al. (2005) studied a comparative study including three countries such as: Netherlands, Sweden and UK to compare the disclosure practice of these three different countries over the three year period (1998, 2000 and 2002) in 20 large publicly listed firms from each country. Through the content analysis of the annual reports, in terms of InCD, ECD and HCD, 22 items were found. Findings reveal that there was generally an upturn trend for all the countries during the study period.

Vergauwen and Alem (2005) demonstrated a study in three countries such as: Netherlands, France & Germany to survey and compare the level of ICD in these countries with 39 IC items in 89 listed
companies from these three countries through the content analysis of the annual reports from 2000-2001. Findings of the study shown that there was a significant difference between countries and generally French companies reported the best performance. Guthrie et al. (2006) explored an investigation to compare the status of IC disclosure in two different regions as well as assess size, industry and time effects in 50 top Australian companies and 100 listed firms in Hong Kong. 18 items regarding with ICD, ECD and HCD were identified through the content analysis of the 2001 annual report. Results of the study indicated that there was lower level of ICD, primarily in qualitative form and a positive correlation between company size and level of IC disclosure.

Sonnier et al. (2007) examined the relationship between profitability and IC disclosure in 143 high-tech US companies for the period of five years from 2000-2004. 121 items from SCD, RCD and HCD were found through the content analysis method. Findings indicated that there was a significant and negative relationship between Profitability and the level of ICD. Sujan and Abeysekera (2007) surveyed in Australia to identify the status of ICD as well as compare with a previous study using the same research method in 20 top listed companies by using 2004 annual reports. Through the content analysis, 25 items of InCD, ECD and HCD were found. Findings reveal that there was no any consistent IC reporting framework; external capital mostly reported; mainly in qualitative and a modest upturn trend.

Singh and Kansal (2011) studied to survey the disclosure practices of pharmaceutical firms and its impact on IC valuation of 20 top listed pharmaceutical firms in India. Based on the content analysis of 2009 annual reports, 24 items were found in terms InCD, ECD and HCD. Findings reveal that there was a lower level and varied disclosure, primarily in narrative, external capital was most commonly disclosed, most reported elements including brands, and business collaborations and there was a weak and negative relationship between disclosure and valuation.

Findings from Sri Lankan listed companies’ annual reports
Abeysekera and Guthrie (2005) investigated a research to report the trend of IC disclosure in 30 largest listed companies in Sri Lanka. According to them, in terms of InCD, ECD and HCD, there were 45 items were identified in the annual reports from 1998/1999-1999/2000 through the content analysis. Major findings of the study shown that there were: an increasing trend of ICD and external capital mostly reported.

Abeysekera (2008) compared in Singapore and Sri Lanka towards ICD and compare the disclosure trend and category between a developing and a developed country perspective of 20 top listed companies by using three year annual reports from 1998-2000. 45 items were found in the respective annual reports from InCD, ECD and HCD. Major findings indicated the mixed results for the trend of ICD in both countries, further it also indicated that human capital was mostly disclosed in Singapore while external capital was mostly disclosed in Sri Lanka.

Most of the companies listed on CSE are preparing their annual reports in the following headings, such as: Group Highlights, Governance, Sustainability Integration and Risk Management, Management Discussion and Analysis, Financial Statements and Supplementary Information. Next, the authors present modes of intangible information or IC of the John Keels Holdings PLC using various illustrations. Such as: terms and sentences, picture images, tables, graphs and charts (refer to appendices).

CONCLUDING NOTES

In this conceptual paper, the authors conducted a comprehensive literature review with respect to ICD from various countries including Sri Lanka. The findings show that there was a generally increasing trend of ICD in the Sri Lankan listed companies. Thus this study has achieved the first objective. According to the theoretical perspective such as stakeholder and legitimacy theory, most of the companies are now
realizing that the ICD in annual reports would be a very helpful means to reduce information asymmetry, discharge accountability and highlight legitimacy to various stakeholders, and consequently improve the relationship with them, which is a basis for organizations to survive and succeed in society (Yi et al., 2011). In this research papers authors have reviewed the relevant studies on ICD in order to contribute to the insights towards ICD as various findings of prior literature, thus this study has achieved the second objective.

ICD in reports in terms of text, sentences, pictures, tables and graphs could benefit the companies in such ways as reducing the insider trading, reducing the capital costs, decreasing the volatility of stocks, adding the corporate image, attracting the potential investors and other stakeholders and talents, and retaining the existing ones (Rogers, 2007). Most of the Sri Lankan listed companies are now being disclosed at least ICD in their annual reports in terms of text, sentences, pictures, tables and graphs with the core discipline of GRI4 guidelines. So, this study has also achieved the first objective. It is widely acknowledged that the disclosure level of some IC items are still low according to the IC coding framework addressed in this study, thus fourth objective of this study has been achieved. This study also proposed two conceptual models which can be applied by the future researcher towards ICD. Thus this study has been achieved the third objective.

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IAS 38, Intangible Assets.


LKAS 38, Intangible Assets.


Destination Discontinuity for Sustainable Development of Tourist Destination

Keywords: Himalayan Tourism, Uttarakhand, Management of Tourism, S Curve, Destination Discontinuity, India

INTRODUCTION AND MOTIVATION OF STUDY

Tourism is an important factor in world trade with international dimensions as a component of national economies, as a means for earning foreign exchange, as an employment provider, as a medium of social cultural exchange. Famous economist considered service to be unproductive as in the case of Adam Smith (1776), who stated that service did not generate value service were seen only as immaterial activities unable to contribute to the material economic progress. The various sectors under the service sector in India are Insurance, hotel, transportation, construction, restaurant, trade, communication and, social and personal service, financing, business services like tourism and real estate. The theme of UNCTAD XIII, Development centered Globalisation; toward inclusive and sustainable growth and development, there focus was on how the strengths of global economy can utilised to spread its benefits more inclusively and sustainably, by creating jobs and raising living standard for poor people and nations.

United Nation Conference agrees that tourism can stimulate trade and development. Tourism today is one of the most promising and viable option. The economic significance of tourism in the national economy was studied by NCAER by constructing a tourism satellite account for the year 2002-03 on behalf of the central ministry of tourism. The tourism industry contributes about 2.78% towards gross domestic product of Indian economy. If indirect affect are also accounted, the contribution of tourism in GDP increases to 5.83%. The direct employment generated by tourism industry in economy is about 4.59% at the same time the share increases to 8.27% if indirect employment generation is also take into consideration.

Tourism in India has emerged as a major source for sustainable economic development because of its strong forward and backward link with other prominent sectors of economy. According to one study published by World Travel and Tourism Council, tourism in India is able to generate 6.3% of India’s total employment. Tourism increases the level of economic activity in developed or underdeveloped area by increasing the tourist inflow in that area. It helps the Locals and government in revenue earning by various Sources (taxes) like luxury transportation, and income from tourist protected areas (TPA) via Accommodation facilities, Road network expansion, Communication facilities, Transport facilities, Medical and health facilities, Banking facilities, Proper vehicle parking facilities, Safety and security providing by local police.

Tourism product is a complex consumptive experience that results from a process where tourist use multiple of service (information, relative prices, transportation, accommodation and attraction service, gunn 1988) Here for the purpose of study we took destination as a product of tourism industry for understanding the management of problems and issues related to tourism industry in Himalayan region of India.

In India seven states fall under Himalayan region these are Jammu Kashmir, Himanchal, Uttarakhand, Sikkim, Meghalaya, Assam and Arunachal Pradesh from North Western to South Eastern direction.
The growth rate in all this state in 2013 was below the national average in term of domestic inflow of tourist having Jammu & Kashmir as exceptional case. The slow most growth was recorded for Uttarakhand which shows -25.67 %. There are many reasons for slow and negative growth rate. These are Less Government Support and Policy initiatives, Pollution, climate degradation, lack of management (Tourism and Disaster) at government and private level. The solution can be generated if we follow a structured way for finding a solution. Before working on structure of tourism problem solving there is a need understand the general framework of management of tourism from strategy management perspective which was adopted from Zamora, 2010.

GENERAL FRAMEWORK OF MANAGEMENT OF TOURISM

Framework of management of tourism can be defined as an application of science, engineering, environment, knowledge management for effective identification, selection, acquisition, development, exploitation and protection of tourist destination through strategy formulation for desired requirement from destination and then implementation of such strategy for having desired result as a development of destination and having desired level of growth rate from that destination.

This framework includes four steps and last two steps as outcome. First step include the application of science, engineering, environment and knowledge which help in creation of attractive destination among tourist. There are many destinations which were developed by only by the application of engineering or environment but the uses of such application also require science and knowledge. The second step include the formulation of strategy for the development/modification of destinations to make it affordable for tourism industry with the support of government for manufacturing of basic infrastructure and policies related to tourism in that destination. The third step include the identification, selection, acquisition and development of specific destination out of many destination for exploitation of destination for tourism activities and then creation of policies for the protection of tourism in that destination by providing protection to that destination. Finally the last step come into picture of implementation of strategy require for step third for developing, exploiting and protecting the destination. The last two step is the outcome of the strategy as destination (as product) in tourism industry and desired level of growth in tourism industry with the development of such destination.

THE “S” CURVE IN DESTINATION LIFE CYCLE

As we all know everything in world has a life cycle so do destination also have such life cycle which is generally avoided by the authors in there literature. Destinations have a limited life cycle which is highly depended on the environment, tourist inflow, management and policy related aspects. Same thing happen when Himalayan Tsunami took place in Uttarakhand. It was not the first time such activity took place in Uttarakhand before that there were many regular cloud-bursts activities were taking place in PithoraGarh, Kumaon region of Uttarakhad which were regularly neglected and then
such major catastrophe took place in June 2013 with the wake of pre monsoon and within a span of 24 hours caused the flash flood in Kedarnath. There were series of natural disasters in Uttarakhand. Here we included some of them, Aug 2009, cloud-burst in NACHNI near Munsiyari in Pithoragarh district; Sept 2010, Cloud-burst activity in Almora lead to entire village dead; Sept 2012, Rudra-Prayag a Cloud-burst activity took place; and then June 2013 in Kedarnath and Rambada Region.

Therefore there is a need to understand the life cycle of destination so that better and accurate planning can be done to protect the destination and tourism activity in destination. Every destination goes from four phases of life cycle.

The concept of life cycle was adapted from Arthur 1981s concept of life cycle to measure changes in destination, The Four phases in life cycle of destination are

- **Emerging Destination:** - Low Competitive impact with less inflow of tourist.
- **Growth:** - Competitive impacts of destination remain low but inflow of tourist start pacing.
- **Maturity:** - Destination develops a great competitive impact in region with leading tourist inflow.
- **Saturation:** - Destination reached at maximum level here after it stops growing and tourist inflow remains unchanged or starts decreasing.

![Figure 2: Phases in Life Cycle of a Destination](image)

Except Jammu and Kashmir, Sikkim, and Assam all other Himalayan region showed negative or very slow growth rate.

<table>
<thead>
<tr>
<th>State</th>
<th>Domestic Tourist Inflow 2012</th>
<th>Domestic Tourist Inflow 2013</th>
<th>Domestic Tourist Inflow %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jammu and Kashmir</td>
<td>12427122</td>
<td>13642402</td>
<td>9.78%</td>
</tr>
<tr>
<td>Himanchal Pradesh</td>
<td>15646048</td>
<td>14715586</td>
<td>-5.95%</td>
</tr>
<tr>
<td>Uttarakhand</td>
<td>26827329</td>
<td>19941128</td>
<td>-25.67%</td>
</tr>
<tr>
<td>Sikkim</td>
<td>558538</td>
<td>576749</td>
<td>3.26%</td>
</tr>
<tr>
<td>Arunachal Pradesh</td>
<td>132243</td>
<td>125461</td>
<td>-5.13%</td>
</tr>
<tr>
<td>Assam</td>
<td>4511407</td>
<td>4684527</td>
<td>3.84%</td>
</tr>
<tr>
<td>Meghalaya</td>
<td>680254</td>
<td>691269</td>
<td>1.62%</td>
</tr>
</tbody>
</table>

Source: Ministry of Tourism, Government of India, Tourism Statistics 2013
STATUS, SHARE AND TREND OF UTTARAKHAND TOURISM INDUSTRY: A COMPARISON WITH INDIAN TOURISM

It is newly developed state of India and it is often referred as the Devbhumi which means land of Gods because the large number of pilgrimage places like Gangotari, Yamunotri, Badrinath, kedarnath, Hemkund Sahib and Haridwar are situated here therefore this entire region always remain busy with char dhamyatra and tourism activities. It is a hill state and has beautiful forest with snow-capped mountain, and scenic beauty. Being a hilly state, many pilgrimage sites open during summer only while Haridwar remains open to visitors throughout the year. Many people visit the city to have a dip in the holiest river Ganga at Har Ki Pori where kumbhmela is organised after every twelve years. It is a place where Hindu religion people come to perform last rituals of their ancestors. The scenario and trend of Uttarakhand tourism, its comparison with Indian tourism can be analysed with the help of Table 2

In the context of Indian tourism there is a continuous growth in the arrivals of both the domestic as well as foreign tourists. During 2002 the foreign tourist inflow was just 2.38 million but it augmented three fold in a decade to 6.97 million in 2013 with an average annual growth of 28.78%. Taking a glance over the foreign exchange earnings (FEE) of the same period then it shows the same pattern of growth and it is augmented by six fold to 18.45 billion USD from 3.10 billion USD which means if, the foreign tourist inflow increase by 1% the FEE increased by 2% or shows a double effect. At present India’s global ranking in terms of total tourist arrival is 42nd and in terms of FEE it got 16th position which means that India is one of the most favoured nations of the world in top 50 tourist countries. India can increase its standing in the list of most favoured nation if it will take care of negative incidents. Incident like Ocean Tsunami (2004), Varanasi and Hyderabad Bombing (2006), and Mumbai terror Attack (2008), Leh Flood (2010), and Himalayan Tsunami (2013) negatively affect the growth rate of foreign tourist arrival in India. Now the Question is why we were so specific about the negative events like terror attacks and natural disasters despite of the fact that the number of tourist arrivals shows an increasing trend. The answer is clear that the total tourist arrival shows a growth of 7-9% during the year of such negative events and during the normal years the growth rate of total tourist arrival hovered around 13 to 17%.
Table 2: Comparison of Growth and Share of Tourism Sector in India and Uttarakhand

<table>
<thead>
<tr>
<th>YEAR</th>
<th>INDIA TOURISM</th>
<th></th>
<th>UTTARAKHAND TOURISM</th>
<th></th>
<th>SHARE OF UTTARAKHAND TOURISM IN INDIAN TOURISM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Domestic Tourist Arrival (Million)</td>
<td>Foreign Tourist Arrival (Million)</td>
<td>FEE US $ Billion</td>
<td>Total Touris t Arrival (Million)</td>
<td>Growth Rate</td>
</tr>
<tr>
<td>2002</td>
<td>269.60</td>
<td>2.38</td>
<td>3.103</td>
<td>271.98</td>
<td>-</td>
</tr>
<tr>
<td>2003</td>
<td>309.04</td>
<td>2.73</td>
<td>4.463</td>
<td>311.77</td>
<td>14.62</td>
</tr>
<tr>
<td>2004</td>
<td>366.27</td>
<td>3.42</td>
<td>6.170</td>
<td>369.69</td>
<td>15.66</td>
</tr>
<tr>
<td>2005</td>
<td>392.01</td>
<td>3.96</td>
<td>7.493</td>
<td>395.97</td>
<td>07.10</td>
</tr>
<tr>
<td>2006</td>
<td>462.32</td>
<td>4.45</td>
<td>8.634</td>
<td>466.77</td>
<td>17.88</td>
</tr>
<tr>
<td>2007</td>
<td>526.56</td>
<td>5.08</td>
<td>10.729</td>
<td>531.64</td>
<td>13.89</td>
</tr>
<tr>
<td>2008</td>
<td>563.03</td>
<td>5.28</td>
<td>11.832</td>
<td>568.31</td>
<td>06.96</td>
</tr>
<tr>
<td>2009</td>
<td>668.80</td>
<td>5.17</td>
<td>11.136</td>
<td>673.97</td>
<td>15.67</td>
</tr>
<tr>
<td>2010</td>
<td>747.70</td>
<td>5.78</td>
<td>14.193</td>
<td>753.48</td>
<td>11.88</td>
</tr>
<tr>
<td>2011</td>
<td>864.53</td>
<td>6.31</td>
<td>16.564</td>
<td>870.84</td>
<td>13.45</td>
</tr>
<tr>
<td>2012</td>
<td>1045</td>
<td>6.58</td>
<td>17.737</td>
<td>1051.5</td>
<td>17.2</td>
</tr>
</tbody>
</table>
## Destination Discontinuity for Sustainable Development of Tourist Destination

<table>
<thead>
<tr>
<th>Year</th>
<th>AAGR EXCLUDING 2013</th>
<th>AAGR INCLUDING 2013</th>
<th>Source 1</th>
<th>Source 2</th>
<th>Source 3</th>
<th>Source 4</th>
<th>Source 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>1145</td>
<td>1151.97</td>
<td>6.97</td>
<td>18.45</td>
<td>20.01</td>
<td>.090</td>
<td>20.10</td>
</tr>
<tr>
<td></td>
<td>01.75</td>
<td>01.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Sources:
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- Indian Tourism Statistics at glance 2012
- Indian Tourism Statistics at glance 2011
- Uttarakhand at Glance 2010-11
- Uttarakhand at Glance 2011-12
- Uttarakhand at Glance 2012-13
- Uttarakhand at Glance 2013-14
- Growth of Tourism industry in India
- sodhganga.inflibnet.ac.in

### FEE:
- Foreign Exchange Earnings in Billions, All the figures are in Million except percentage.
On the other side when the Uttarakhand tourism statistics take into account it also shows the almost same trend as in case of Indian tourism but instead of continuous increase in the total number of tourist arrival it shows decrease in number (2008-2013) because in this hilly state there were so many negative incidents happened like continuous landslides and cloud outburst in rainy season and as it is a tourism dominant state of all the seasons. The total tourist arrival in Uttarakhand is doubled in a decade but if we exclude 2013 then we can observe that instead of doubled it tripled in 2012 but due to Himalayan Tsunami the tourism trend in Uttarakhand is badly affected by a negative growth rate of - 28.07%. In the year of 2002, the share of Uttarakhand tourism in Indian tourism industry was 4% which shows its contribution toward the development of tourism activity in India. As it is matter of fact that the trend in tourism industry shows a continuous growth in the inflow of tourists in India as well as in Uttarakhand. But the actual picture of the state tourism is that the share of Uttarakhand shows a continuous decrease, that means despite of Himalayan beauty, natural resources, flora and fauna, mini char dham, and pilgrimage hot spot Haridwar the Share of Uttarakhand tourism was reduced by more than 50% in 2013 and dip to 1.82%.

**SOCIO ECONOMIC IMPACT OF TOURISM INDUSTRY**

Tourism has both backward as well as forward linkage with socio economic development in a country. With the development and promotion of tourism industry, economy of country benefits in many ways:

**Impact on Employment:** the primary impact of tourism is to create the employment for the unemployed people. The tourism and other related sectors influence the extent of employment by establishing the tourist facilities like hotels, resorts, safari, parks, and tourists guide etc. But the employment here is seasonal in nature and if any disaster occurs then it affects the tourism growth opportunity and in turn employment. There are many people who are fully dependent upon the tourism activities but negative tourism growth affects the economy of country or state as in case of Uttarakhand.

**Impact on Government Planning:** It helps the government in revenue earning by various taxes like high end transportation, and income from sources like tourist protected areas (TPA). Tourism development shows a positive contribution toward the economy. The government should try to plan an area for better tourist inflow rate and development of the tourism industry. Further after getting benefits from tourism industry they can increase their investment in estimation of tourism demand, tourism planning and development. It helps to manage the inflow of both the domestic and foreign tourists and will be able to provide all the basic amenities to the arrivals and by proper estimation and planning government can maintain the tourism sustainability as well.

**Impact on the Development of Infrastructural and other Facilities:** it is an important factor for the tourism development and affects the domestic economy through tourism industry. In Uttarakhand there is a vast expansion of economic and social infrastructural facilities which supports the tourism. Some of the facilities are as under:

- Accommodation facilities
- Road network expansion
- Communication facilities
- Transport facilities
- Medical and health facilities
- Banking facilities
- Proper vehicle parking facilities
- Safety and security providing by local police

**Impact on Peace and Stability:** Honey and Gilpin (2009) suggests that the tourism industry can also help to promote peace and stability in developing country like India by diversifying the economy, providing Jobs, generating income, protecting the environment, and by promoting cross-cultural awareness.
However, the key challenges are adoption of regulatory policies and frameworks, mechanisms to reduce crime and corruption, etc..

**Impact on Foreign Exchange Earnings**: As it is evident that tourism is an important source of foreign exchange earning in India. This has favourable impact on balance of payment of the country. The tourism industry in India generated about 18.44 billion USD in 2013 and it is expected to increase 275.5 billion USD by 2018 at a 9.8% growth rate.

**PROBLEM RELATED TO TOURISM INDUSTRY**

Tourism industry works in an ecosystem which is a geographic area and includes all the living organisms, their physical surroundings and the natural cycles sustain them. Attractive landscape sites such as lakes in Nanital, River in Haridwar, Gangotri and Yamunotri Glacier, Mountains and Hill in all-round Uttarkhand Himalaya. The threat to such ecosystem is often severe as these sites are very attractive to both tourist and developers.

**Aesthetic pollution**
Tourism generally fails to integrate its structure with the natural features and indigenous architectural beauty of destination. Lack of land use policy and planning make it more difficult to integrate it with natural eco system and beauty of destination such as valleys, hills, and Rivers. Furthermore other facilities and supporting infrastructure related to tourism such road, bridges, employee housing, parking, waste disposal affect its ecosystem.

**Physical impacts**
Such impacts are caused not only by tourism related construction such as land clearing, but by continuing tourist activities and long term changes in local ecologies. Also tourist visiting Temples used to do same practice again and again which eventually damage the vegetation, soil and biodiversity.

**Loss of Biodiversity**
Excessive use of transport and inflow of tourist lead to increase in Greenhouse gases and absorption capacity of destination which can impact on loss of biodiversity by shrinking nature’s basket of goods and services and in turn threatens our food supplies, destabilizes ecosystems by weakening its ability to deal with natural disasters such as flood, droughts, cloud-burst and human caused stress.

**Depletion of Ozone layer**
The ozone layer refers to a region of earth’s stratosphere which absorbs most of the sun’s ultraviolet (UV) radiation and thus protects us from harmful wavelength, source wiki. It contains high concentration of Ozone (O₃) relative to other parts of the atmosphere which is situated at an altitude of 12-50 kilometres. Refrigerators, air conditioners propellants in aerosol spray contain Ozone Depleting Substances which create negative impact on ozone.

**Solid Waste and Littering**
In areas with high appealing natural attractions, waste disposal become a major problem and improper disposal becoming a despoiler of the natural environment (river, hills, roadsides, valleys). In mountain areas of Himalayas tourist generating a great deal of waste. Such practices are degrading environment.

**Climate Change**
Tourism not only affecting the climate but it is also changing the climate. It can been observed by increasing frequency of storms, disasters such as flood, land slide, sever weather events, which created a disastrous effect not only on tourism but also on this region.
**Destination Discontinuity**

The concept of Destination Discontinuity is adapted from Arthur D. Little. When particular destination reached to almost of its top most limits then the concept works on effective forecasting of the tourism and environment requirements. On X axis it is time frame which shows the period of growth for destination, with the passage of time destination having attraction starts growing, as and when it reach to top the growths limit either by way of environment degradation, or less management and carrying capacity support for tourism in particular destination.

On Y axis it is performance of the destination. The performance behaves almost in same manner as we have studied in Destination life cycle model. This model start working when destination reached to its saturation level when the destination start losing more growth options and tourist inflow remains same.

![Figure 3: Life Cycle of Two Destinations](image)

At this time there is requirement to search for other destination which can help to discontinue the prior destination or divert the tourist inflow form destination (D1) to new destination (D2). The development of destination D2 can be take place with the help of general strategic framework of Management of tourism, in which with the help of environment engineering, science and knowledge we can look for destination D2 and with the help of effective planning we can develop the destination D2 before the discontinuity of destination D1. When discontinuity at destination D1 start taking place at that time destination D2 shows a slow growth rate as noticed in figure 3. And figure 2. Of Destination life cycle. Slowly it can start attracting tourist via effecting planning, management, infrastructure and its natural beauty.

For the purpose of the study we have taken a case study of two district of Garhwal Region in Uttarakhand, one is Uttarkashi and another is Chamoli. Both of them are famous for their unique world class features for example Gangotri Glacier in Uttarkashi and Nanda Devi National Park. Gangotri Glacier is one of the primary sources of the Ganges and one of the largest in the Himalayas with an estimated volume of over 27 cubic Kilometres, the glacier is about 30 kilometres long and 2 to 4 Km wide. Around the glacier are the peaks of the Gangotri Group including several peaks notable for extremely challenging climbing routes, such as Shivling, Thalay Sagar, Meru and Bhagirathi III, source wiki. It flows roughly northwest, originating in a cirque below Chaukhamba, the highest peak of the group. On the other hand Nanda Devi national park, it is a glacial basin surrounded by a ring of peaks between 6,000 meters and 7500 meters high and drained by the Rishi Ganga through the Rishi Ganga Gorge, a steep, almost impassable defile. The entire park lies at an elevation of more than 3500 meter above sea level, source wiki.

Other Similarities which we found our presented in a table form in table 3
Table 3: Similarity of Destinations in Uttarkhand

<table>
<thead>
<tr>
<th>SIMILARITIES</th>
<th>CHAMOLI (Destination 1)</th>
<th>UTTARKASHI (Destination 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHAR DHAM</td>
<td>Badrinath</td>
<td>Gangotri</td>
</tr>
<tr>
<td></td>
<td>Kedarnath</td>
<td>Yamunotri</td>
</tr>
<tr>
<td>National Park</td>
<td>Valley of Flower National Park</td>
<td>Govind National Park</td>
</tr>
<tr>
<td>Domestic Airport</td>
<td>Gauchar Airport</td>
<td>Chinyalisour Airport (Upcoming)</td>
</tr>
<tr>
<td>World’s Highest Peaks and Glacier</td>
<td>Nanda Devi Park</td>
<td>Gangotri Glacier</td>
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<tr>
<td>Township</td>
<td>Joshimath</td>
<td>Uttarkshi and Harshil</td>
</tr>
<tr>
<td>Sports adventure (Ski and Trekking)</td>
<td>AULI</td>
<td>Dayara Bugyal (open for trekking, yet to come up with ski)</td>
</tr>
<tr>
<td>Altitude</td>
<td>More than 50% of region have an altitude of 1000mtr to 3000mtr and rest is more than 3000mtr</td>
<td>More than 50% of region have an altitude of 1000mtr to 3000mtr and rest is more than 3000mtr</td>
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Both the districts are famous for their world class features which attract both domestic as well as foreign tourist a lot. Still Chamoli district attracts most of the tourist coming in this region because of well-maintained good weather roads and well-developed transport facilities in comparison of Uttarkashi. Being situated on Great Himalayan Range both the districts show almost same features. No doubt the Chamoli District is a leader among both of them by attracting most of the tourist arriving in these districts either for pilgrimage or for adventures purpose but the very well-known Himalayan Tsunami created a huge disaster and affected the tourism most in this region and Uttarakhand Government is now thinking to shift the tourist inflow from Chamoli district to Uttarkashi district so as to shift the burden of tourism activity from Chamoli district to Uttarkashi district.

According to Destination Discontinuity model Destination 1, Chamoli is on growth path when in 2013 a major tsunami took place and lead to decrease in annual tourist arrival in Chamoli but at the same time Destination 2 started taking small steps of growth by attracting tourist for pilgrimage, adventure and leisure purpose. Even government also started some activities to connect both district via road as a medium term strategy which will be accomplished before 2017 and establish an airport in Destination 2 at Chinyalisaur which will provide gateway to Tehri for water sports as well as to Destination 2 (Uttarkashi) for trekking and skiing activities. But such activities should started before the occurrence of natural disasters in Chamoli as it restrict the tourist arrival by very good margin only in 2013 the growth rate of tourist arrival showed a negative growth of 28% which can be shaved if effective planning done by the government as well as private players taking active role in tourism building in Chamoli district. However still we can develop the Uttarkashi district so that huge burden of tourism activity can be evenly shifted to other district such as Uttarkashi as in this case so as to gain time to further improve the ecological balance in hilly areas of Himalaya region and to boost up the tourism activity to provide livelihood activities to the rural and local people associated to Himalayan region.

CONCLUSION

No doubt that the tourism is an important source of development for the destination but at the same time the massive supportive infrastructure construction are negatively impacting the tourism and the area associated with tourism. The Himalayan States in India are the major source of tourist attraction as they have huge snow-capped mountains, lakes, rivers, forest, wildlife sanctuaries, etc. But unplanned construction and lack of management by government and private players, these states are losing their shine, a proper understanding and destination management is require to up bring back the same shine in this tourist destination. Here we focused on two districts of Uttarakhand State of Himalayan Region in
India and divided our paper in three sections, first is to understand the tourism from strategic management aspect via general framework of tourism management and “S” curve analysis and then problems associated with tourism in Uttarakhand such as Aesthetic pollution, Physical impacts, Loss of Biodiversity, Depletion of Ozone layer, Solid waste and Littering, Climate change and then last part is solution by the method of Destination Discontinuity in Uttarakashi and Chamoli district of Uttarakhand. The Limitation of our study is it didn’t covered whole Himalayan Region and didn’t talk about the method of forecasting as forecasting is required for destination discontinuity.

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Abandoned Housing Projects in Malaysia: A Planning Law Perspective

Keywords: Abandoned Housing Projects, Case Studies, Legal Research, Planning Legal Issues, Purchasers’ Losses, Malaysia

INTRODUCTION

Housing is a burgeoning industry in Malaysia. Initially housing was provided by the Malaysian Federal Government in the early days of its independence. Later, the private sector was invited by the government to participate in providing housing accommodation to meet the public upsurges in demand for housing. To govern the housing industry spearheaded by the private sector, the Malaysian Government introduced laws. One of the laws is the Town and Country Planning Act 1976 (Act 172) (‘TPCA’). Nevertheless, despite there are many housing policies and legal means to ensure housing success, there are still issues plaguing housing industry in Malaysia. For an instance one of the big issues is the issue of abandoned housing projects. This issue has been existed since 1970s. Until now, this issue has not been fully addressed and resolved by the government. Many purchasers have become victims in abandoned housing projects, suffered irreparable damage and exorbitant losses.

OBJECTIVES

The objective of this paper is to discuss the issues arising from the planning law that govern housing development projects in Malaysia. The purpose of the planning law is to ensure the housing development projects are successful and sustainable for human lives and harmonious with the environment. This writing is pertinent particularly in the event of abandonment of housing development projects, which hitherto have not been fully resolved by the Malaysian government. By identifying the issues, the authors will suggest some proposal to overcome the issues and provide better protection to house purchasers and other stakeholders.

SCOPE

This paper analyses planning legal issues pertaining to two abandoned housing projects in Malaysia. The analysis is done by applying qualitative case study and legal research methodologies over these two abandoned housing projects. These two housing projects are:

1) Taman Harmoni, Lot 82, Mukim of Cheras, District of Hulu Langat, at the State of Selangor, Malaysia; and,
2) Taman LingkaranNur, KM 21, JalanCheras-Kajang, Selangor at P.T. 6443, H.S(D) 16848, Mukim of Cheras, District of Hulu Langat, also at the State of Selangor, Malaysia.
CASE STUDY 1 - TAMAN HARMONI, LOT 82, MUKIM OF CHERAS, DISTRICT OF HULU Langat, AT THE STATE OF SELANGOR, MALAYSIA

Pursuant to a resolution passed in the Selangor State Executive Council (EXCO) dated 2 October 1991 on the application of the State Secretary of Selangor Incorporated (SUK (Incorporated)) to alienate a piece of land formerly known as Lot 82, Mukim of Cheras, District of Hulu Langat, Selangor (the said land) and based on the layout plan as approved by the Selangor State Department of Town and Country Planning, the Council had agreed on the proposal of alienating the said land to SUK (Incorporated). Prior to the application for such alienation, the EXCO had once approved an application for the said land to be developed into a Low-Cost-Housing-Special-Programme on 21 September 1988. This housing project was named 'Taman Harmoni' (Hulu Langat Land and District office file number: P.T.D. U.L 1/2/520-91).

The project—Taman Harmoni at Lot 82, Mukim of Cheras, District of Hulu Langat was divided into two (2) phases—Phase I consists of single-storey-medium-cost-terraced houses, while Phase II involved the development and erection of the low-cost flats. The development for Phase I was fully completed, albeit delayed, by the defaulting developer (K&T Development Sdn. Bhd. (‘K&T’)), whilst Phase II had not been commenced at all, except for the preliminary, piling, and levelling works done by the defaulting developer. Thus Phase II was considered an abandoned housing project. This project was a joint venture between K&T, PerbadananSetiausahaKerajaanNegeri Selangor (State Secretary of Selangor Incorporated (SUK (Incorporated)), being the land proprietor and PermodalanNegeri Selangor Berhad (PNSB). The major reason leading to the abandonment of the project was the financial difficulties faced by K&T. These difficulties arose due to the lack of skills, experience, and expertise of the defaulting housing developer company (K&T), and the inappropriate selling prices for the units compared to the costs of construction and unforeseen costs (earth works and piling works) faced by K&T (Ministry of Urban Well-being, Housing and Local Government (‘MHLG’) file number: KPKT/08/824/6037-1).

Fortunately, the project had been revived by the land proprietor—SUK (Incorporated) through their project manager, PNSB—until full completion and Certificates of Fitness for Occupation (‘CF’) were obtained on 1 July 2005. However, the rehabilitation was a loss making venture for PNSB and SUK(Incorporated)(MHLG file number: KPKT/08/824/6037-1).

Analysis and Findings
Based on the above case study, there was no mention in the planning permission and the comments made by the related technical agencies about the future problem of slime soils beneath the land of the purported project. Neither was there any requirement for the applicant developer to carry out soil tests for the land in the project. Further, as there was yet any gazetted local plan and structure plan for the District of Hulu Langat, at the commencement of the project (Taman Harmoni), which might have envisaged any soil problem and the suitability of the location for housing development. The planning authority being the Department of Town and Country Planning (‘JPBD’), Ulu Langat Municipal District Council (‘MDUL’) and Kajang Municipal Council (‘MPKj”) only had conductedan ad hoc investigation about suitability of the purported project and the land, including by consulting several technical agencies.

The current Cheras Local Plan (the local plan where the project under study is located) emphasises the suitability of the specific areas or zones where housing development projects should be carried out, within its jurisdiction. Further, pursuant to the Selangor Structure Plan, the categorizations of the land use in Selangor for specific developments, including land areas and zones, purportedly suitable for housing development projects, were made after the affected lands had been subjected to certain suitability analyses and after considering issues and factors such as the saturated areas, committed developments and the need to preserve environmental sensitive areas such as water catchment areas, wild life forest reserves, low-lying watery grounds, high-lands exceeding 100 meter from the sea level and water areas. These measures and analyses were undertaken in order to optimise the land use according to their
suitability and to be consistent with the sustainable development objectives and rules (Jabatan Perancangan Bandar dan Desa Negeri Selangor, n.d).

Despite the above measures and analyses conducted over the land use, the suitability and the categorizations of the land use, it is opined, the Cheras Local Plan and the Selangor Structure Plan still lack a requirement which imposes on the applicant developers to carry out necessary and thorough soil tests against the affected land and its soils, in order to ensure that the land and its soils are practically suitable for carrying out housing development projects. This is because, even though the local plan and structure plan have been prepared after certain studies, analyses and field works made based on primary and secondary data over the suitability of the lands for certain uses, certain specific soil tests, it is opined, are still required to ensure that the purported location and its soils are surely and practically suitable for housing development projects. This suggestion is raised, in view of the fact that, the said analyses, studies and field works might have been outdated or might not have been exhaustively made and thus they are incapable of identifying certain soil problems such as slime soils beneath certain areas within the jurisdiction of the local plan for certain necessary actions.

Apart from the proposal to fit the above suggestion into the local plan and the structure plan, the above suggestion, regarding the necessity to undertake certain soil tests, can also be applied, it is opined, when the local planning authority deals with applications for planning permission, provided the above suggestion has been duly given appropriate and sufficient consideration by the draft development plans or the gazetted development plans or the State Planning Committee so directs or that the development proposal report made so proposes (section 21A of the TCPA), or there is an objection by the neighbouring land owner to the project site, respectively pursuant to section 22(2)(a)( the provisions of the development plan, if any), or (b)(the provisions that the local planning authority thinks are likely to be made in any development plan under preparation or to be prepared, or the proposals relating to those provisions), or (aa)(the direction given by the State Planning Committee, if any) or (bb)( the development proposal report) or (c)(objection by the neighbouring land owner against the purported application for planning permission under section 21(6) of the TCPA) of the TCPA.

The planning permission too did not emphasize the capability of the applicant developer to implement the purported housing project. For example there was no reference made to MHLG for views regarding the capability of the applicant developer. Similarly, no references were made to Department of Environment ("JAS") and the Department of Minerals and Geoscience, regarding the suitability of the location and the soil structure or the provision of certain counter measures that the applicant developer had to comply with, before planning permission could be granted.

The above problems may also be due to the absence of a specific provision in the TCPA, particularly section 22(2) of the TCPA which does not require the local planning authority to consider the views from the relevant technical agencies in dealing with an application for planning permission. Due to the absence of such a specific provision, even though in practice there are planning rules (the repealed Planning Control (General) (Selangor) Rules 1996 and the current Planning Control (General) (Selangor) Rules 2001(Sel. P.U.9)) and guidelines to refer to the technical agencies for views, the local planning authority may conduct ad hoc investigations and may not seek any view from the technical agencies or if there is any, only a limited and insufficient number of technical agencies are consulted. This is because, the duty to refer to these agencies or parties is not mandatory but is a mere directory, i.e. it is subject to the discretion of the planning authority, either to refer or not to refer to them, pursuant to rule 8 of the repealed Planning Control (General) (Selangor) Rules 1996 and rule 8 of the current Planning Control (General) (Selangor) Rules 2001(Sel. P.U.9) and the guidelines.

Even though the developer had submitted the Development Proposal Report to MPKj, pursuant to section 21A of the TCPA, there was no mention about the problem of slime soils at the location of the project. It
should be noted that pursuant to section 21A(1)(d)(i) of the TCPA, the applicant developer shall have to describe, *inter alia*, the physical environment, topography, landscape, geology and the natural features of the said land. In other words, the report submitted to MPKj, was incomplete, as the applicant developer did not carry out any soil test on the land in order to ascertain the ‘geology’ of the purported project land (Abdul Karim, 2006).

Despite section 22(2)(a) of the TCPA which requires the local planning authority to comply with the development plans (local and structure plans) if any, in considering applications for planning permission, the development plans need not be followed slavishly. This was the result of the judicial findings in *MPPP v. Syarikat Bekerjasama-SamaSerbaguna Sungai Gelugor* [1999] 3 MLJ 1 (Court of Appeal) and in *Chong Co Sdn. Bhd v MajlisPerbandaranPulau Pinang* [2000] 5 MLJ 130 (Appeal Board (Penang)). The decisions of these cases have marginalised the importance of development plans. Thus, even if there may be certain provisions in the development plans which the applicant developer shall have to comply with, for example provisions for avoiding future abandonment or provisions of certain counter-measures and solutions for facing the abandonment, these provisions are not mandatory, following the decision of the above case-law.

Based on the case study, the author finds that in approving the application for planning permission, the local planning authority (the State Director of Selangor JPBD, MDUL and MPKj) did not know about the problem of slime soils. Thus, the only ways for the local planning authority to find out about the conditions of the land and its suitability was by making a direct site visit and by way of a reference to certain technical agencies for example the Department of Irrigation and Drainage (‘JPS’), TenagaNasionalBerhad – electrical authority (‘TNB’) and the Land/District Office and if possible through the information provided in the Development Proposal Report prepared by the applicant developer. However, these parties had not identified the problem of slime soils either.

Even of late too, planning factors involving and affecting housing development and its sustainability have not been given satisfactory consideration in the development plans (Johar, 2006). This is due to the lack of mandatory, multi-criteria evaluation and multi-criteria decision making (MCDM) in the planning process which emphasize factors affecting housing development, the absence of comprehensive study/assessment/evaluation over factors influencing housing developments including the soil conditions and structures and other matters relevant in housing development, the prices for the houses and the development costs, the absence of a coherent policy and the unreasonable political interferences over the planning permission process for housing development (*ad hoc* planning)(Syed Abdul Kader, 2001).

The above non-compliance, in the case study, was partly because the State of Selangor had yet, as at the date of the applications for planning permissions by the applicant developer, adopted the TCPA in *toto* and that the Planning Control (General) (Selangor) Rules 1996 only came into existence in 1996. The State of Selangor through the State Planning Committee Meeting had only on 13 May, 1996 approved the application of parts IV to IX of the TCPA 1976 (Act 172) and TCPA (amendment) 1995, enforced from 1 May, 1996. On the same date also, the State Planning Committee approved the application of Planning Control (General) (Selangor) Rules 1996.

Alternatively, during the approval of the planning permission for the project, there were no emphases, guidelines nor considerations on factors leading to the abandonment of housing projects. Likewise, there were no counter-measures provided to face the problem. Thus, before the enforcement of TCPA and its Rules the planning practices were made on *ad-hoc* bases, including by referring to certain technical agencies.

It is opined that, the local planning authority could be liable for negligence in their failure to exercise due care in granting planning permission and failure to exercise proper and sufficient planning control, which
partly had caused the abandonment. This is because there is no provision in the TCPA that confers on the local planning authority immunity against any breach of duty and negligence, as compared to and provided for the State Authority and the local authority, pursuant to section 95(2) of the Street, Drainage and Building Act 1974 (Act 133) (`SDBA`). However, any action against the local planning authority shall be subject to the provisions in the Public Authorities Protection Act 1948 (Act 198) (revised 1978), for example pursuant to section 2(a) of this Act, the legal action must be commenced within three years from the default of that authority.

As compliance with the development plan is not mandatory, following the case-law-- MajlisPerbandaranPulau Pinang v. Syarikat Bekerjasama-samaSerbaguna Sungai GelugorDenganTanggungan [1999] 3 MLJ 1 and Chong Co Sdn. Bhd v. MajlisPerbandaranPulau Pinang [2000] 5 MLJ 132, the local planning authority may tend to carry out ad hoc planning control based on expediency and necessity, especially in areas not identified or covered by any existing development plan. Further, this gives the local planning authority flexibility in exercising planning control. By this reason too, it is opined that, following the above case-law and the subservient authority of the planning authority to the State Authority, these may undermine initiative and need to adopt and apply the gazetted comprehensive development plans. This would also give the local planning authority more flexibility, based on expediency and necessity, even where a gazetted development plan exists for the area, allowing the exercise of ad-hoc planning control over the housing developments to take place. However, it is opined, this situation may lead to certain unwarranted results. Thus, if this were the case, then the judicial policy and the policy of the local planning authority are in conflict with section 22(4)(a) of the TCPA viz, ‘the local planning authority shall not grant planning permission if the development in respect of which the permission is applied for would contravene any provision of the development plan’.

CASE STUDY 2 – TAMAN LINGKARAN NUR, KM 21, JALAN CHERAS-KAJANG, SELANGOR AT P.T. 6443, H.S(D) 16848, MUKIM OF CHERAS, DISTRICT OF HULU LANGAT, ALSO AT THE STATE OF SELANGOR, MALAYSIA

Taman LingkaranNur, Kajang, Selangor above was a result of a privatization project between SaktimunaSdn. Bhd. (the defaulting developer) (Saktimuna) and the Selangor State Government. The latter was the proprietor of the project land, who later alienated the land to Saktimuna for it to develop into a housing project subject to certain terms and conditions. However, in the course of the development of the project, the project failed and was abandoned as Saktimuna faced serious financial problems due to insufficient sales and revenues generated through sales, and their inability to meet the development and construction costs, which persisted from 1992 to early 2000 (MHLG file number: KPKT/08/824/4275).

Later the project was taken over by one Syarikat LingkaranNurSdn. Bhd. (SLN)—the first rehabilitating party with the consent of the Selangor State Government and the defaulting developer. Unfortunately, SLN also suffered the same fate, i.e. it was also unable to complete the project due to financial constraints (MHLG file number: KPKT/08/824/4275).

On the instruction of MHLG and numerous appeals from the aggrieved purchasers, Syarikat Perumahan Negara Berhad (SPNB) had taken over part of the project, i.e. Phase 1A from SLN, with the consent of the Selangor State Government and Saktimuna. Being a government linked company (GLC), SPNB obtained funds from the Ministry of Finance (MOF) to revive the project. The rehabilitation succeeded. However, this rescue was a welfare service, in that the available moneys in the hands of the end-finance were insufficient to meet the rehabilitation costs. MOF had to top-up funds to ensure the completion of the rehabilitation. During the course of the rehabilitation, there were several problems faced by SPNB, and one of them was the refusal and failure of certain purchasers to give consent to SPNB to carry out the purported rehabilitation works. Thus, not all the units in Phase 1A had been fully rehabilitated and obtained CFs. The remaining phases (Phase 1B and 2), except for Phase 3 which SLN
had a joint-venture with Tanming Sdn. Bhd. and it was developed into a completed housing project now known as Taman Cheras Idaman, have as yet been revived. These phases (Phases 1B and 2) are still in the course of negotiation and study for rehabilitation, both by Saktimuna, the OR (being the Kuala Lumpur Department of Insolvency—Jabatan Insolvensi, Kuala Lumpur) and the new chargee (Idaman Wajib Sdn. Bhd.) (MHLG file number: KPKT/08/824/4275).

Analysis and Findings
In general, the legal issues for the above case study concerning planning permission, are quite similar to the first case study—Phase II of Taman Harmoni as elaborated above.

Based on the instant case study’s legal observations, the author finds that in approving the planning permission, there were no local plan and structure plan (development plans) for the area, on which the project was to be implemented, which would have envisaged the problem of soil erosion, which could be referred to by the local planning authorities (State Director of the Selangor State JPBD, Shah Alam Selangor, MDUL and MPKj). Indeed there were references made to certain technical agencies for example the JPS, TNB and the Land/District Office but these agencies had not emphasized the possibility of soil erosion problems at the location of the project either. In addition, there was no reference made to MHLG, JAS or the Department of Minerals and Geoscience to ascertain the capability and suitability of the developer and the project location.

The planning permission granted to the developer had also not addressed measures so as to avoid any possibility of future abandonment of the purported housing development project and ensuring the success of the development. For example, in respect of the geographical situation and the soil structure—soil erosion problems to the adjacent land due to the flowing water of Sungai Long and the construction management and the financial management for carrying out the housing project.

The above problem occurred, partly because the State of Selangor had yet, as has been explained in first case study above, at the date of the application for planning permission, adopted TCPA in toto and the Planning Control (General) (Selangor) Rules 1996 only came into existence in 1996.

Alternatively, during the approval of planning permission, there was no emphasis, guideline or consideration on factors leading to the abandonment. Thus, before the enforcement of TCPA and its rules the planning practices were made on an ad-hoc basis—by referring to certain limited technical agencies (Ulu Langat District Office file number PTD.UL.1/2/334/82 Semt). The local planning authority too did not give considerations particularly on the possibility of abandonment and providing its counter measures.

Even the current TCPA’s provisions, for example section 22(2) of the TCPA too, does not provide the planning authority with a duty to refer to the relevant technical agencies such as MHLG and the Department of Mineral and Geoscience and JAS, when considering the application for planning permission.

Similarly, there was also no Environmental Impact Assessment Reports (EIA) carried out by the developer, particularly in respect of the soil structures, as the purported activities would not fall under the ‘prescribed activities’.

Likewise from the contentions and elaborations in the first case study, there is still a lack of mandatory, multi-criteria evaluation and multi-criteria decision making (MCDM) in the planning process and absence of comprehensive study/assessment/evaluation over housing development projects on part of the planning authorities, which has partly contributed to the abandonment of the project and its consequences (Jabatan Perancangan Bandar dan Desa Semenanjung Malaysia, n.d).
Even if the above matters (the mandatory multi-criteria evaluation decision making and multi-criteria decision making (MCDM) in the planning process) exists in the development plans, the decisions in MajlisPerbandaranPulau Pinang v. Syarikat Bekerjasama-samaSerbaguna Sungai GelugorDenganTanggungan [1999] 3 MLJ 1 (Court of Appeal) andChong Co Sdn. Bhd v. MajlisPerbandaranPulau Pinang [2000] 5 MLJ 132 (Appeal Board (Penang)) which tend to undermine the importance of complying with the development plan as provided in section 22(2)(a) of the TCPA in dealing with the applications for planning permission, may mar the effectiveness of the purported planning permission, which the development plans could have provided measures for facing the problems of abandoned housing projects. Further, the ensuing consequences, emanating from this problem as illustrated in the first case study above, may also occur.

Just as much as has been elaborated in the first case study, insofar as the instant abandoned housing project is concerned, the local planning authority may be liable for negligence or breach of duty for failure to exercise due care in granting planning permission and for failure to exercise proper planning control which had partly caused abandonment of the project. This is being so, it is opined, as there is no immunity provision in any statutory provision, particularly in the TCPA, conferring immunity on the local planning authority, against any breach of duty and negligence on their part, as compared to and provided for the local authority pursuant to section 95(2) of the SDBA. However, as emphasised in the first case study, this legal action shall be subject to the provisions in the Public Authorities Protections Act 1948 (Act 198) (revised 1978), for example pursuant to section 2(a) of this act, the legal action must be commenced within three years from the default of that authority.

CONCLUSION AND RECOMMENDATIONS

The planning authorities in Peninsular Malaysia, must apply multi-criteria evaluation and multi-criteria decision making (MCDM) in the planning process involving housing development, recognize factors leading to housing abandonment and provide counter measures for addressing the same and its consequences. So far there is none, insofar as the District of Hulu Langat and Mukim of Cheras are concerned. The development plan, especially the Local Plan, providing the multi-planning-criteria for housing development such as measures to avoid and to settle problems of abandoned housing projects and its consequences, has to be expeditiously gazetted so as to avoid any ad hoc planning.

Even though there is a dual administration of State Authority and planning authority, which has contributed to the inefficiency and ineffective control of land uses, alienation and subdivision of land and planning control, any problem emanating from this, can at least be minimized, if not eliminated, by way of better integration and coordination between the authorities--the State Authority, planning authority, building authority, housing authority (MHLG) and the other relevant technical agencies.

EIA report should also be submitted by the applicant developer pursuant to the Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 1987 (P.U.(A) 362/87) of the Environmental Quality Act 1974, irrespective of the measurement or size of the housing project. For this purpose, such an amendment has to be made to item 7 of the Schedule Order to the Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 1987 of the Environmental Quality Act 1974 (Act 127).

As far as both of the housing projects are concerned (Phase II Taman Harmoni and Phase 1A Taman LingkaranNur), there was yet, at the time of the issuance of the relevant planning permission, any or comprehensive gazetted development plans (local and structure plans) dealing with and applying multi-criteria evaluation and multi-criteria decision making (MCDM) in the planning process involving housing development (especially, the suitability of the project’s location and the counter-measures to face and
prevent the problems and occurrences of abandoned housing projects), which the planning authority could refer to. Even the current gazetted Selangor Structure Plan and the Cheras Local Plan too do not provide factors leading to housing abandonment and do not provide measures and methods to solve the problem and its ensuing consequences and losses.

In absence of the gazetted development plans, insofar as both housing projects are concerned, it was the discretionary practice of the planning authority, to refer to certain relevant technical agencies for comments and approval of any purported application for planning permission to undertake housing development (Rule 8 of the Planning Control (General) (Selangor) Rules 2001). However, this practice has yet been to be put into the mandatory provisions of the Town and Country Planning Act 1976 (‘TCPA’). The absence of such a mandatory statutory provision may lead to the local planning authority not referring to them for approvals or views or setting aside their conditions, views and approvals/disapproval. The technical agencies include the JPBD, Department of Public Works (‘JKR’), JPS, Sewerage Service Department (‘JPP’), JAS (in term of the suitability project location for drainage purposes), Department of Health (JK), TNB, Department of Water Supply (JBA), District and Land Office, Highway Board (LLM), Department of Minerals and Geoscience (in respect of soil structures), MHLG (in respect of the capability of the applicant developer insofar as Act 118 is concerned) and other relevant agencies, for the purpose of commenting and reference over the proposed housing development to be carried out by the applicant developer. For this purpose a new supplemental mandatory provision needs to be inserted into section 22(2) (Treatment of Applications) of the TCPA. The supplemental provision should also state the obligation and mandatory adherence to the development plans. Thus, the proposed provision should read:

Addition to Section 22(2) of the TCPA

‘In dealing with an application for planning permission, the local planning authority shall take into consideration…-

(bc) the necessary views of the technical agencies’ (emphasis added).

The word ‘technical agency’ should also be interpreted and inserted into section 2 of the TCPA as follows:

Addition to section 2 of the TCPA

‘Technical agency’ means any relevant authority which shall be consulted for necessary views, insofar as the local planning authority deems necessary, for the purpose of issuing any planning permission by the local planning authority’.

The planning permission and all the conditions stipulated should be made certain and not be subject to variation from the date of the issuance, during the course of construction, development and rehabilitation of the project until the date of the application of CF/CCC by the qualified persons/Principal Submitting Person (‘PSP’). This is to avoid any possible problems to the developer, as evident in both case studies, which had led to abandonment, unless the planning authority and the technical agencies agree to bear all the ensuing costs as consequence to any change or variation made by the developers. Therefore, a new provision should be inserted into section 22 of the TCPA to the effect of the following:

Addition to Section 22(7) of the TCPA

‘The conditions for the planning permission so granted, shall be irrevocable and shall not be subject to any variation unless the local planning authority or the technical agencies, as the case may be, shall bear
all the costs and expenses to be incurred by any applicant consequent to the carrying out of the required variations except as otherwise provided in this Act’

Similar should be the case for the conditions of the approved building plan and other plans. To effect this suggestion, a new supplemental provision should be inserted into section 70 of the SDBA, viz clause 18A, which reads:

Addition to section 70 of the SDBA i.e. section 70(18A)

‘The plans so approved and the conditions so imposed by the local authority or the technical agencies, shall be irrevocable and final for the purpose of issuance of certificate of completion and compliance, pursuant to this Act or any By-laws made thereunder and if later in the event, there is any variation in the plans or conditions for the purpose of the issuance of the said certificate, required by the local authority or the technical agencies, the case may be, the local authority or the technical agencies concerned shall make good any losses incurred as the result of such required variation’

Finally regarding the human resource, inefficient administration and logistics problems, it is suggested adequate priority, administrative revamps and monetary provisions should be provided by the State and Federal Governments to ensure efficiency of the local authority and the technical agencies machinery.

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On Investigating the Difference between Outcomes Obtained from Nominal Group Technique and Survey Method

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On Investigating the Difference between Outcomes Obtained from Nominal Group Technique and Survey Method

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INTRODUCTION

Organizational decision makers function under increasingly uncertain conditions as organizational environments have become more dynamic and complex (Pringle and Neeley, 1983). This dynamicity coupled with complexity has necessitated the importance of making decisions in a group. The straightforward reason for using groups in making decisions is that a group of knowledgeable individuals with diverse managerial and technical expertise is more likely to make effective decisions than a lone individual. In general, groups are superior to individuals in making decisions when the issue is relatively complex, since members of a group can generate more creative solutions than one individual working alone (Blanchard, 1992).

Groups are used to formulate vision and mission statements, develop specific goals, identify and propose solutions to problems, determine how to measure the performance of the organization as it strives towards continuous improvement (Roth et al., 1995). Groups are also used to create fresh and innovative ideas from the employees for the purpose of continuous improvement in various systems of organizations. Marx (1995, p. 16) states:

Everything mankind has and will have in the future is and will be the result of people’s ideas.

…Some of the more progressive companies in the history of modern management realized the potential value of their employees’ ideas for the improvements in the general functioning of their organizations. They have realized that ‘idea power is the most tremendous human force in the world.’

Employees also feel enthusiastic and consider themselves valued when they are made a part in the group decision making process. The majority of the decision making groups use the traditional interactive group approach (also known as focus group) in which the members, under the direction of a chairperson, communicate with one another in a relatively unstructured manner. However, a number of weaknesses are inherent in this approach (Pringle and Neeley, 1983). To overcome these weaknesses, a number of structured group decision making techniques have been developed of which the three main are Brainstorming, Delphi Technique and Nominal Group Technique (Anderson, 1990).

Osborn (1957) proposed brainstorming as a technique for improving productivity and making quality decisions using groups. The technique stands on four principles: (1) state as many ideas as possible, (2) the wilder and more creative the ideas the better, (3) improve or combine ideas, and (4) accept all the ideas without any criticism. Brainstorming as a group idea generation technique has been in use over the last half century. Its principles are easy to understand and many participants experience the kind of synergy that is regarded as the technique’s main plus point. That is, some people do hear ideas that prompt them to think of other ideas of which they might not have otherwise thought. As a result, brainstorming has strong appeal as a way for groups to generate ideas (Gallupe et al., 1992). However, in many practical brainstorming sessions, it has been observed that the aggressive participants take control
ON INVESTIGATING THE DIFFERENCE BETWEEN OUTCOMES OBTAINED FROM NOMINAL GROUP TECHNIQUE AND SURVEY METHOD

of the whole session whereas lesser aggressive participants’ views are almost unheard. That is, brainstorming technique suffers from the absence of egalitarian participation (Miles, 1983). Conlin (1989, p.32) writes:

Business people, searching for new creative ideas, try to help the process along in a brainstorming session. They gather five or six people in a room. Two or three end up dominating the conversation. Participants criticize each other’s ideas, then compromise on a solution, and everyone leaves the meeting unsure that the group even came up with the best answer. It probably didn’t.

To ensure egalitarian participation in a typical brainstorming session, Andrew Delbecq and Van de Ven developed nominal group technique in 1968. It is actually a structured brainstorming technique that ensures balanced participation among the group members and it is used to gather a large amount of subjective information pertaining to some issue. Fredrick B. Kraft, Robert H. Hoiss, and Joseph G. Paolillo (cited in Roth et al., 1995) proposed NGT as an alternative to traditional focus group sessions and they proved that in group problem solving situations, focus groups have produced a smaller number of problem solving dimensions, fewer high quality suggestions, and smaller number of different kinds of solutions than groups in which members were constrained from interaction (as in NGT) during the generation of solutions. In the words of Frankel (1987, p.543):

Recent works in literature reflect the view that structured techniques are needed to ensure quality solutions to problems. The nominal group technique (NGT), which provides multiple high-ranking alternative solutions representing important information, is considered one of the best structured techniques available.

People conduct surveys to know feedback from the survey participants. The objective of the proposed research is to compare findings obtained from two nominal group sessions and two normal surveys with regards to two particular issues, as highlighted in the Methodology section. Specifically, the objectives of the proposed research are the following:

i) To conduct two nominal group sessions for two separate issues;
ii) To conduct two surveys involving about 125 participants each;
iii) To compare the outcomes of the nominal group sessions with those obtained through the normal surveys.

Since the main subject of this paper is experimentation with NGT, its brief description is provided below.

NOMINAL GROUP TECHNIQUE (NGT)

Nominal Group Technique is a structured brainstorming technique that is used to produce a large number of ideas pertaining to an issue while ensuring that all the group members have equal participation in the development of ideas (Delbecq, Van de Ven and Gustafson, 1975). NGT is not only used to generate a large number of ideas, but also to prioritize those ideas and consequently the ideas which receive majority of the votes can be selected. NGT is usually applied to identify problems and generate solutions to these problems. The technique is particularly useful for groups that are not used to interact, groups in which tension levels are often high, or groups in which status difference among members might inhibit open discussion.

Some amount of preparation is required for application of NGT. First of all, a group should be formed comprising 7 to 10 persons who are expected to be knowledgeable about the issue for which the session is convened. It is better to have participants having diverse background. A room should be prepared which
should have preferably a U-shaped table. A marker board, marker pen and some sheets of paper should also be available. A facilitator should be chosen who is expected to have prior experience in conducting or at least participating at a number of nominal group (NG) sessions. The facilitator is also expected to be an unbiased person and he/she is not supposed to direct the group at reaching a particular decision. Much of the success of a NG session depends upon the ability of the facilitator.

Following are the six steps of NGT: (1) Opening the session, (2) Silent generation of ideas in writing, (3) Round-robin recording of ideas, (4) Serial discussions on the ideas, (5) Voting to select the most important ideas, and (6) Discussion on the selected ideas. For a successful nominal group session, the following rules should be observed: (1) No criticism about anybody’s ideas, (2) No evaluation about anybody’s ideas, (3) Generate as many ideas as possible, (4) Modifying and combining ideas, and (5) Anonymity of input. As its name suggests, the nominal group technique is only ‘nominal’ a group, since no interaction takes place among group members and ranking of the ideas are generated on an individual basis. Some of the benefits of the technique are: (1) Balanced participation among members, (2) Generation of more creative ideas than interactive groups, (3) Generation of larger number of ideas than do traditional interactive groups, (4) Selection of the best ideas through prioritization procedure, (5) Minimization of problems that are common in face-to-face meetings, (6) On the part of the participants, greater sense of accomplishment (Dunham, 1998).

The technique has been extensively applied in education, business, health, social services and governmental organizations (Moore, 1987). Few specific areas of application are change management (Lane, 1992; Tribus, 1992), consumer research (Claxton, Ritchie, and Zaichkowsky, 1980), education (Davis et al. 1998; Montano et al., 2005), information systems (Rosemann and Vessey, 2008), health (Hofemeister, 1991), meeting management (Blanchard, 1992; Finlay, 1992), organizational development (Mendelow and Liebowitz, 1989), performance evaluation (Yiu et al., 2005), project management (Rustom and Amer, 2006), social issues (Pissarra and Jesuino, 2005; Welling et al., 2006).

As it has been mentioned in the abstract of the paper, the main purpose of this paper is to empirically investigate and qualitatively analyze the outputs generated from various uniform nominal group sessions on a common issue. The investigation has been carried out through participation of 244 undergraduate students. In the literature, a number of similar studies have been conducted involving academia, especially students. We provide a brief review of the relevant works on NGT involving academia.

**PREVIOUS EXPERIMENTS ON NGT INVOLVING ACADEMIA**

In order to determine the mental health and personal development needs of students, faculty members, and staff members of Appalachian State University (ASU), Skibbe (1986) formed two nominal groups, one composed of 6 second semester freshmen (general psychology course) and the other composed of 5 graduating seniors (recruited from various classes). Freshmen group was more concerned with faculty support, involvement in the campus community, and academic and campus information. On the other hand, seniors were more interested in time management, priority setting, and career counseling.

Gallupe et al. (1992) conducted two experiments to investigate the effects of computer-mediated technology and group size on the productivity of brainstorming groups. At Queen’s University Decision Lab in Kingston, Ontario, 120 undergraduates participated in 3 group sizes (2, 4, and 6 members). At the Park Student Center Lab at the University of Arizona in Tucson, 144 undergraduates participated in 2 group sizes (6 and 12 members). Groups used both electronic and non-electronic, i.e., usual brainstorming techniques. The larger groups in both experiments generated more unique ideas and more high-quality ideas, and members were more satisfied when they used electronic brainstorming than when they used usual verbal brainstorming.
In order to further enhance the effectiveness of NGT, Frankel (1987) combined the technique with multidimensional scaling, a prominent multivariate statistical technique. The author tested the combined technique with 3 groups of graduate students and faculty in an educational program and the results indicated that the method provides a useful technique for defining complex problems while preserving and capturing its participants’ sources of perception and meaning. Hazard (1983) designed an experiment to determine whether techniques for achieving group consensus are superior to the more traditional group decision making techniques. Six groups of 5 members each, randomly selected from an undergraduate management class, were assigned the problem of recommending a system of teacher evaluation to a board of education for a fictitious school district. Each group was given 4 tasks: 1. selecting goals of a teacher evaluation system, 2. determining general criteria for assessing teacher performance, 3. deciding who should select and apply the assessment system, and 4. identifying the main data sources to be used. Three groups were assigned traditional technique and three groups were instructed to use NGT. Each group was judged on its effectiveness according to relevancy, reliability, and validity. In each of the experiments, the groups employing the NGT achieved higher scores in overall effectiveness and in each of the structured criteria except validity.

Davis, Rhodes, and Baker (1998) described an application of NGT in identifying the areas that needed improvement in the undergraduate nursing curriculum of University of South Alabama College of Nursing. Approximately 40 faculty members participated in the exercise. The revised curriculum which resulted from the NGT exercise has had full and enthusiastic support of the faculty. Bristol and Fern (2003) investigated through the involvement of students from a university of south-eastern university in US, whether consumer attitudes change in focus group and NGT. They found that interaction and discussion among focus group members changed their attitudes, whereas this shift among NGT participants is minimal. The authors cautioned the researchers in using focus groups in consumer research and recommended using NGT instead.

As a partial fulfillment of the course Organizational Communication, Kolb (1999) instructed her students to form small groups of four to six and choose an organization and then select a decision making or problem solving situation that people in this organization might realistically face. Students were given a handout that provides information on varieties of group decision making techniques, namely, brainstorming, interactive process, ideal solution, Kepner/Tregoe method, NGT, single question, and standard agenda (a brief description of each of these can be found in author’s paper) and they were instructed to choose an appropriate technique for the decision making/problem solving situation.

Hornsby, Smith, and Gupta (1994) investigated the impact of three group decision making techniques, namely, traditional interactive, NGT, and Delphi on job evaluation outcomes. The authors formed 21 groups of students that consisted of 105 second-semester seniors majoring in Business Administration at a medium sized Midwestern university. Evaluation data were collected on three consecutive nights, each night employing a different decision making technique. The authors found that there were no change between initial and group evaluation for the Delphi technique and that is congruent with the fact that this method allows the greatest degree of evaluation decision anonymity. On the other hand, the findings that both the NGT and the traditional technique result in a significant shift from initial evaluations and that is due to comparatively decreased confidentiality.

Kramer, Kuo, and Dailey (1997) involved 200 students who enrolled in a multi-section basic communication course, to investigate the outcomes of untrained, brainstorming, and nominal groups. The authors found no difference in the decision quality of these three groups. However, brainstorming and nominal group members were more satisfied, felt their groups used a more effective process, and communicated more effectively than untrained groups.
Mahler (1987) points out that though NGT has been increasingly used for public planning, budget setting, and policy making, but NGT’s assumptions about group processes and about politics are not thoroughly researched. In particular, the author searches answer of three questions: (1) What do actors perceive about their level of participation in the NGT process? (2) To what degree do they accept and feel committed to the outcome of the process? (3) To what degree do they feel that the process produces consensus? The author conducted several group exercises in organization theory classes for political science and public administration majors at the masters and upper-division undergraduate levels. One hundred and one students in five classes over three semesters participated in the exercises. Half of the groups were instructed to use traditional group technique and the remaining half NGT and in each case the issue assigned was: determine how to improve county high school education amidst the report of declining quality of secondary education. At the end of every session, each group was given a questionnaire to fill in and the purpose was to know their feedback about the participation level and acceptability of the results. The author found that though NGT generates larger number (on the average 16.83 compared to merely 5.25 from interactive groups) ideas compared to interactive groups, the members in the interactive groups felt greater sense of participation than NGT groups. However, no significant difference was found in acceptability of the results.

**COMMENTS ON MORE RELATED WORKS**

Rustom and Amer (2006) use a sound methodology all the way but we could not find the ranking of main factors and sub-factors of quality in building construction projects in Gaza strip. The literature review of this paper is too short and we miss a section about previous, similar studies and the present study's relationship to them. There is also a need to motive the research in a better way. The authors need to present more on their work in relationship to other research in their area of interest. The results are in its present for interesting for a minor audience but more work is needed in order to make it valuable for an international research society.

Montano et al’s (2005) paper uses a quantitative approach which is used appropriately. However, the study does not generalize into something interesting for the international audience. For instance, interesting research answer a question raised by previous research on the topic; or correct a methodological fault of earlier work; or reconcile the conflicting data of other studies; or test the validity of a theoretical framework in a way not heretofore explored; or begin a novel line of research that has no prior experimental precedent. Nevertheless, the authors present the results from the quantitative study in a clear and sound way.

Adejumo and Babatunde (2010) focused on a company and it is very difficult to generalize this research finding with other studies. The literature is comprehensive for this study but research methodology is too short and ambiguous (i.e. how authors collected the research data? Total sample size was not known. In addition, the authors did not relate their findings with previous studies especially hypothesis test results. The authors needed to use some other tests (i.e. mean, standard deviation, Spearman analysis, one-way ANOVA and MANOVA) to see significant differences on company’s performance ratios between 2001 and 2006.

Van der Wall and Uys (2009) conducted four group discussions with staff members of a South African university based on nominal group technique (NGT) to determine the priorities of the staff members employed in the section with regard to their perceptions of the problems and solutions to the employment relations conflict situation in the workplace. The authors conducted semi-structured interviews and analysed the data based on qualitative approach. The findings of this research are presented with appropriate procedures and discussions. The authors also presented adequate literature review to support their research findings. However, this research cannot be generalized with other studies due to the validity of the research instruments and its sample size.
Fraser’s (2000) study uses a quantitative approach to investigate the influence of personal characteristics on effectiveness of construction site managers. Initially, author prepared a set of 26 personal characteristics to identify the relationship on effectiveness of construction site managers by using the nominal group technique. Based on the research findings, it was observed that 13 personal characteristics have no relationship with effectiveness of construction site managers. The research methodology of this study is well structured and findings are presented with sound analysis and interpretation. However, the author could provide some justifications why 13 personal characteristics have no significant influence on effectiveness of construction site managers.

Miller (2009) presents an engaging classroom experiment that reliable demonstrates the superiority of nominal over brainstorming groups for generating more ideas. The author distributed research questionnaire to the two different groups of respondents (one for brainstorming groups and another for nominal groups) with proper instructions and 105 student groups were participated from 12 different classes. In this study, author asked to the each group of the students to generate as many names as they can for a new ice cream store. Half of the groups were followed brainstorming instructions and other half followed nominal group technique instructions. Based on the results, it was observed that brainstorming groups are generated more number of ideas compare to nominal groups.

The study conducted by Shewchuk and O’Connor (2002) describes a process to understand what health care means to the elderly by using cognitive concept mapping. The present study examined on how elderly persons organize health care delivery issues, the present analysis draws on both qualitative and quantitative approaches. In this study, authors used nominal group techniques to elicit participants’ perceptions in response to the question: what are the healthcare issues that are of the greatest concern to you? During the data collection, the authors provided to the participants a deck of 20 cards and they were asked to examine the labelled cards and then to sort them into piles based on how they perceived on healthcare issues. After collected the research data, authors analysed data through multidimensional scaling (MDS) to determine the underlying spatial structure or pattern inherent in the data. The results of the data analyses were described to illustrate an example of an interpretive framework that might be used when seeking input from relevant constituents.

Maxwell (2000) used Q methodology and nominal group technique to resolve conflict at the country level. In this study, approximately 20 participants were participated in the nominal group technique idea generation process. Each participant was give about 4-5 minutes silently writing down their own ideas on conflict resolution and all ideas were recorded by the facilitator on a flip chart. After generated the ideas, group members were asked for clarifications or modifications on their list of ideas on conflict management. The participants were given three different colored strikers (red = first choice = 3 points; green = 2 choice = 2 points; yellow = 3rd choice = 1 point) to use to vote for their top three ideas. Voting with the stickers was included in order to compare the results of the Q sorts to a standard nominal group technique voting process and given participants some immediate feedback regarding the thinking of the group. The research results show that nominal group results are heavily skewed in one direction, reflecting only the viewpoint of high power participants in the dispute while the Q sort data accurately reflect the viewpoints of the entire group of disputants.

**METHOD**

Firstly, one nominal group session is conducted on the issue “What are the desired qualities and traits (and their corresponding priorities) of a good manager?” Number of participants is 30. This nominal group session is followed by a survey for the same issue and sample size of the survey is 140. A comparison of the findings of the NG session and the survey is made.
On Investigating the Difference between Outcomes Obtained from Nominal Group Technique and Survey Method

The above flow of activities is repeated for another NG session and another survey for a separate issue, “What are the criteria and their priorities to choose a foreign country for expansion of a manufacturing company?” The reason of selection of those two issues is that both the issues are general in nature so people can easily contribute.

The main research method adopted in the present research is nominal group technique, which is described below briefly.

**Steps in the Nominal Group Technique**

Following are the six steps of NGT:

**Step 1: Opening the session.** This is done by enunciating the purpose of convening the session, especially stating the issue (usually in the form of a question) for which the session has been convened. The ‘issue’ referred here should be such that several ideas can be easily generated about it. Note that the issue should be well understood by all the participants and they are expected to be knowledgeable on the issue, as mentioned before. In many cases, the issue is communicated to the participants well before assembling for the NG session. Even if everyone knows the issue, it is good to have it set out again in clear terms. To do this, facilitator may need to give a brief background of the issue. Furthermore, he/she should briefly mention the rules of a NG session (described later), which are to be followed.

**Step 2: Silent generation of ideas in writing.** All the participants are given about 10 minutes to generate as many ideas as possible pertaining to the issue. At this stage, quantity rather than quality is emphasized. Participants are encouraged to write down whatever ideas come into their mind. Quality of ideas will be taken care of at a later step. This step of idea generation needs to be completed in total silence, i.e., no discussion among group members is permitted.

**Step 3: Round-robin recording of ideas.** In this step, the facilitator starts from one end of the room and asks each participant to provide the best idea from his or her list which he/she has generated at Step 2. If there are 10 participants, then in one round there will be 10 ideas. All the ideas have to be written down on the marker board, which is in full view of the entire group. After completing the first round, the facilitator should start for the second round and again one idea per person will be collected and in this way, 10 more ideas will be written down on the board. Collecting ideas in this round-robin fashion will be continued until all the ideas are exhausted in the participants’ list. At any round, if someone does not have any idea to share, then he/she can pass for that round. But again, it is possible for him/her to reenter and provide ideas. On the marker board, ideas are numbered sequentially.

**Step 4: Serial discussion on the ideas.** The purpose of this step is to clarify the meaning of all the ideas. The facilitator starts from the beginning of the master list (i.e., the list on the marker board) and asks the participants whether the meaning is clear to them. If any idea is not clear, then it needs to be clarified by the person who provided it or by someone else. Note that there should not be any ambiguity on any idea. All the ideas are to be well understood by all the participants. However, the depth of the discussion should be controlled by the facilitator to ensure that a heated debate does not brew.

**Step 5: Voting to select the most important ideas.** This is the time to ask each of the participants to identify the most important 5 ideas from the master list and rate them using 1 to 5 scales according to their importance. The most important idea is to be assigned a rating of 5 and the least among these 5 ideas will receive the rating of 1. When all the participants finish the task of rating, cards are to be collected from all of them. Next, votes are written against the ideas on the board. One sample has been shown in Table 1.
Table 1 omitted but would have been here

When all the votes are aggregated, it is easy to pick up the 5 ideas which are most highly rated by the group as a whole. These constitute the most favored group of actions for dealing with the issue of the nominal group session.

**Step 6: Discussion on the selected ideas.** This is not an essential step of NGT but it is recommended. This helps the group to further consolidate the findings. All the above six steps have been summarized in Figure 1.

**Rules of conducting A Nominal Group Session**

To get the desired results from a nominal group session, the following rules must be adhered to:

**Rule 1: No criticism on anybody’s idea.** The basic objective of NGT is to obtain a large number of ideas. As it has been mentioned before, participants are asked to generate whatever ideas come into their minds. When some idea will be presented at Step 3, apparently it might seem silly, but nobody should laugh or ridicule, otherwise it will inhibit the free flow of ideas and the creativity of the individuals within the group will be lost. Furthermore, an apparently not-so-good idea can stimulate others to generate better ideas. In other words, ideas that first seem silly may prove to be very good or may lead to ideas that are very good.

**Rule 2: No evaluation about anybody’s idea.** The participants are not allowed to evaluate others’ ideas. If someone thinks that some participant’s idea is not good enough, then he/she may not select that in the voting stage. In fact, all the inferior ideas will be dropped when voting exercise is completed.

**Rule 3: Generate as many ideas as possible.** Participants are strongly encouraged to generate as many ideas as possible. Osborne (1957) stated this rule as “the wilder the ideas the better”. Initially, if you look for quality of the ideas, then perhaps not many ideas will be generated. The rationale for observing this rule is: the larger the number of ideas produced, the greater is the probability of achieving an effective solution.

**Rule 4: Modifying and combining ideas.** It is possible that two ideas, which are already articulated, be modified and combined. This will be treated as a new idea. In the literature, this phenomenon of combining ideas is known as “hitchhiking”. Once again, the basic purpose of following this rule is to generate larger number of ideas.
On Investigating the Difference between Outcomes Obtained from Nominal Group Technique and Survey Method

Figure 1. Flow Chart of Various Steps in Nominal Group Technique

AGBA 12th World Congress
Page 273 of 1173
**Rule 5: Anonymity of input.** In a NG session, ideas – not the participants who generated them are important. In the session, status of the participants is not considered. Therefore, all the inputs including the votes have to be kept anonymous.

**Sampling**
For the present research, we conducted two different nominal group sessions of which the number of participants were 30 and 27 respectively. There were the MBA students registered with the Graduate School of Management at IIUM. The issues of these two sessions were (1) What are the qualities of a good manager? (2) What are factors to be considered to choose a country for overseas expansion of a manufacturing company? Using the usual NGT, we generated a list of items and their corresponding ranks. Later we conducted an integrated survey in which altogether 140 respondents participated. These respondents came from 44 different organization in Malaysia, as shown in Appendix B. Here we used a questionnaire (shown in Appendix 1) that had mainly three parts: In Part A we asked to provide their demographic information; in part B, we provided the list of items (qualities of a manager) that was generated in the previous brainstorming session. Part C was similar to Part B, only difference being the items here are the factors to be considered to choose a foreign country for expansion of business. In both Part A and B, the respondents were asked to choose the most important five items and rate them using 1-5 scale as it is done in the NGT.

**DATA ANALYSIS**
Thirty MBA students participated in the NGT study. Altogether 31 qualities of a good manager were generated and they were voted using the NGT voting scheme. The qualities and their individual weights are shown in Table 2.

Table 2 omitted but would have been here

Table 3 provides the sorted results most important to least important.

Table 3 omitted but would have been here

Table 4 provides the details of the finds obtained from the frst part of the survey.

Table 4 omitted but would have been here

Table 5 provides the sorted results.

Table 5 omitted but would have been here

Table 6 provides a comparison, the main research agenda of the present work.

Table 6 omitted but would have been here
Now we proceed to describe the second experiment conducted in the same way as described above. Now the issue considered was the identification and ranking of factors that are important in the choice of a foreign country in order to expand manufacturing company’s business.

In the NGT session 27 MBA students participated and altogether 24 items factors were generated and these are shown in Table 7.

Table 7 omitted but would have been here

The factors are sorted according to the weights received (from most important to least important), as shown in Table 8.

Table 8 omitted but would have been here

As per the first experiment, here also we conducted a survey involving the same respondents of the first survey and they were asked to choose the most important five factors from the list of 24 and assign weights from 1-5 scale as per the rule of NGT process. The details are shown in Table 9.

Table 9 omitted but would have been here

The results are sorted as per the following Table 10.

Table 10 omitted but would have been here

Table 11 provides the comparison of the two sets of ranks obtained in NGT and survey method. As we find that the rank correlation coefficient is 0.878 which is significant at 1% level of significance. This shows that the ranks are highly correlated.

Table 11 omitted but would have been here

**CONCLUSIONS**

The present research shows once again, the usefulness of decision making using NGT in a small group setting. Making decisions in small groups is very common in organizations. Nominal group technique is a perfect method that can be applied to make a decision involving only few members. The present research amply shows that even if a larger number of participants are involved in making the decisions, the results will not be significantly different. Therefore the organization’s managers need not be overly concerned that the decision might be different if they involve larger number of participants. This saves organization’s scarce resources such as time and money.

**REFERENCES**


On Investigating the Difference between Outcomes Obtained
from Nominal Group Technique and Survey Method


Appendix A omitted but would have been here

Appendix B omitted but would have been here

All of the tables and appendices cited in this paper are omitted due to space considerations. Interested parties are invited to contact the author for a complete copy of the paper.
INTRODUCTION

Bahrain is an Island with historical connections to the Persian Empire. It is a former province of Iran ((Federal research Division, 2004), which is called as “Pearl of Persian Gulf” and is densely populated Arab country. Its area is only 260 square miles, which is one of the most crowded countries on earth. It is home for one million people approximately (Gillespie, 2002). Bahrain has a long history as hub of banking and it strives hard to retain that status (Oxford Business Group: The Report: Bahrain, 2008). Likewise, the Kingdom of Bahrain is considered to be the hub of Islamic banking according to the Central Bank of Bahrain, which is proud to play host to the largest concentration of Islamic financial institutions in the Middle East region. A country, indeed, with an area of only 665 square kilometers has become one of the leading Islamic financial centers in the region (New Horizon, 2007).

DEVELOPMENT OF ISLAMIC BANKING IN BAHRAIN

With the establishment of the first Islamic bank, the Bahrain Islamic Bank in 1978, the history of Islamic banking in the country began. The Gulf War broke out in 1990 and was one of the triggers, which prompted a rapid development of Islamic banking and finance in Bahrain. The increase of oil prices and huge revenues as a result of this it stimulated the Islamic banking market escalating the demand for Islamic tailored investments and services. Since then, Bahrain has seen the flourishing growth and swift development of Islamic banking institutions (IBIs). It is, therefore, obvious that the Islamic banking system in Bahrain is undoubtedly booming. Its total assets reached $20 billion in 2006. In the same year alone, three Islamic banks were granted banking licenses with another two a year earlier. There are more banks in the queue waiting for the Central Bank's approval (New Horizon, 2007).

This is why the Global Financial Centers Index, published in the UK, has recognized Bahrain as one of the world's fastest-growing financial centers, ranking it 39th. Looking closer at the banks in Bahrain, especially the locally incorporated banks, it is observed that they achieved a record of net profits in 2006. The immense change, which took place in 2007, was the increasing role of the Islamic banking sector, which rose dramatically by 73.2% from $666.1 million in 2006 to $1,153.4 million in 2007. This huge increase in profits was replicated in both wholesale Islamic banking (66%) and retail Islamic banking (93%), and paved the way for the growing attraction and sophistication of Islamic finance throughout the region. The Islamic banks in 2008 accounted for 50% of the aggregate net profits of Bahrain’s banks, considerably higher than the 33% they accounted for in 2006. The mounting demands for Islamic banking products indicate that the role of Islamic banks in the overall profits of Bahrain’s banks may even be on rise in the days to come (Timewell, 2008).
A variety of products such as mudarabah, ijarah, murabahah, musharakah, salam and istisna are provided by Islamic banks in Bahrain. Restricted and unrestricted investment account facilities are also available for customers. Similarly, almost all of the services provided by the conventional banks are provided by Islamic banks too after appropriate modification has been made to them to comply with Shariah principles. Consequently, the entire assets of the Islamic banks grew at the rate of 44.6% during the period of 2004-2007. This rate of growth is a clear indication of the successful over taking of the conventional banking system in the country (Timewell, 2008).

The demand for Islamic financial products has been tremendously increasing. This resulted in the emergence of a number of Islamic banks. Of the nine new banks licensed by the Central Bank of Bahrain (CBB) in 2007, six were Islamic banks. More importantly, Bahrain’s Islamic banks are playing a competitive role both locally and globally. Recently, there was a study, which rated fifty Islamic banks globally growing fast by assets and net profits, of which twelve were Bahraini Islamic banks, which are displayed in the Table 1. This means that 24% of the total fast growing banks in the world exist in Bahrain. This upward trend is, indeed, expected to continue despite the surging competition from Dubai and Qatar.

**Table 1: Fastest Growing Islamic Bank by Net Income & by Assets**

Figures in US $ as at 31 December 2007

<table>
<thead>
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<tr>
<td>Ithmar Bank</td>
<td>10</td>
<td>4,078,789,000</td>
<td>3,318,755,000</td>
<td>181,050,000</td>
<td>188,310,000</td>
</tr>
<tr>
<td>Gulf Finance House</td>
<td>20</td>
<td>2,245,067,000</td>
<td>1,500,884,000</td>
<td>211,586,000</td>
<td>343,258,000</td>
</tr>
<tr>
<td>Shamil Bank of Bahrain</td>
<td>21</td>
<td>2,045,691,000</td>
<td>1,693,260,000</td>
<td>61,550,000</td>
<td>80,568,000</td>
</tr>
<tr>
<td>Bahrain Islamic Bank</td>
<td>25</td>
<td>1,786,115,705</td>
<td>1,159,760,380</td>
<td>34,683,126</td>
<td>67,829,512</td>
</tr>
<tr>
<td>Bank Alliance Islamic</td>
<td>29</td>
<td>1,078,158,668</td>
<td>499,690,336</td>
<td>43,626,372</td>
<td>62,744,654</td>
</tr>
<tr>
<td>Khaleeji Commercial Bank</td>
<td>33</td>
<td>730,501,480</td>
<td>255,745,875</td>
<td>21,219,601</td>
<td>56,475,353</td>
</tr>
<tr>
<td>Unicorn Investment Bank</td>
<td>36</td>
<td>446,669,000</td>
<td>293,342,000</td>
<td>30,139,000</td>
<td>49,591,000</td>
</tr>
<tr>
<td>United International Bank</td>
<td>37</td>
<td>383,364,000</td>
<td>Not available</td>
<td>Not available</td>
<td>35,894,199</td>
</tr>
<tr>
<td>Capivest</td>
<td>40</td>
<td>325,000,000</td>
<td>195,396,424</td>
<td>10,218,807</td>
<td>31,910,000</td>
</tr>
<tr>
<td>Global Banking Corporation</td>
<td>44</td>
<td>236,190,021</td>
<td>Not available</td>
<td>Not available</td>
<td>35,894,199</td>
</tr>
<tr>
<td>Venture Capital Bank United</td>
<td>46</td>
<td>222,006,000</td>
<td>90,922,000</td>
<td>13,258,000</td>
<td>32,336,000</td>
</tr>
</tbody>
</table>
During the strong competition from GCC countries, in general, and Dubai and Qatar, in particular, Bahrain remains a cornerstone in the banking sector. More importantly, it has spearheaded the Islamic banking activities in the region and has developed into a natural and well-located center for Islamic banking in the Middle East region with 29 Islamic banks with a total size of US$18.4 billion. Bahrain has been at the forefront of the market for Islamic bonds (Sukuk). The CBB has played a leading role in the introduction of these innovative products. In 2001, the CBB became the first sovereign in the world to develop and issue sukuk. Since then, the CBB has established a schedule of Sukuk issuance, which comprises short-term as well as medium to long-term Sukuk. US$13.3 million Sukuk al-ijarah of six month tenure and a US$ 15.9 million issue of Sukuk al-salam of three month tenure are each offered once a month. For the medium and long term tenures, the CBB has offered a total of 14 issues of ijarah Sukuk with a total value of US$2.05 billion. The most recent one, a five-year US$350 million international issue listed on the London Stock Exchange, was made in March 2008 (Islamic Finance News, 2008).

Bahrain is pursuing a dual banking system. It is not focusing solely on Islamic banking but also encourages the presence of conventional banks. Both sectors are given equal opportunity and equal treatment. According to al-Sayyed, there has been an increase in conventional banks in the country, but this increase has not been as significant as that of their Islamic counterparts. He further states that there is a lot of interaction going on between Islamic and conventional banks in Bahrain. A large number of specialists from the latter have moved to work at the IBIs (Al-Sayyed, 2007).

Accordingly, the CBB is promoting both Islamic banking and conventional banking equally. The author is unable to agree with this stance. Bahrain is a Muslim country, which should promote only the Islamic banking system in order to fulfill the objective of the Islamic economic system that strives to abolish the riba-based transaction, which has been proved to be a failed system that has created huge economic turmoil globally. Bahrain may be a role model for a fully-shariah-based system. However, the conventional banking system must also be allowed to operate to a certain extent considering the reciprocal rights and obligations towards non-Muslims. In support of this suggestion, the argument of Ziauldin Ahmed is quoted and the author totally agrees with that view:

The guidance for all institutional developments in an Islamic society is to be derived from the principles of the Shariah. The form and content of Islamic banking practices have therefore to be deduced from the teachings of Islam. There was no prototype of modern banks in the early history of Islam. Even in the western countries, banking in the form in which it exists today is of comparatively recent origin. The attitude of Islam to all known innovations is that nothing should stand in the way of their adoption if they are useful for human society and do not conflict with the fundamental principles as enunciated in the Holy Qur’an and the Sunnah (The Encyclopedia of Islamic Banking and Insurance, 1995).

Meanwhile, a number of factors have contributed for Bahrain to becoming a leader in Islamic banking. As al-Sayyed argues, one of the key reasons is the Central Bank’s policy of encouraging innovation. Every Islamic bank based in the country has its own Shariah Board that is a mandatory authority, which consists of a minimum of three people. It is up to the Board to advise the bank on various aspects of Islamic banking and to decide, which products and services are Shariah compliant. The Central Bank, for its part, also has a Supervisory Shariah Board, but this has a different role. It deals with the issue of Sukuk.
Central Bank does not centralize the decision-making process concerning the Shariah compliance issues of individual banks, and does not interfere in these processes. However, the author disagrees with this policy because the direct supervision of the Central Bank concerning Shariah compliance is vital in order to ensure that an Islamic bank is operated based on Islamic banking principles. Such a practice is different in some other countries, such as Malaysia where the Central Bank of Malaysia has to approve any innovation in Islamic banking and finance before they are introduced to the market. In addition, the Shariah boards of all of the banks in the country are subject to review by the Central Bank. The author is of the opinion that this approach may be adopted by other countries such as Bahrain when operating Islamic banks and financial institutions. In addition, creating a favourable environment for the innovations has proved to be worthwhile. The product range of Islamic banking is expanding rapidly. The Bahraini banking market has witnessed the emergence of Shariah compliant credit cards and other Islamic products. (The Central Bank of Malaysia Act, 2009: Articles, 51-58).

More importantly, human resource is a prime factor for the development of Islamic banking or any other sector. Thus, Bahrain has individuals who are very experienced and who have extensive knowledge in Islamic banking. Due to the country’s long tradition in finance, the Central Bank offers its expertise to specialists both within the country and outside it. The Bahrain Institute of Banking and Finance was set up under the auspices of the Central Bank in 1981 to provide training and education in various aspects of finance. The Central Bank has advised a number of countries, including the USA, UK, Sudan and Malaysia, on regulation matters, which are considered to be compliant with the best international practice (New Horizon, 2007).

**REGULATORY FRAMEWORK OF ISLAMIC BANKING IN BAHRAIN**

The financial system comprises several elements including depositors, banks, entrepreneurs and regulators. Financial institutions operating in any country must follow some regulations enforced by the Central Monetary Authority or the Central Bank of a country to better serve the public and the national interest. The major objectives of regulating the Islamic banks are to minimize the risk of failure and to accomplish some preferred objectives. Islamic Bank regulations are designed to prevent Islamic commercial banks from becoming too risky and uphold public confidence in the country’s financial system (Islam, 2003). In line with this, the CBB is the single regulator of Islamic banks and other financial institutions operating in Bahrain. It has carried out a number of reforms in these sectors. It has introduced a new modernized licensing framework for financial institutions which became effective in October 2006. There are five licensee categories that comprise the new framework. These are Islamic banking, conventional banking, insurance, investment business and specialized licensees (New Horizon, 2007). The Table 2 displays this in a nutshell.

Previous banking law, the Bahrain Monetary Agency Law No 23 of 1973, has been replaced by the Central Bank of Bahrain and Financial Institutional Law 2006 (CBBFIL 2006), which consists of 188 Articles. The Bahrain Monetary Agency has also been replaced by the Central Bank of Bahrain since 2006(CBB). The new legislation has not many differences in substance, but it has effectively re-organized the provisions that were in force previously. Accordingly, the licensing and supervision of Islamic and conventional banks operating in and from Bahrain are being governed by the new legislation. The law provides for minimum capital and reserve requirements, and authorizes the CBB to decide the category of business, which banks may carry out. It entrusts the CBB with the power of inspection, which is inclusive of a comprehensive system of quarterly and monthly statistical returns from banks (The Central Bank of Bahrain and Financial Institutional Law, 2006).

All regulated services should be licensed and comply with the provisions of the said Act. Section 39 of the CBBFIL 2006 defines what is meant by “Regulated Services”. It provides that “Regulated Services shall mean the “financial services” provided by the financial institutions, including those governed by
Islamic Shariah principles. One can observe that the same terminology has been used to mean the financial services in the UK too (the Financial Services and Markets Act 2000: section: 2). Similarly, “bank” means:-

1) Any corporate body licensed under the terms of this law to accept deposit, advance loans, manage and invest funds with or without providing any other related services;
2) Any person licensed under this law to accept deposit, advance loans, manage and invest deposit and savings according to Shariah principles with or without providing other related services;
3) Any other licensee as approved by the Central Bank.

It is, therefore, clear that the term bank includes the Islamic banks and the same regulation will be applied to Islamic banks. The section 39(2) is relevant to Islamic banks (The Central Bank of Bahrain and Financial Institutions Law, 2006: Article: 1).

Meanwhile, there is no specific regulation for Islamic banking and financial institutions in Bahrain (Lee & Detta, 2007). Although the Act is comprehensive similar to the FSMA, it does not provide a special treatment for Islamic banking concerning Shariah supervision and any other related issues that might surface. However, these issues have been remedied by other instrument complying with Standards of Accounting and Auditing of Islamic Financial Institutions (AAOIFI), which have been made mandatory for IBIs operating in Bahrain (AlJalahmah, 2008). This unique arrangement may be incorporated to other countries’ legislation or the Central Bank may impose as a condition for issuance of license to the Islamic banks and windows. This move may standardize the quality of Islamic banking business. Similarly, this will help find IBIs that are willing to enter into mutual agreements for enhancement of the industry.

A strong regulatory framework is in place, which is a cornerstone of the Central Bank’s policy. As al-Sayyed argues, the regulations are of the highest standard of the best international practices and are flexible. The Central Bank is in constant ongoing consultation with the industry. It does not introduce any local or international regulations without consulting the financial services industry first. This is also a similar practice set out in the FSMA 2000(the Financial Services and Markets Act, 2000: section: 8) of the UK (New Horizon, 2007). Ahmad al-Bassam, director of licensing and policy of the CBB, states that “The CBB offers the most comprehensive and robust regulatory framework and the most stable environment something, which has become crucial in the current financial climate” (The Review, 2009).

“As a Central Bank, it has made every effort to create a business environment that promotes a stable foundation for Islamic finance to flourish,” said Hussain Sharaf, director of Islamic Financial Institutions Supervision of the CBB. Bahrain is recognized as a leader in Islamic banking. Investors from the Muslim world have long sought investment vehicles that offer returns in an Islamic acceptable manner. It is believed that it has created a regulatory climate in Bahrain that is conducive to fostering success within this industry. Both conventional and Islamic banks are subject to the same supervisory regulations. However, Islamic banking has the unique characteristic that makes it somewhat problematical to be compliant with exactly the same regulation (Islamic Finance Review, 2008). In order to address this issue, IBIs in Bahrain are required to comply with the Standards of the AAOIFI. This is mandatory. The AAOIFI has issued a number of standards on accounting, auditing, ethics, governance and Shariah and it continues to revise them from time to time. This is a very useful move, which regulates IBIs in various aspects. The Bahrain regulators made an attempt to set a standard equivalent to the standard required to be adopted by conventional banks, which is based on the International Accounting Standards (IAS) (Islam, 2003).

Bahrain was one of the first countries to develop and implement regulations specific to Islamic banking to issue Sukuk. In addition, the waqf fund was established in 2006 by the CBB to fund Islamic banking research, education and training. This is an evidence of the CBB’s innovative approach and steering role.
towards the promotion of the industry. Another indication of Bahrain’s role in the growth of Islamic banking is that it has been chosen as the host country for many international organizations whose goal is to give the right direction for the industry and set acceptable standards for Islamic banking. As such, the AAOIFI, the Liquidity Management Centre (LMC), the International Islamic Financial Market (IIFM) and the Islamic International Rating Agency (IIRA) are housed in Bahrain and it is evident that Bahrain has much in terms of expertise, knowledge, and practical experience to offer the international Islamic banking and finance industry (The Review, 2009). It has to be pointed out that these factors are crucial to regulate the Islamic banking industry effectively.

Registration of Islamic Banks under the Company Law 2001
Islamic banks are required to be registered under the CBBFIL 2006(The Central Bank and Financial Institutions Law, 2006: Article 40(b)) and the Commercial Companies Law 2001(CCL) (The Company Law 2001 of Bahrain: Article: 6) The Article (2) of the CCL provides that a commercial company incorporated in the State of Bahrain shall take one of the following, otherwise, it shall be null and void:

1) General Partnership Company;
2) Limited Partnership Company;
3) Association in Participation;
4) Joint Stock Company;
5) Limited Partnership by Shares;
6) Limited Liability Company;
7) Single Person Company;
8) Holding Company.

It is noteworthy to point out that an Islamic bank can be operated by a single person under the Single Person Company incorporated under the said Act subject to Art. (1) and 40(b) of the CBBFIL 2006, which provides that the bank means “Any person licensed under this law to accept, manage and invest deposits and savings according to the Islamic Shariah principles with or without providing other related services. In addition, Art. (1) Illustrates that “any person” will include natural and corporate persons.

Further, it is mandatory that the Company’s Memorandum of Association and amendments thereto shall be drawn up in Arabic and attested by a Notary Public; otherwise, it would be rendered null and void. Nevertheless, Association in Participation is exempted from this requirement (The Company Law 2001 of Bahrain: Article: 6).

Licensing Procedure
Article 40 of the CBBFIL 2006 prescribes that no person may undertake a regulated service in the Kingdom of Bahrain unless licensed by the CBB. The CBB Rulebook provides comprehensive guidelines on the licensing process and associated matters of Islamic banks and other regulated services. Additionally, Islamic banks seeking a license must be registered under the Commercial Companies Law 2001. By virtue of Article (40) of the CBBFIL 2006, without due regard to the provisions of the CCL 2001, no financial institutions shall be established in the Kingdom of Bahrain with the exception of the approval from the Central Bank( The Central Bank of Bahrain and Financial Institutions Law, 2006: Article: 40).

The CBB Rulebook classifies the licensing category into six volumes. Volumes one and two cover conventional and Islamic banks respectively. Volumes 3, 4, 5 and 6 have been allocated to cover insurance, investment business, special licensees and capital market licensees, respectively. See the Table 2 as displayed below.
Moreover, the Rulebook of the CBB contains the procedures to be followed by an applicant to provide regulated services. Thus, applicants are strongly instructed to communicate with the CBB in advance in order to get guidance on the CBB’s license categories and other related essential requirements. Prior to submitting the application for a license officially there would be a meeting, which is called the “pre-application meeting” between the director in charge of the issuance of licenses and the applicant. There would be more than one meeting if the circumstances require so to determine suitability to provide such a license. Applicants are expected to submit a proposal, which contains a short summary of their proposed business, mention of identified issues or questions and other related matters. Subsequently, the Central Bank will issue license or refuse to do so if requirements are not met. Furthermore, the application for a license under Articles 44 to 47 of the CBBFIL 2006 will be processed within 60 calendar days and the CBB is required to make a decision within that period. In addition, an applicant for a license is expected to submit all the documents as required by the CBB such as “a completed Form 1” together with all supporting documentation as specified in the form, under cover of a letter signed by an authorized signatory of the applicant (A Guide to Central Bank of Bahrain, 2009).

Vigilant Supervision
As Mashar M. Islam states, prudential information on returns is required from all banks operating in Bahrain. This includes quarterly prudential information returns, besides monthly and half yearly statistical returns, and yearly returns concerning management personnel and foreign exchange dealers. In addition, the auditor’s management letter together with the response from the bank’s management is required by the CBB. In order to avoid potential risk. Islamic banks are instructed to comply with five International Islamic Financial Accounting Standard (IFAS) and also to publish this information as supplement to their audited financial statements. This was made effective in 1997. Eventually, the audited accounts must be submitted to the CBB within 3 months of the end of the calendar year. External auditors are appointed annually and must be acceptable to the CBB. It has direct access to auditors in order to protect the financial integrity of a bank. Direct access to auditors by the CBB is allowed at the discretion of the auditors. Inspection is carried out on a regular basis that can cover any aspects of a bank’s operations. Regular meetings are held with the senior management of banks to discuss past performance and future strategies. The CBB maintains a close coordination with auditors in accordance with the Bank for International Settlements (BIS) directives. Meetings are held with all locally incorporated banks in order to discuss issues such as capital adequacy, asset quality, internal control, profitability and liquidity. Inspections are carried out related to management, control systems, accounting and other book keeping records. Money changers provide the CBB with monthly turnover returns and quarterly Profit & Loss and balance sheet statements (Islam, 2003).

Capital Adequacy
The minimum legal paid-in capital requirement is set according to each category of bank. Islamic banks are required to have initial capital of at least US$10 million. However, this rule may be relaxed in order to
determine appropriate levels to be agreed with the CBB on a case-by-case basis. Furthermore, at all times an adequate level of capital funds must be maintained, measured on a risk-weighted basis in accordance with the Basel arrangements. In January 1998, the minimum risk-asset ratio was increased to 12% from the Basel recommended and internationally accepted minimum of 8% (Sharaf, 2008).

**Deposit Protection**

In 1993, a deposit protection scheme was introduced under which deposits with the Bahrain offices of all commercial banks are protected in the event of a bank failure. This scheme provides up to the lesser of three quarters of the total amount or US$40,000. Government banks including the CBB and related parties are not entitled to this protection. Payments under the scheme will be met by contributions from all other commercial banks (Islam, 2003).

In addition, the CBBFIL 2006 provides the Council may issue regulations to protect deposits and other rights of the customers of the licensee. Such regulations shall provide for compensating such customers in cases where the licensee is unable, or appears likely to be unable to meet claims made against him. The regulation may provide for the formation of one or more funds. Such funds shall constitute a separate corporate body and have an independent balance sheet and special regulations to be approved by a resolution issued by the Central Bank (The Central Bank of Bahrain and Financial Institutions Law, 2006: Article: 177).

**Controls on Liquidity**

It is the responsibility of the management to maintain adequate liquidity. A liquidity policy shall be agreed with the CBB concerning the high quality liquid assets and ability to meet obligations in due time (Islam, 2003).

**Dispute Resolution**

Legal provisions are in place to resolve the disputes arising among IBIs. The CBBFIL 2006 provides that a Dispute Resolution Committee (DRC) shall be established in the Central Bank and shall have exclusive authority for settling disputes between the licensees. The committee shall be formed by a resolution to be made by the Council every three years as follows: (The Central Bank of Bahrain and Financial Institutions Law, 2006: Article: 176).

1) Three judges of the High Court of Appeals to be delegated by the High Judiciary Council. The Committee shall be chaired by the most senior judge among the three;

2) Two of the senior officials of the Central Bank or two qualified personnel of high standing in finance services to be nominated by the Governor.

The two members of the Committee, other than the judges, shall take an oath before the chairman of the Committee to the effect that they will carry out their mission sincerely and with conscience, and participate in the discussions of the Committee without having the right of voting with respect to the decisions issued by the Committee. The decisions of the Committee shall be explained and reached by a majority vote, however, in case of a tied vote; the chairman’s side shall have the casting vote. Such decisions, after drafting of the same by the clerks of the said court, shall have the force of a resolution issued by the High Court of Appeals. The execution judge shall undertake the implementation of the decisions taken by the Committee pursuant to the provisions of the Civil and Trade Procedure Law. The Committee may decide to hear the witnesses and to assign experts to investigate all documents relevant to the dispute and take all measures necessary to the settling thereof. The Minister of Justice, in agreement with the Council, may issue a resolution to specify the procedures to be followed in presenting a dispute before the Committee and the manner of delivering the Committee’s decisions to the relevant parties, and the remuneration of the members of the Committee. (The Central Bank of Bahrain and Financial Institutions Law, 2006: Article: 176).
This provision is unique and this may be incorporated to banking laws of other jurisdictions, which lacks in this regard.

**Provisions for Bad and Doubtful Assets**

Provisions are in place to monitor Islamic banks on a quarterly basis. Inspections and prudential meetings make policy and its compliance. If this arrangement is considered to be inadequate, measures are taken to motivate the banks to re-examine their policy and take the necessary action. The CBB applies the Bank of England’s matrix formula for deciding upon the level of provisions required against problematic loans to sovereign borrowers (Islam, 2003).

**REGULATORY ISSUES IN ISLAMIC BANKING IN BAHRAIN**

The law of Bahrain represents a mixture of the Shariah, tribal law, and other civil codes and regulations. The new constitution promises an independent judiciary. A Higher Judicial Council supervises the courts. Courts have been granted the power of judicial review (Radhi, 2003). According to Article 2 of the Bahrain Constitution, the religion of the State is Islam. The Shariah is a principal source for legislation. The official language is Arabic (The Bahrain Constitution, 1973: Article: 2). However, Shariah has only a little role to play. It governs only family matters such as marriage and divorce. Commercial matters are governed by the English common law and the High Court has the jurisdiction to hear commercial case. Cases, therefore, concerning Islamic banking are also tried in the same court. However, a large part of the laws of Bahrain are based on published statutes, which derive from the Shariah. The Contract Law and Civil Wrongs Ordinance 1970 are based on the principles of English common law, which were originally adopted during the British protectorate period. Much recent legislation is based upon and follows a civil-law format, much in the style of Egypt and France (www.infoprod.co.il/country/bahrain2a.htm, 2009).

Nevertheless, one might expect that when Islamic banking cases are disposed, the Shariah would play a big role as judges are familiar with the Shariah. This presumption is proved based on the Article 3 of Judicial Law of Bahrain:

> Where a judge does not find a statutory provision that is applicable he shall derive the basis of his judgment from the principles of Islamic Shariah law. In the absence of Shariah provisions, rules of custom shall be applied. Special custom will apply over general custom. Where there is no custom, principles of natural law, justice and good conscience shall be applicable (Radhi, 2003).

As far as taxation is concerned, the single corporate income tax in Bahrain is levied only on oil, gas and petroleum companies at a rate of 46 percent. This tax is applicable to any oil company conducting its business activity in Bahrain of any kind, including oil exploration, production, or refining, regardless of the company's place of incorporation. However, 1% is levied on salaries, which go to an employment and training fund (Oxford Business Group, Report: Bahrain, 2009). In addition, Bahrain has no value added tax, property tax or production tax (www.infoprod.co.il/country/bahrain2a.htm, 2009). It is, therefore, clear that no income tax is charged on other businesses, including Islamic banks. It is notable that there is no individual income tax either in Bahrain. However, employers who employ more than ten employees, irrespective of their nationality, must pay 10 percent of the employee's gross income to social welfare taxes. The employer's contribution is 7 percent of gross wages for insurance against old age, disability and death. This arrangement is applicable only to Bahraini employees. In the meantime, 3 percent of gross wages for insurance against employment injuries is applicable to all employees. The employee's contribution is five percent of gross wages for insurance against old age, disability and death, which is applicable to Bahraini employees only (www.infoprod.co.il/country/bahrain2a.htm, 2009). In line with this, an Islamic bank consisting of more than ten employees must comply with the above legislation.
FUTURE PROSPECTS OF ISLAMIC BANKING IN BAHRAIN

Bahrain might be small in size but to the Islamic banking industry it is being recognized as bigger and a veritable giant. It has become an international hub for Islamic banking by hosting the biggest concentration of Islamic financial institutions in the Gulf. It also plays host to a number of global organizations conducive to the evolution of Islamic banking, notably the AAOIFI, the International Islamic Financial Market, the Liquidity Management Centre, the Islamic International Rating Agency etc. It is anticipated that the presence of those institutions will help the Islamic banking industry grow faster than ever and there is no doubt that it would remain an international hub for Islamic banking in the days to come.

The Government of Bahrain has set out to make the country into the Singapore or Hong Kong of the Gulf, and, hopefully, of the whole Middle East and South Asia. Although at present wholly or partially government-owned enterprises dominate the economy, laws and regulations have been overhauled in recent years, particularly since 1990, in an attempt to make the business climate as welcoming as possible for free enterprise and in order to attract foreign companies. (www.infoprod.co.il/country/bahrain.htm, 2009).

Exemption from income tax, property tax, value added tax or production tax, indeed, provides incentives to the Islamic banking industry, which will grow much faster as there are no notable hurdles unlike other jurisdictions. This will attract offshore Islamic banks as well to locate their business in Bahrain.

The growth rate of Islamic banking is relatively higher than the conventional banking in Bahrain. Conventional banks face hard competition from Islamic banking. Some banks want to convert themselves into Islamic banks in order to survive. This trend suggests that a fully Islamic banking system would soon dominate the country joining the countries that already have a fully Islamic banking system such as Pakistan, Sudan and Iran.

The Waqf Fund was established in 2006 by the CBB, with contributions from the Central Bank and eight leading Islamic banks in Bahrain. Its members now include 18 leading Islamic financial institutions, in addition to the CBB, with the aim of advancing Islamic finance training, education and research. Its capital contributions, which stand at approximately US$7 million, allow the fund to pursue these goals through a broad range of initiatives. Apart from its work in training and research, the fund also acts as an industry incubator by hosting roundtable discussions on development issues where leading figures focus on key issues and recommend the best way forward for the industry (Sharaf, 2008). The constant research and training would find solutions to various problems the industry may face.

CONCLUSION

Bahrain is a leader in Islamic banking in the Middle East. It is a Muslim country where the influence of Islamic law is in force to a great extent despite it is not being fully under Shariah jurisdiction. However, the industry is growing tremendously in the country. However, it has different problems and challenges in promoting the industry. Most of the problems can be resolved thorough discussions and the exchange of ideas. Staff and staff development are common problems for all Islamic banks in Bahrain, which requires an operating staff knowledgeable both in the conventional as well as Islamic principles governing Islamic banking. Staffs with such qualities are hard to meet.

Meanwhile, Bahrain is also becoming a regional and international hub for Islamic banking industry. It has also made a considerable contribution to the industry. It remains a host country for a large number of Islamic banking and finance organisations in the world, e.g., AAOIFI. Additionally, it has the capability to play a major role in promoting and shaping the industry both within the region and globally. As
Bahrain is a country with a number of Shariah scholars, it may concentrate more on resolving issues in relation to the Shariah. The Islamic banking industry in Bahrain is regulated by one regulator, the CBB. With the benefit of its experience, it may become actively involved in an effort to provide a balanced system of regulation to the world. The CBB borrowed a number of good things from the UK regulatory system and additionally it has made AAOIFI’s Shariah Standard compulsory for Islamic banks to comply with them. Due to this, it has a comprehensive system of Islamic banking legislation, perhaps one suitable for the whole world.

In addition, in Bahrain, there are no specific issues like double or dual taxation, double stamp duty or any other legal issues, which might surface in a non-Muslim jurisdiction. Therefore, Bahrain will continue to be an international hub for Islamic banking due to the liberal policy it always seems to adopt in relation to Islamic banking. It is noteworthy to point out that, there is no income tax, value added tax, property tax or any other taxes in Bahrain. Instead, it gives a number of incentives for business including Islamic banking. For example, only 5% custom levy is imposed for normal goods imported. The foreign companies are given the right to full ownership. Eventually, Bahrain could be an ideal example for a country that makes efforts to promote Islamic banking.

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APPENDIX

AAOIFI: This is a non-profit institution established in Bahrain in 1991. It aims at developing accounting, auditing, governance, ethics and Shariah Standards to be followed by the Islamic financial institutions. The institution consists of six divisions. They are General Assembly, Board of Trustees, Accounting and Auditing Standards Board, Shariah Board, Executive Committee and Secretariat General. As of 2008, 161 financial institutions from 40 countries have obtained their membership. Its duties and responsibilities, inter alia, to harmonise and converge the fatwa issued by Shariah Supervisory Boards of the Islamic financial institutions, to help in the development of instruments complying with the Shariah, issuance of Shariah ruling on demand, to review the issued standards to ensure the compliance with the Shariah regulation and principles etc (Sudin Haron & Wan Norsofiz Wan Azmi, Islamic Finance and Banking System, McGra-Hill (Malaysia), Sdn Bhd, 2009, pp. 487-491).

The Central Bank of Bahrain and Financial Institutions Law 2006(CBBFIL): It was promulgated on 6 September, 2006 with the issuance of the decree No. 64 of 2006. The decree No. 64 implemented the CBBFIL and repealed the Bahrain Monetary Agency Law (BMA) of 1973 as well as the Insurance Law of 1987. The CBBFIL established the Central Bank of Bahrain as the successor of organisation of the Bahrain Monetary Agency. It also set out the CBB’s mandate, governance and powers. The CBBFIL provides enhanced enforcement powers to the CBB as well as reinforcing its operational independence. The CBBFIL represents a significant modernisation and simplification of Bahrain’s financial service legislation, as well as marking the final stage in the creation of a single regulator for Bahrain’s financial services industry.
Criminal Liability of Legal Entities for Polluting the Environment: Shariah and Law Perspectives

Keywords: Environmental Issues, Polluting, Environmental Crimes, Legal Entity Person, Criminal Liability, Environmental Protection

INTRODUCTION

The regulation for the protection of the environment is considered as one of the most recent steps taken to reduce pollution. It should be noted that the problems of people destroying the environment and the place in which he shares with other living things have increasingly become worse. Therefore, international interest on environmental issues during the second half of the twentieth century may be too late. This is reflected in the legal treatments for these problems. On the contrary, Islamic jurisprudence have general regulations for the protection of the environment as can be seen in the Koran and the Sunnah whereby it calls for the people to have interest in the environment as well as preserving it from all forms of exploitation and abuse. Therefore, it can be argued that the legislations for the protection of the environment and the identification of the different types or forms of infringements are still in its infancy.

Additionally, up to this present day there is no comprehensive legislation that provides the general rules on how to solve the legal problems for the protection of the environment (AL-Lahlou, 2002). This research will review the environmental protection from the Islamic Sharia and legal point of view on crimes committed by legal entities which is defined by jurisprudence and the judiciary as “a person or group of persons or organizations formed from funds collected from the sale of shares in the organization to form a body that has a separate identity as that of the founder members or shareholders and such bodies may own factories or are companies that provide public services to the people” (Maqubl, 1994). The issue at hand here is criminal aspect of causing damage to the environment as criminal law is one of the means used by national and international communities in their fight against the damage to the environment through pollution and other destructive acts. Hence, The exacerbation of the environment was due to pollution caused by industrial progress and various other related activities. This has caused the deterioration of the environment and as a result the environment has changed from being a source of comfort and enjoyment into a source of epidemics and diseases. This was due to the damage that has been done to the planet’s air, soil and water (Arhomh, 2000).

Consequently, the community noted that there is a need to develop legal and legislative controls immaterial of whether it has been mentioned in the Quran or the Sunnah or derived from the opinions of scholars. These controls must be adhered to strictly to preserve and protect the environment. In addition, the people responsible for violating the rules and regulations will have to face criminal charges and the penalty if they are found guilty. These laws seek to states and determine the standards based on scientific studies and research on the contamination of water, air, soil, and its effects on the planet. These laws may also be used to develop controls and methods to reduce the severity of the problem. They have also enacted criminal punishments that are deemed appropriate to punish the offenders of environmental crimes (AL-Lahlou, 2002).
RESEARCH DESIGN AND PROCEDURE

This research is qualitative. It also takes a comparative approach and an analytical examination of environmental protection and criminal liability concerning the legal entity. It also determines the criminal liability of the legal entity by comparing it with some of the provisions of the Islamic Sharia related to the environment. In addition to that, a review of the sources and references relevant to the current issue was also conducted.

DEFINITION OF THE ENVIRONMENT

Humans and the environment have a co-existing relationship, humans depend on the environment and in turn the environment relies on the human race to improve and preserve it. The issue of climate change has for the first time attracted sufficient attention from the United Nations Conference on the Human Environment that was held in Stockholm in June 1972. The Conference called for the need for a common outlook and common principles to inspire and guide the people of the world for the protection of the human environment. The conference also called on the governments and people to make common efforts to maintain and improve the human environment for the benefit of all the people and for future generations (United Nations [UN], 1972). It should be noted that the conference had three main results:

2) An action plan containing 109 recommendations adopted by participating countries that reach a consensus on that issue. The action plan determines specific environmental procedures to address issues of the environment. The environmental action plan is divided into categories including global ones such as the Environmental Assessment Program (Earth Observation), environmental and international management activities, and measures to support the national and international procedures of assessment and management.
3) Creating a new United Nations Environment Program Foundation (UNEP) to serve as a focal point within the United Nations system to enhance and coordinate international environmental agendas (Galizzi, 2005).

The first principle of the Stockholm Declaration gives the liability of protecting the environment and the enhancement to human beings because it provides that “Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.”

Moreover, the Stockholm Conference (1972) have defined the concept of the environment in general including all creatures. It is defined as “a set of natural, social and cultural systems in which human and other creatures live in a way that derives their victuals and perform their activity” (United Nations [UN], 1972).

This definition clearly includes the materials, both natural and synthetic products, which provide the satisfaction of human needs. This definition broadly includes everything that surrounds the human being that may affect the health of the human being. The term “environment” includes the whole city, its homes, its streets, its rivers, its wells, and its beaches. It also includes what humans have such as food and drinks and what humans wear such as clothes. In addition, it includes air and chemical factors and others. A healthy environment can be defined as a clean environment which is free from disease-carrying germs as well as all the different pollutants, irrespective of their origins. It is clear from these definitions that most of the international conventions and international conferences concerning the environment have adopted a
Criminal Liability of Legal Entities for Polluting the Environment: Shariah and Law Perspectives

The broad concept of the environment which international jurisprudence have failed with regards to the determination of an accurate concept of the environment. This opens the way for the emergence of several terms related to the environment (Hijab, 1999).

Islam has a deeper and wider view of the environment unlike man-made laws in the availability of definitions concerning the concept of the environment. These definitions are consistent within the overall framework, but they differ in the fine details in accordance with the type of study and definition. It has been noted that some considers the environment as a warehouse or store of natural and human resources (Sayeh, 2002). Others consider it from an aesthetic point of view; i.e. it is a source of natural beauty. However, others view the environment in terms of its impact on the life and the growth of organisms. There are some who cares about the social and economic aspects of the environment (Murad, 2005). However, from the Islamic point of view the environment is public property. This public property must be preserved in order for it to continue to exist. Almighty Allah said: “Do not corrupt the land after it has been set right, that is best for you, if you are believers” (Al-Hilali & Khan, 1997: pp.26). The view of Islam of the environment through this verse is from the aspect of spatial dimension.

The Islamic view of the environment includes its temporal dimension. This can be noted through this verse: Almighty Allah said: ‘Travel in the land and see how (Allah) originated the creation …… ’ (Al-Hilali & Khan, 1997: pp. 531)

Moreover, Islam views the environment as subservient to man. Therefore, man must deal properly with and contemplate God's creatures. Almighty Allah said: ‘See what is in the heavens and the earth! ‘But neither signs nor warnings help the unbelievers’ (Al-Hilali & Khan, 1997: pp. 284)

The Islamic view of environmental issues was on the basis that it was created with-specific amounts of natural resources and certain features, therefore these natural resources and features can ensure the availability of sufficient sustenance which is appropriate for human beings and other organisms, provided that it is used wisely. This is shown in the verse: Allah Almighty said: ‘Indeed, We have created all things according to a measure’ (Al-Hilali & Khan, 1997: pp.727)

Environmental Threats and Challenges
The local, regional and global environments face many threats, dangers and challenges due to large industrial development and competition among nations in industrial-activities managed by individuals and serving the industrial institutions that belong either to the state or individuals. This has resulted in the contamination of the environment and damaged the health of individuals and living organisms. Additionally, in some cases, the damage to the environment was caused by natural disasters such as volcanic eruptions and forests fires as a result of higher temperatures. This results in the contamination of a large area. These threats are the most important sources of environmental hazards (Al Alfi, 2009).

Pollution
Pollution, whether its source is from nature or from human intervention in the ecological environment, is a serious threat to the environment as well as to human beings. Since the beginning, human beings have faced pollutants from natural sources in the environment itself such as natural disasters that caused epidemics, famine, et cetera. (Alqassas, 2000). Due to technological progress, the environment have become more contaminated as a result of industrial effluents and harmful waste. In addition to that, it is also a result of the misuse of natural resources in a way that led to the disruption of the ecological balance and posseds a threat to the environment (Mekhamer, 1984).

There are many opinions with regards to the identification of the different sources and types of material that causes the pollution of the environment. According to the Stockholm Conference pollution can be
defined as “the human activities that lead to the inevitable introduction of materials and sources of energy to the environment. These materials threaten human health and natural resources”.

The risk of contamination of the environment is considered one of the oldest and most common risk faced by the environment, humans, individuals, and groups. It should be noted that states have an obligation to prevent and overcome this problem. The state is one of the most essential for the protection of the environment as the problem of pollution threatens the right of human beings to live in a clean environment without pollution (Alabiedy, 2011).

The view of Islam concerning pollution is through the use of more powerful indications of the concept of pollution. This legal opinion combine three elements. The following verses of the holy Quran affirms the existence of pollution of the environment in all its elements through this verse. Allah Almighty said: “Corruption has appeared on land and sea with what the hands of the people earned. Therefore, they taste some of what they did in order that they return” (Al-Hilali & Khan, 1997: pp. 545-546). This verse identifies three key elements of pollution.

1) According to the verse quoted above, a change to the air, water, or land environment must have occurred. The natural balance that God Almighty have created in the environment have been disturbed. The following holy verse have expressed this idea: “Corruption has appeared on land and sea.” In other words, pollution, the imbalance of resources, and blessings which God offered to His slaves on land and sea have appeared. Hence, the earth have weakened and it is no longer able to grow. The deterioration of the quality of water has made it undrinkable and also endangered the lives of marine organisms (Issa, 2002).

2) The change is attributed to man and his actions. The following verse have expressed this idea: “with what the hands of the people earned.” Therefore, human acts and his deeds are responsible for the corruption, destruction and turmoil that have exploited the wealth and resources of the environment; as compared to when there was no corruption before human existence. However, corruption was created by humans who went against the approach of the Creator of the universe in which corruption does not originally exist in the universe (Qutb, 2003).

3) The third element: damage or the possibility of damage to environmental resources and its destruction, the deterioration of its condition and its application that became invalid and was confirmed in the holy Quranic verse: “Therefore, they taste some of what they….” This means that the suffering, damage and hurt was the result of human action and they must bear the consequential punishment for the damage they have inflicted on the environment. This have causeds damage and torment due to the violation of God's command as well as not obeying His orders when dealing with the environment. Therefore, the call of the Holy Quran to those who are accused of corruption is to quit their oppression, transgression and causing corruption on Earth (Morsi, 1999). The following holy verse shows this idea, Allah Almighty said: “did in order that they return.”

Degradation of the Environment and the Draining of its Resources
The United Nations warned of environmental degradation due to economic, agricultural and industrial activities practiced by humans. It continuously called upon the countries to undertake effective procedures to control and prevent the harmful effects of such practices, which may lead to further environmental degradation, as well as to improve the environment. It is clear that vast areas of arable and fertile lands are facing desertification as the Secretary-General of the United Nations have announced that desertification and drought is threatening the lives of more than one billion people in more than 110 countries in the world (UN, 2003).

Noticeably, the major nuclear and industrial powers are the biggest culprits when it comes to polluting the environment as more often than not they do not pay heed to environmental safety or the international
agreements as they are even exporting hazardous nuclear waste to be stored and hidden away in some remote area in some poor countries in exchange for low prices. The major industrial powers also refused to take firm steps to protect the environment as they want to avoid the high prices of industrial products (Amer, 1999). Moreover, it is noticed that International Criminal Law still lacks binding sanctions on international hegemonic powers because most of the declarations or resolutions of international conferences are non-binding recommendations and the major powers refuse to abide by them because they interfere with their economic interests. Therefore, the inclusion of environment pollution crime as an international crime punishable in accordance with International Criminal Law should be reconsidered (Dbach, 2014).

By exploring the basic law of the International Criminal Court, one realizes that Article 7 which includes acts falling within crimes against humanity do not have any text to confirm the inclusion of polluting the environment among these crimes (Rowan, 2009)

**Criminal Responsibility of the Offenders of Pollution Crime**

Criminal responsibility is defined as “the perpetrator's liability to undergo the penalty prescribed for it in the law”; in other words, the offender of environmental pollution crime is obliged to undergo the penalty prescribed by law as a punishment for committing the crime which is subject to penalty (Jurani, 2010).

In terms of Islamic jurisprudence, the meaning of responsibility is contained in the following verse: “That was a nation which has passed away. They shall receive the reward of what they earned and you of what you earned. And you will not be asked of what they used to do” (Al-Hilali & Khan, 1997: pp. 26). It is noticed that the scholars of Islamic jurisprudence did not use the term in penal law only, but they applied it to civil law as well. They called the first one as "the necessity of the punishment", and the second as “warranty” (Abn Rushd, 1961). Both Islamic jurisprudence and criminal law agree that criminal liability depends mainly on the presence of the following three conditions, namely:

1) The offender committed the crime.
2) The offender had intention to commit the crime.
3) The offender is aware of the illegality of this action.

The legitimacy rule requires personal responsibility, i.e. humans are the only ones who have criminal responsibility, but not animals or inanimate objects; however, those things may result in civil liability. This, in turn, is the application of the personal responsibility principle; a person is responsible only for his personal actions. Consequently, he cannot be punished only for the crime that he committed or contributed to it as a partner, in application of the principle of personal punishment which is considered as one of the most important principles of modern criminal legislation. The Almighty said: “… and no bearer of burdens shall bear the burden of another…” (Al-Hilali & Khan, 1997: pp. 199).

- In the verse: “Leave (O mankind, all kinds of) sin, open and secret. Verily, those who commit sin will get due recompense for that which they used to commit” (Al-Hilali & Khan, 1997: pp. 190).
- And this verse: “... Every person is a pledge for that which he has earned” (Al-Hilali & Khan, 1997: pp. 714).
- Then He said: “… But you shall certainly be called to account for what you used to do” (Al-Hilali & Khan, 1997: pp. 361).

Therefore, no one shall be punished, whether it is a limited, retaliatory, or a discretionary punishment, except those who participated in the crime and are found guilty (Al-Adli, 2000), as the Almighty said: “And never would We destroy the towns unless the people thereof are Zâlimûn (polytheists, wrong-doers, disbelievers in the Oneness of Allâh, oppressors and tyrants)” (Al-Hilali & Khan, 1997: pp. 524).
However, the evolution of the legal system, the emergence of new facts in the field of responsibility, and the desire to provide effective protection, whether nationally or internationally, are required for some legitimate interests against some forms of serious and complex criminality. This is especially so at the environmental level and they are known as economic crimes. Industrial institutions (legal entity) which threaten the security and safety of the community, will have to face appropriate measures and binding sanctions that can be taken against them as perpetrators of environmental crimes (Ganaha, 2004).

**Criminal Responsibility of Legal Entities in Environmental Crimes**

The notion of criminal responsibility of legal entities and its related provisions includes the clarification of criminal responsibility of legal persons in Islamic jurisprudence, criminal responsibility in the positive law and finally, room for comparison between the two types of legislations.

**Criminal Responsibility of Legal Entities in Islamic Jurisprudence**

The criminal responsibility of legal entities in environmental crimes is not specified in Islamic jurisprudence, therefore, there is no explicit provision that recognizes the existence of legal entities or their responsibility, whether civil or criminal. In addition, the old scholars of Islam did not discuss this issue because it did not exist in their time, unlike some contemporary scholars who are divided into two groups regarding the issue of recognition of criminal responsibility of legal entities, which requires the identification of the following two viewpoints:

**The First Viewpoint:** It is said that "since its early days, Islamic jurisprudence knew about legal entities, they were considered as the treasury of the state, on the one hand, and Waqaf (endowment), on the other hand, schools, shelters, hospitals and others were considered as legal entities and they had rights of ownership, i.e. the rights to own and dispose property, e.g., the treasury of the state collects tributes and has expenses due to the foundlings and captives, while Waqaf (endowment) has its own property or what is worth of the others’ rights (Rakha, 1999)."

But this view has denied the criminal responsibility of those legal entities or persons because that responsibility is built on cognition and choice. Undoubtedly these legal entities or persons lack both of them and therefore, they are not qualified to undergo that responsibility. However, this team believes that the punishment of legal entities should be borne by those natural persons who supervise its affairs, such as the penalty of cancellation, demolition, removal, and confiscation. Furthermore, it is legitimately possible that these persons can be made to limit their harmful activities for the protection of the community, its systems and security (Al-qahwaji, 1993).

**The Second Viewpoint:** the second opinion states that legal jurisprudence does not recognize the existence of legal entities because Islam does not sentence the legal entity for criminal responsibility on the mere assumption that the will of existence is present in the legal entity. Thus, scholars have replaced it with the notion of allocation of patrimony which, as they think, is a sufficient notion, rather than a synthesis of a non-existent person, since its recognition in criminal field could threaten the principle of personal criminal responsibility (Rakha, 1999).

Nevertheless, it is noticed that this opinion, although it excludes the criminal responsibility of legal entities, but it is close to the previous opinion by introducing a new form of responsibility along with the responsibilities of children to protect society from damaging their interests. This is termed as the non-innocence of these persons in case of damages resulting from their various activities, especially if those damages are related to an element of the natural environment such as humans. While some jurists believe that the lack of a theory of legal persons in Islamic jurisprudence does not preclude its applications in the field of criminal responsibility such as the treasury of the Muslims are responsible for the payment of blood money and the expiation by an Imam for killing somebody unintentionally when he was carrying out the limit and blood money of those killed in public places, like public markets and streets, without
knowing their killers, then the oath should not be, in such a case, due to the lack of belief of all the people (Al-qahwaji, 1993).

It can be concluded that in Islamic jurisprudence, the legal entity, while it has been proven that it is responsible for some of the financial rights and obligations, is not legally eligible for punishment because it does not have the mind to recognize responsibilities and to be entrusted with its eligibility for performance and punishment.

**Criminal Responsibility of Legal Entities in Positive Law**
The prevailing idea in criminal jurisprudence and laws is that legal entities do not inquire about what crimes their representatives committed when performing their duties, even if this is for their own interest. But, the criminal responsibility of the crime is related to which representatives of this legal entity committed the offence. This has not prevented it to deviate from the general rule, which is a trend of most modern criminal laws, based on the objections against the general rule which is not the responsibility of the legal entity.

To confirm that traditional principle as a general rule, they have listed some arguments that were not free from criticisms and to illustrate the exception which was adopted by the various countries of the world, this item should be divided into three parts.

**The Objections of Responsibility of a Legal Entity**
There were a number of objections to the criminal responsibility of legal entities for environmental crimes monitored by some scholars, who said that (Fouda, 2003):

- Legal entity is an assumption by the legislation due to practical necessities to satisfy the demands of public or private interests. Thus it is not a human being who has self-will, but the legal entity’s will is the will of the human being who represents it.
- The existence of a legal entity and its eligibility are determined by the purpose for which it was created. Consequently, its existence is a necessity that should be estimated accordingly.
- The confirmation of criminal responsibility is an obvious violation of the personal punishment principle in law because the punishment will inevitably be assigned to human beings or natural persons who created the legal entity.
- Some penalties such as death sentences and corporal punishments cannot only be meted out to natural persons. However, a legal entity does not have a head to be hung from or a body to be imprisoned.
- The purpose of punishment is to deter and/or rehabilitate and this cannot be achieved by punishing a legal entity.

It is ironic to say that the punishment of a legal entity has a deterrent and frightening effect so much so that it stops committing other crimes or that the punishment causes it to reform, become more disciplined and leads it to follow the right path. Therefore, some scholars say that legal entities can commit environmental crimes, but it cannot be punished as it is like an incompetent person for whom the punishment does not give rise to any benefit.

**Criticizing the Objections Against the Legal Entity’s Responsibility**
The trend of modern jurisprudence have adopted the need to acknowledge the criminal responsibility of a legal person for environmental crimes is rooted mainly in the fact that the arguments of the opponents are not free of defects and criticisms—and the defects are as follows (Alzhabiy, 2000):
Criminal Liability of Legal Entities for Polluting the Environment: Shariah and Law Perspectives

- The viewpoint that a legal entity is an assumption made by the legislation due to practical necessity and its will is borrowed from the will of the human being who represents it as an invalid view, either legally or in reality, but the right, which is a trend of modern jurisprudence, is that a legal entity’s will is independent of the members’ will who form it. This is what German jurist (Otto Gierke) meant by his foundation of the theory of the real will of a legal entity.
- Also, the supporters of those who prohibit criminal responsibility of a legal entity for environmental crimes are required to provide justifications to differentiate between their non-acknowledgement of criminal responsibility and their acknowledgement of civil responsibility of a legal entity for environmental damages, especially when the latter is an implicit recognition of the availability of the real or self-will of a legal entity.
- The viewpoint that the existence of a legal entity and its liabilities are determined by the purpose for which it was created is an inappropriate viewpoint because the allocation of a legal entity for a particular matter is not incompatible with the possibility of assigning the crime of environmental pollution to it. This is especially so as we know that a legal entity may be rewarded like associations, clubs and companies, if they provide valuable services to the public such as protecting the environment. So why are they not liable for punishment if they committed acts that are criminalized under the law.
- The opinion that the punishment of a legal entity for its environmental crimes violates the personal punishment principle is inappropriate. This is because the punishment of those persons who form a legal entity is required by necessity and public interest and it is of great benefit to society that the individuals do things in the right way and comply with the legal obligations placed upon them.
- The opinion that it is impossible to apply some penalties to a legal entity for committing dangerous environmental crimes such as death penalty and imprisonment is also incorrect in terms of the punishment possibility to fit a legal entity and the extent of environmental damage, such as its cancellation, imposition of a fine, confiscation, deprivation of some privileges like accepting donations and establishing branches, suspension of its activity or the closure of all or some of its branches for a certain period of time. Furthermore, some jurists have suggested that the fines imposed under the Penal Code that can be applied to legal entities be replaced by a prison sentence.
- The opinion that the punishment of a legal entity for the crime of polluting the environment does not achieve the purpose of punishment, which is deterrence and rehabilitation, is incorrect because there are natural persons who are not deterred or rehabilitated by the punishment. However, they experienced the penalties assigned to them for committing crimes.

The Acknowledgement of Criminal Responsibility of Legal Persons And Its Obliged Punishment

Modern jurisprudence in most countries of the world tends to acknowledge that legal entities are criminally responsible for dangerous environmental crimes that threaten the lives of human beings. Companies, associations and institutions that are recognized as legal entities have spread and widened its activities, and their threat to the environment has become greater. Therefore, it is necessary to treat legal entities like natural persons and subject them to the same provisions of the Criminal Law that are applicable to all natural persons. As to some of the objections presented by their supporters saying that some of the penalties cannot be applied only to natural persons like death penalty and corporal punishments, it can be said: "The strongest corporal punishment, which is the death penalty, can be applied to a legal entity if it fits. This means the elimination of this legal entity, in addition to that there are many punishments that can fit a legal entity, such as a fine, confiscation and the deprivation of certain privileges like accepting of donations or the establishment of branches, suspending its activity or closing of all or some of its branches for a certain period." (Alia, 2002). Consequently, some jurists have suggested the application of the provisions of Criminal Law to legal entities by replacing financial penalties with imprisonment.
CONCLUSION

The Holy Quran and Prophetic Hadiths have explained that the environment with all of its components, elements, parts (whether air, water or soil) belongs to Almighty Allah and it is temporarily held by human beings on trust only, thus human beings are responsible for its protection and welfare. Accordingly, it becomes a field test of human morality and the extent of his commitment to the most supreme approach in performing this message for which he has been created. Therefore, fourteen centuries ago, Islamic law paid attention to environmental topics as a defense and protection which essentially stem from the danger which everyone becomes exposed to at all times and from everywhere, which is pollution that has no boundaries. Thus, it has become an inclusive danger threatening the collapse of the world and in order to survive it is necessary to prevent and deter each and every source of danger that threatens the collapse of the world.

However, it is noted that most criminal protections afforded to the environment at the local or international levels are generally weak because of the weakness of the sanctions against perpetrators of various environmental crimes, especially when we know that positive legislators have regulated various crimes against environmental interests, but they have classified most of them as misdemeanors and contraventions. Consequently, this abstract regulation requires reconsideration, as well as enhancing the punishment for those who attempted to pollute the environment. This cannot be achieved unless there is a reformulation of legal rules to achieve adequate protection for the environment. As such, the following recommendations are proposed.

- Create special environmental courts to ensure that the judges have the scientific expertise and capacity to judge this type of environmental crimes issues.
- Develop guidelines for judgment and databases to assist judges in making appropriate decisions regarding environmental issues as quickly as possible. These guidelines should overcome the problems of conflicting penalties provided by legislation and also after taking into consideration the severity of the offense.
- Implementation of advanced training programs for judges to become specialist in environmental issues so that they can settle environmental crimes judiciously.
- Develop a strategic action plan to comply with the obligations at the regional and international levels of environmental agreements and contracts that have been ratified by all countries.
- To conduct programs at the national, regional and international levels for environmental awareness with a focus on environmental and international law, agreements and contracts. It should address the national, regional and global environmental issues and the challenges of climate change, as well as desertification and the scarcity of drinking water and others. The legislative role must be strong to control these serious environmental problems.
- The necessity of giving tax exemptions to companies and establishments that maintain the environment and also to give tax incentives to companies to encourage them to include some plans to take care of the environment in all their future investment plans.
- On the other hand, the necessity of acknowledging the principle of progressive taxation on enterprises and companies with behaviors that are critical to the health of the environment in some of their future actions and projects.

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An Overview of Network Marketing in Indian Market

Keywords: Direct Sales, Network, incentives, Multilevel

INTRODUCTION

It is known by different names: multilevel marketing (MLM), network marketing (NM), and network marketing direct selling organization (NM DS). Regardless of what it is called, MLM (the label preferred here) is a much maligned form of the direct selling retail channel of distribution. MLM companies are being continually scrutinized by government regulatory agencies in the European Union, the United States, and the People’s Republic of China. The claim is made that MLM companies, the MLM retailing channel of distribution generally, and the specific method of compensation of distributors, are illegal pyramid schemes.

Increasingly, one potential indicator of pyramiding that is being suggested by government agencies in the European Union and the United States is the extent of internal consumption, which is defined by Peterson and Albaum (2007, p. 317) as the practice of an employee or other type of company representative purchasing products or services at a discount from list or regular market price from his or her employer (or other principal) for his or her own use or consumption Multilevel marketing is a way of distributing products or services in which distributors earn income from their own retail sales and from sales made by other direct and indirect recruits, that is, people they have recruited to sell, and people their recruits have recruited, into the direct selling organisation as distributors (Vander Nat & Keep, 2002, p. 140). Technically, multilevel marketing is not a type of marketing but rather is a form of compensation (emphasis added) in a direct sales company where the salesperson can earn money on his or her own personal retail sales and also on the sales of people he or she personally recruited into the business and on the sales of people recruited by their recruits (World Federation of Direct Selling Associations, 2011a, p. 1). A distributor’s own sales include products consumed by the distributor himself or herself, that is, internal consumption.

Thus, MLM companies are direct selling organisations that depend on personal selling, and that reward distributors (salespeople) for (1) buying products, (2) selling products, and (3) the purchases and sales made by individuals they recruited to become distributors (Coughlan & Grayson, 1998, p. 402). Although recruitment of others to join an MLM network is encouraged, no rewards are given for the simple act of recruitment (emphasis added). The only rewards from recruiting others come from the sales made, and the consumption by, those recruited (Berry, 1997, p. 76). True multilevel marketing involves the development of a legitimate retail selling and distribution network (emphasis added) that grows by social networks (Coughlan & Grayson, 1998, p. 425). Such organisations offer actual products and/or services and do not require distributors to take large financial risks (Salter, 1997, p. 5).

Network Marketing is a system of moving products or services via a Network of agents known as ‘distributors, who are not salary paid employees but independent contractors of respective Network Marketing Companies. The Network is built by the distributors themselves as everyone they recruit or sign up becomes a wholesale customer who in turn can sponsor others as sub-distributors known as ‘Down lines’. The introducer is known as ‘Up Line’ distributors. In traditional marketing, when the
manufacturers want to get their products quickly into the hands of as many people as possible, they may require millions of money for the expenses for advertisements, celebrities and other expenses. It will also probably require going through layers of middlemen like wholesalers, and retailers, etc. The Network Marketing companies will produce and supply the products on wholesale basis, provide the necessary promotional and sales materials, which are chargeable; handle the data processing, accounting and even impart the training. This group of people then introduces the products and business opportunities to others, who in turn, introduce it to even more people. So it continues with the base of consumers and Independent contractors from time to time, growing leaps and bounds. The company does not have to advertise any more either because its distributors do it for them often just through “word of mouth.” ‘Word of Mouth’ is known as ‘Buzz marketing’ or ‘Viral marketing’. Word of Mouth Marketing Association (WOMMA) defined ‘Word of Mouth’ as “Giving people a reason to talk about the products and services, making it easier for the conversation to take place”. When a customer is satisfied, the same customer will refer to known people e.g. to the kith and kin by way of giving positive Word of Mouth, for example, the Hollywood movie *Titanic*, or any good experience at a restaurant.

Network Marketing companies does not have to advertise any more either because its distributors do it for themselves often just through positive “word of mouth” publicity. ‘Word of Mouth’ through friends and relatives plays a dominant role in spread of Network Marketing for example, *Amway India Enterprises* and *Hindustan Unilever Network* uses this kind of publicity. The study conducted by Bhavannarayana Kandala, Madhusudhan Prasad V (2010) found that *Amway India* and *Hindustan Unilever Network* promote individual ‘business opportunity’ through their direct selling approach of world-class network products. Most of the distributors collected information about *Amway India* and *Hindustan Unilever Network* through the ‘Friends’ and ‘Relatives’, who are also distributors and in the opinion that the favorable products of the distributors are fast moving Network products. A majority of the distributors opined that the long-term association with *Amway India* and *Hindustan Unilever Network* influences the distributors to pursue the business. The level of satisfaction has been measured with the help of five-point Likert scale technique and Henry Garret Rank technique. The demographic characteristics such as gender, education, marital status, occupation, and monthly household income of the distributors of *Amway India* and *Hindustan Unilever Network* products do not influence their level of satisfaction.

Although the MLM sales organisation results in various levels (i.e., downlines and uplines or more generally downstream and upstream), distributors can order products directly and receive commissions (bonuses) directly from the company. This is known as direct fulfillment, in contrast to indirect fulfillment, whereby so-called downline distributors have to work through their upline “leaders” for product ordering and delivery and for payment of bonuses earned. As in all forms of direct selling, MLM distributors purchase the products or services they sell or consume themselves from the MLM company and then add a profit margin for sales made to consumers not in the MLM organization.

Direct Selling generated self employment opportunities to the Women. According to FICCI and Indicus Analytics (April 2013) is going to increase its importance in India, which will provide an additional source of employment often part-time and to women. Contribution of direct selling to tax revenues to Governments will also increase and it is indicating that a positive correlation between ‘direct selling’ and ‘Monthly Household Income’ was indicated by PHD (Progressive, Harmony and Development) studies. Many myths were prevailing on Multilevel Marketing doubting their ethical perspectives.

In light of the above facts it is imperative and apt to take up a study on NM practices in Indian context focusing on the impact of demographic and behavioral aspects of distributors on them. The study is an attempt to focus on various dimensions of NM to provide insight of various linkages contributing to its success. Direct Selling industry market size was INR 63,851 million for 2011-2012 and is expected to reach INR 1,08,436 millions by 2014-2016. The members of these groups are spending time and effort, meeting stringent requirements and paying money to attend the business building seminars. The distributors are willing to sacrifice because they hope to generate new sales and form alliance.
OBJECTIVES

1. To study and analyze the factors influencing the satisfaction of distributors of select NMCs.
2. To compare the demographic characteristics of distributors belongs to select NMCs.
3. To compare the perceptions of distributors belongs to select NMCs.
4. To formulate a model for ‘Level of satisfaction’ for NM distributors.

HYPOTHESIS

Ho1: There is no significant association between ‘Demographic variables’ and ‘Factors Influencing Business Orientation’ of Network Marketing.
Ho1.1.2: There is no significant association between ‘Age’ and ‘I keep in touch with my customers regularly’.
Ho1.1.3: There is no significant association between ‘Age’ and ‘I keep in touch with the distributors in other Network Marketing Company’s’.

QUESTIONNAIRE

The respondents were administered a structured non-disguised questionnaire (shown in Appendix A). The questionnaire begins with a brief introduction revealing the purpose and importance of the survey in addition to the statements allaying fears regarding participation and confidentiality of their responses in the survey. The self-administered questionnaire was developed using scales from previous studies. The questionnaire consists of ‘fill in the blank’, ‘dichotomous (closed ended) questions’, ‘double-barreled questions (Yes, No and if Yes’ further information), ‘Ranking’, ‘five-point Likert scale statements’ and ‘Open-ended’ descriptive questions. The questionnaire has been divided into two Constructs: Construct-A Demographic Attributes and Distributorship Experience, and Construct-B (Statements of Satisfaction).

Sampling Technique

It is cross-sectional descriptive study and the researcher had adopted Snowball sampling (Non Probability sampling method) by taking references from different distributors their down lines and up lines and cross lines etc. The respondents were selected on simple random sampling basis.

Period of The Study

A time period of about nine months from May 2013 to January 2014 was spent to collect the data. The areas from which information is collected and number of respondents from each area are shown in tables of sample composition.

DATA ANALYSIS

Ho1: There is no significant association between ‘Demographic variables’ and ‘Factors Influencing Business Orientation’ of Network Marketing.

Table 1: Chi-Square Test Results of Business Orientation

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>DF</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>31.439a</td>
<td>8</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>34.090</td>
<td>8</td>
<td>.000</td>
</tr>
</tbody>
</table>
An Overview of Network Marketing in Indian Market

Table 2: Business Orientation Significance Value.

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Approx. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>On Nominal by Nominal</td>
<td>Phi</td>
<td>.229</td>
</tr>
<tr>
<td></td>
<td>Cramer’s V</td>
<td>.162</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td></td>
<td>600</td>
</tr>
</tbody>
</table>

Table 3: Chi-Square Test Results of Touch with Customers

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>DF</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>35.464</td>
<td>8</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>37.980</td>
<td>8</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.016</td>
<td>1</td>
<td>.901</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>600</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Customer Touch Significance Value.

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Approx. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal by Nominal</td>
<td>Phi</td>
<td>.243</td>
</tr>
<tr>
<td></td>
<td>Cramer’s V</td>
<td>.172</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td></td>
<td>600</td>
</tr>
</tbody>
</table>

Source: Primary Data

Ho1.1.1: There is no significant association between ‘Age’ and ‘I use my Network Marketing Company products regularly’. Since significance value .000 < 0.05 Ho1.1.1 is Rejected and the strength of association between ‘Age’ and ‘I use my Network Marketing Company products regularly’ is 0.

Ho1.1.2: There is no significant association between ‘Age’ and ‘I keep in touch with my customers regularly’.

Ho1.1.3: There is no significant association between ‘Age’ and ‘I guide my down line into product selling activities’. Since significance value .000 < 0.05 Ho1.1.3 is Rejected and the strength of association between ‘Age’ and ‘I guide my down line into product selling activities’ is 0.

Ho1.1.4: There is no significant association between ‘Age’ and ‘I keep in touch with the distributors in other Network Marketing Company’s’.

Source: Primary Data
Table 5: Chi-Square Test Results of Touch with Distributors

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>DF</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>19.869</td>
<td>8</td>
<td>.011</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>20.426</td>
<td>8</td>
<td>.009</td>
</tr>
<tr>
<td>Linear-by-Linear</td>
<td>.399</td>
<td>1</td>
<td>.528</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>600</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.53.

Table 6: Distributor Touch Significance Value.

<table>
<thead>
<tr>
<th>Symmetric Measures</th>
<th>Value</th>
<th>Approx. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal by Nominal Phi</td>
<td>.182</td>
<td>.011</td>
</tr>
<tr>
<td>Nominal Cramer's V</td>
<td>.129</td>
<td>.011</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>600</td>
<td></td>
</tr>
</tbody>
</table>

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.

Source: Primary Data

Ho1.1.5: There is no significant association between ‘Age’ and ‘I keep in touch with the personnel in my Network Marketing Company office’.
Since significance value .011 < 0.05 Ho1.1.5 is Rejected and the strength of association between ‘Age’ and ‘I keep in touch with the personnel in my Network Marketing Company office’ is 1.1%.

Table 7: ANOVA Values Amway India and Hindustan Unilever Demographic Characteristics.

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1333.3</td>
<td>28</td>
<td>47.618</td>
<td>.757</td>
<td>.814</td>
</tr>
<tr>
<td>Within Groups</td>
<td>35929.0</td>
<td>571</td>
<td>62.923</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>37262.3</td>
<td>599</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>9.4</td>
<td>28</td>
<td>1.539</td>
<td>.039</td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>124.6</td>
<td>571</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>133,993</td>
<td>599</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>10.7</td>
<td>28</td>
<td>1.762</td>
<td>.010*</td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>124.2</td>
<td>571</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>135.0</td>
<td>599</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>78.3</td>
<td>28</td>
<td>2.800</td>
<td>1.339</td>
<td>.116</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1193.5</td>
<td>571</td>
<td>2.090</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1271.9</td>
<td>599</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>28.7</td>
<td>28</td>
<td>1.025</td>
<td>2.167</td>
<td>.001*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>270.1</td>
<td>571</td>
<td>.473</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>298.8</td>
<td>599</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AGBA 12th World Congress
Page 304 of 1173
Discussion on ANOVA

Table 4.76 ANOVA table reveals that the demographic variables such as Gender, Marital Status, Occupation, Education, and Monthly Income differ significantly and Age does not differ significantly of distributors of Amway and Hindustan Unilever Network.

INFERENCES: The ANOVA test results shows that Age do not differ significantly of distributors of Amway and Hindustan Unilever Network $F_{(28, 571)} = .757, p = .814$.

The ANOVA test results shows that Gender do differ significantly of distributors of Amway and Hindustan Unilever Network $F_{(28, 571)} = 1.539, p = .039$.

The ANOVA test results shows that Marital Status do differ significantly of distributors of Amway and Hindustan Unilever Network $F_{(28, 571)} = 1.762, p = .010$.

The ANOVA test results shows that ‘Occupation do differ significantly of distributors of Amway and Hindustan Unilever Network $F_{(28, 571)} = 1.339, p = .116$.

The ANOVA test results shows that ‘Education’ do differ significantly of distributors of Amway and Hindustan Unilever Network $F_{(28, 571)} = 2.167, p = .001$.

The ANOVA test results shows that Monthly Income do differ significantly of distributors of Amway and Hindustan Unilever Network $F_{(28, 571)} = 1.586, p = .030$.

The demographic characteristics such as Gender, Marital Status, Occupation, Education, and Monthly Income differ significantly and ‘Age’ do not differ significantly of distributors of Amway and Hindustan Unilever Network.

DISCUSSION OF RESULTS

- If an organization intends to switch over to Network Marketing has to offer a product range/mix, which is acceptable to be sold by different age groups of partners.

- To highlight the role of service in Network Marketing and communicates its importance to the distributors suitable, tangible measures of service, quality can be measured and monitored for kaizen (means small improvement on continuous basis across the organization).

- Distributors of all age groups are equally interested to use as well as sell entire product mix of Hindustan Unilever Network and Amway India Enterprises.

- ‘Word of Mouth’ (WOM) refers to the customer endorsement of the entire product range of both the players as the WOM publicity by satisfied customer is what is expected by the distributors, hence irrespective of Age of distributors, WOM Advertisement is preferred.

- Service plays a major role in the process of sale of products. Customers or users expect service to be part of the deliverables. The distributors to belonging to different age groups give equal importance to the service at all the three stages pre-sales, sales and post-sales.

- Since the reasons like ‘Retail Margins’ and ‘Be own boss’ are preferred by the distributors. These have to be highlighted in the sales pitch, while showing the plan to prospects.

  Based on the findings present conclusions were given. Then major finding are discussed and conclusions are drawn. The salient points drawn from chapter IV dealing with data analysis and results and chapter V dealing with discussion and interpretation are presented below.
The study reveals the factors influencing business orientation in NM organizations comprising of Regular Usage of Product, Regular Contact with Customers, Guiding Down line in Product Selling, Recruitment of new Members, ‘Continuous Contact with Distributors of other Networks’, ‘Contribution for Development of Network Activities’, ‘Continuous Contact with Network Marketing Office Personnel’ and ‘Referring Network Products to Acquaintances’.

The analysis of impact of demographic variables on factors influencing business orientation reveals that Age impacts regular usage of NM products. Occupation impacts developing regular contacts. Age, Marital Status, Occupation have impact on guiding down lines.

The analysis of differences in the perception of distributors of Amway and Hindustan Unilever Network reveal that there is significant difference between the distributors of the companies. In all the factors influencing business orientation.

The characteristics of distributors of AI & HUN differ significantly in respect of gender, marital status, occupation, education and household monthly income.

Business Opportunity in NMO is contributed mostly by NMS and Acquaintances.

International Quality, benefits from the products and Prompt service and WOM publicity are the top four reasons which influence the purchase of products from NM.

Retail Margins, Being Own Boss, Financial Freedom, Low Investment and High returns for joining NM business.

Service, self-employment, monetary gains, Feature Advantage Benefit are top four reasons for recommend others to join.

The major problems faced by NM distributors are in the areas of sponsoring new distributors, inadequate product rang, Lack of awareness/Knowledge about NM, and exorbitant prices compared to similar products or substitutes available in the local markets.

SUGGESTIONS

Based on the findings present suggestions were given.

1. Organization intending to adopt Network Marketing has to offer a product range/mix, which is acceptable to various age groups. People in the age groups of 18-40 years are purchasing less regularly compared to above 40 years, hence this segment need more attention in the aspects of product salability and Price.

As distributors of all age groups are equally interested to use as well as sell entire product mix, organizations involved in Network Marketing need to focus on the needs of all the age groups, while giving priority age group of 18-40 years.

2. Employees appear to use more NM products, when compared to Agriculturists, Businessmen, Professional and others. This may be because of fixed salaried persons may show more interest to increase their income through NM as part time occupation. A full time businessman may find it more advantages to focusing on his own business than diverting his attention on NM. It may pay well to focus on Agriculturists and Professionals, who may find time during slack period.
3. Overall the regular customer contact is less across all occupations. However employees are having less ‘Regular contact with customer’ than Non-employees. Promotional plans may be worked out to ensure ‘regular contact with customers’ by all the segments with focus on employees. Frequent customer meet should be arranged necessary support to the distributor by NM Company need to be given by the company.

4. Distributors above 41 years of Age group, Men and Agriculturist ‘Keeping in touch more with distributors of other NM companies’. To ascertain the reasons for being touch with other NM companies and take remedial actions to cultivate these segment to retain them.

5. The practice of ‘Guiding down line’ across all the age groups’ is not satisfactory across all demographics. Married distributor are ‘guiding down line’ more than the unmarried distributors. Employee are guiding down line better than Businessman, Professionals and Agriculturists and others. Motivating Non-Employee segment is important.

6. To highlight the role of service in Network Marketing and communicates its importance to the distributors suitable. Tangible measures of service quality can be measured and monitored. Kaizen (Small improvement on continuous basis across the organization) needs to be adopted for continuous improvement of services.

7. Since the reasons like ‘Retail Margins’ and ‘Be own boss’ are preferred by the distributors. These have to be highlighted in the sales pitch, while showing the plan to prospects.

8. International Quality, benefits from the products and Prompt service and WOM publicity are the top four reasons which influence the purchase of products from NM. To focus on these areas.

**ACADEMIC IMPLICATIONS**

1. Distributing for Network products are in least cases seen as a mere routine and necessary task for a vast majority of households. Thus, findings of this study addressed critical issues of distributor behavior by developing an integrative theory supporting the sequential structure of the constructs in Network selling.

2. This study further theory on distributor behavior in Network product re-selling by focusing on distributor’s selection decision making among Network Marketing Companies.

3. Apart from this, the study has expanded the body of knowledge by describing the impact of ‘Information Sources’ such as ‘Friends and Relatives’ towards Network Marketing.

4. Given the absence of published academic literature relating to Network marketing this study will add value to the existing ‘body of knowledge’ on this subject.

**MANAGERIAL IMPLICATIONS**

The findings highlight the importance of the following points relevant to Network Marketing managers and distributors.

Consistent with previous research the dissertation emphasizes the importance of Network Marketing. Information from this study can help marketers i.e. distributors to respond to the ever changing needs of end users in an Indian Network marketing re-selling. Quite a few of the major implications for Direct Selling are as follows:

1. With the heightened level of competition in today’s Network marketing reselling market, an increasing number of Network Marketing entities are currently facing difficulties in operating profitability, as it is
evident from the high churn rate. This study would enable producers to repositioning and adjust market communications themselves to retain the existing and attracting potential distributors.

2. Friends and Relatives are priority sources of information positive ‘word-of-mouth’ which has consistently been found to be more credible than commercial sources of information (i.e. media sources) on selection of re-patronage intentions and Method of Selling (MOS). This finding may serve as a precursor to distributors while devising promotional communication strategies.

3. This thesis underscores the importance of Method of Selling driven by determinant Network Marketing Organization which is decisive in determining repeat purchase and recruitment of new members. It is more pertinent to mention exemplary product mix, quality distributor service and facilities at product delivery points and facilities to offer a better atmosphere and environment are important for distributor satisfaction.

REFERENCES


A Study on Factors Affecting Training Effectiveness in Banking Sector: A Study with Reference to the State Bank of India, Allahabad, Uttar Pradesh

**Keywords:** Training, Training Effectiveness, Training Methods, Human Resources, India

**INTRODUCTION**

Training is an important personnel function in any organization, it play a vital role in the life of organization. Through training the effectiveness of work-force is increased and maintained. Training helps in transferring necessary skills, attitude and competencies in employees at different levels after identifying the need and relates it with the task of work to be performed. Whether for long term or short term training need, it should be need based, employees centric, result oriented, clear in objectives purpose both for trainer and trainee and with suitable climate for transfer of skills should be designed.

Training is a potential tool used for development of personnel there by enabling improvement in performance. Training is important for any organization irrespective of size, nature, structure. Investing in training is the asset for the organization. The basic objective of training is to establish a match between employee and his job. Therefore training is designed to improve knowledge, skills & attitude and thus, equip the individual to be more affective in his present job or prepare him for future assignment. From the point of view of an organization individual growth is a means to organization effectiveness. Other benefits include:

- It helps in avoiding loss and wastage due to lack of training or required skills.
- It helps in competitive advantage by way of maintaining skilled manpower in organization it helps in sense of belongingness in employees since they feel that organization is bothered for their development and helps in exploring growth opportunities.
- It helps in filling the deficiencies at right time thus avoiding losses.
- It helps in adapting to the changing environment and this leads to effective and faster development.
- It helps the organization stay ahead in competition with the help of trained and competent manpower.

**REVIEW OF LITERATURE**

Mirza S. Saiyadain, (1998) describes the objective of training differ according to the employees belonging to different levels of organization. The basic objective of training is to establish a match between employee and his job.

M.N.Ramesh, (1994) discussed that proper training motivates the worker to take interest in their work and increase their capacity for doing things in a better way. He further said that training could not be viewed in isolation but must be considered an integral part of the entire personnel programme.

Training is the formal and systematic modification of behavior through learning which occur as a result of education, instruction, development and planned experience.’ (Armstrong,2001:543)
A study of 74 senior managers by Farhad Analoui, (1995) in Indian Railways, over three years, has revealed that managers, in order to become effective, not only require task and people skills but also self-development knowledge and skills, because the effectiveness of the senior officials within the public sector has been disproportionately associated with task instead of people-related skills.

Diarmuid De Faoite, Colette Henry, (2002) discussed the importance of proving the effectiveness of training. Effectiveness is the primary motive for training. They define that in order to measure the effectiveness of training evaluating it by way of behavior changes on the job is most important. They emphasize that an approach whereby individuals can see how they have changed and quantify the amount of change is very important.

**PURPOSE OF PRESENT STUDY**

The raw human resource can make only limited contribution towards achievement of an organization objective. Therefore, training promotes willingness and efficiency of an employee in accomplishment of organizational objectives. Training increases the productivity of the employees and contribute to considerable saving in men, material and machines (Baun, Bernard).

Further, better informed workers by training are less prone to commit operational mistakes. Through training programmes, the organizational climate is likely to improve as endless chain of positive reactions.

Employees with adequate training perform meaningful work with knowledge, skill and pride. However, general perception is changing, apart from providing a structured career growth path, one of the reasons for this change in the mindset would be the nature of training provided to new entrants once they are taken on board. The employers are quickly realizing that they need to train and coach their employees appropriately for quality of their manpower.

The basic and primary objective of training& development are to adequately enhance the present effectiveness of officials, through a planned and deliberate process necessary potential and to ensure that they receive the needed training at the required stage & experience.

Through an infrastructure exists in the country for imparting technical education, yet a perceptible gap exists in the subjects being taught in the colleges. Hence the technically qualified personnel are to be trained further to meet the specific requirements of Banking Sector and keep pace with the rapid growth of the scientific & technological innovation from time to time. Moreover in banking sector the personnel may become obsolete due to age and temperament. This is more relevant in case of State Bank of India. They required a new orientation to the changed climate. In such a case training programmes foster creativity and initiative among employees.

**OBJECTIVES OF THE STUDY**

- To identify training need identification process at SBI
- To study different skills that employees at different levels feel important for improving their performance
- To study employees perception about training programs offered by SBI
- To study the satisfaction of the employees from different training programs

**RESEARCH METHODOLOGY**
The research is descriptive and diagnostic in nature where based on the practices the effectiveness of training is attempted to be measured at State Bank of India, Allahabad. Sample size 50 which is selected across different levels to measure and compare different skill requirement of employees in the organization. Sampling unit is all employees of State Bank of India, Allahabad. Type of sampling used in this study is convenience sampling. In this method, the sampling units chose randomly from the total employees at all levels in the organization. The collected data based on questionnaire was analyzed using percentage method to identify the relationship between factors affecting training.

DATA ANALYSIS AND INTERPRETATION

Based on the questions and response collected the following analysis and interpretation can be made. The government Act and Rules stipulate that every SBI branch must have only the trained paid staff. It means that SBI should not have any staff without training at any time. As a matter of fact the SBI feel that those who are not trained and who have not attended any training course, are considered ‘Not Qualified’ for holding the post even though they possess required formal educational qualification. If the bank recruits any untrained candidates, it is the responsibility of the Bank to get them trained within a reasonable time. After a thorough discussion and feedback on training need identification 9 different skills which the Bank tries to instill at different levels were identified and then importance that employees at different levels consider were recorded and identified. The details of these are as follow:

<table>
<thead>
<tr>
<th>Table 1: Table showing The Difficult Areas Of Work In Initial Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Column1</strong></td>
</tr>
<tr>
<td>Particulars</td>
</tr>
<tr>
<td>Lack of knowledge of Procedures</td>
</tr>
<tr>
<td>Problem in recovery of loans</td>
</tr>
<tr>
<td>Problem in contracting loanees</td>
</tr>
<tr>
<td>Problem on managing field work</td>
</tr>
<tr>
<td>Maintenance of Accounts</td>
</tr>
<tr>
<td>No proper guidance</td>
</tr>
<tr>
<td>Public relations</td>
</tr>
<tr>
<td>Preparation of Annual Statements</td>
</tr>
<tr>
<td>Knowledge of Financial and Accounting aspects</td>
</tr>
</tbody>
</table>

After having analyzed the quantum of trained personnel of SBI, now it is proposed to examine the opinions of the employees relating to the pre-training and post-training experiences. It was found that the employees had few difficulties during pre-training period and their work efficiency can improve after training. The responses have been tabulated and presented in Table1 from which it can be understood that 78.12% of respondents felt difficulty in recovery of loans and in carrying out field after joining in service i.e. before acquiring practical training. About 46% of employees have expressed that they were lacking the knowledge of banking procedures. In SBI it is a general practice that the clerks are also transferred as supervisors to attend to the field work. Therefore, it is necessary for them to have the knowledge of preparation of Annual Statements. In this connection, it was found that about 66% employees feel difficulty in preparation of Annual Statements. It is clear from above analysis that the employees have difficulties in vital areas like recovery, preparation of statements and banking procedures in the initial stages i.e. before training.
Table 2: Table showing The Benefits Derived From Training

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Column2</th>
<th>Column3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved knowledge</td>
<td>44</td>
<td>78.75</td>
</tr>
<tr>
<td>Improved confident in work</td>
<td>39</td>
<td>59.37</td>
</tr>
<tr>
<td>Achieved Mastery over the banking procedure</td>
<td>44</td>
<td>68.75</td>
</tr>
<tr>
<td>Better realization of duties and responsibilities</td>
<td>28</td>
<td>43.75</td>
</tr>
<tr>
<td>Better handling of field problems</td>
<td>37</td>
<td>53.75</td>
</tr>
<tr>
<td>Easy preparation of Annual Statements</td>
<td>42</td>
<td>65.62</td>
</tr>
<tr>
<td>knowledge of legal procedures</td>
<td>38</td>
<td>56.25</td>
</tr>
<tr>
<td>knowledge of SBI Principles</td>
<td>44</td>
<td>68.75</td>
</tr>
<tr>
<td>Knowledge of Financial and Accounting aspects</td>
<td>41</td>
<td>65.75</td>
</tr>
</tbody>
</table>

Table 2 explains the improvements achieved by the employees on account of training. These opinions are expressed by 50 selected employees to a question whether they have derived any benefit out of the training? Out of the 50 selected employees of SBI, 44 (78.75%) confirmed that they have broadened their horizon of SBI banking, 68.75% of respondents acquired better knowledge of banking procedures and that about 66% of respondents could improve their knowledge of preparation of Annual Statements. And that of knowledge of financial and accounting aspects it is about 66%. In brief, the responses presented in Tables 1 and 2 amply prove that the training improves the skill of employees at all levels.

FINDINGS OF THE STUDY

Thus from the above analysis the following observations were made:

1. Training and development programs in SBI are aimed at systematic development of knowledge, skills, knowledge of banking procedures and better realization of duties and responsibilities.
2. Knowledge of banking procedures is the most important factor in banking sector. It plays a major role in employees’ growth and development, commitment towards job. It is evident from the analysis that 78.75% of respondents acquired better knowledge of banking procedures.
3. It was found that almost irrespective of the level need of focusing on Annual Statements, legal procedures, financial and accounting aspects along with knowledge of procedures were accepted to be strong factors in which skills need to be developed, thus while designing training programs focus should be on emphasizing these skills so that training becomes more employee driven.
4. The analysis revealed that training can show visible and effective results and that depending upon the nature of the training. Participants could be helped to improve upon existing qualities & develop new qualities.
5. To evaluate training effectiveness by matching post training achievement with pre training expectations of the managers, peers, subordinates and trainee himself. Table2 explains the improvements achieved by the employees on account of training.
6. Also in questionnaire based on suggestions of employees to improve T&D effectiveness followings observations were made-
   a. Participants believe that training needs should be identified according to the level, designation and job profile and such training needs should be finalized only after conducting a joint discussion between HODs and their subordinates.
b. Participants said that training cannot be effective unless policies and practices in related areas support and sustain the training effort. A centralized system of training should be formulated & undertaken.

c. Out of 44 trained employees one has expressed his dissatisfaction about the utility of training. He clearly state that the training obtained is very preliminary and not useful for performing the job.

d. It is heartening to note that 35 trained employees opinion the training programme has been useful in discharging their duties in the bank.

e. 22% of the trainees reveal that they are inadequate to cater to the needs of the internees. Hence, it can be inferred that the training acquired at the training institutes is not bad but there is a need to improve infrastructural facilities like board and lodging and library services.

CONCLUSION

It can be concluded from above analysis that in order to make training more effective in banking sector few changes and improvements are required like identification of training needs should be conducted more frequently in order to gauge the perception of employees regarding training & development process practiced by the organization. No employees would be perfectly efficient in his work unless he is given knowledge of the task being performed by him. It should be borne in mind that training is only one of the mutually dependent components of a personnel program for organizational effectiveness. It is expected that the employees apply their newly acquired knowledge and skills on the job such a way that they aid in the achievement of organizational goals.

No employees would be perfectly efficient in his work unless he is given a knowingly of task being performed by him. In SBI, training is considered as a basic unit since the employees are to blend the principles of the bank with business activities, selection of a suitable method of training is aiming step in the organization of training needs of the employees.

REFERENCES


Exploring the Scope of Multinational Firms of India in Overseas Market: An Analysis of OFDI

Keywords: Emerging Market Economies, Foreign Direct Investment, Outward Foreign Investment, India

INTRODUCTION

An Emerging Market Economy (EME) is defined as an economy with low to middle per capita income. Such countries constitute approximately 80% of the global population, and represent about 20% of the world's economies. The term was coined in 1981 by Antoine W. Van Agtmael of the International Finance Corporation of the World Bank.

Although the term "emerging market" is loosely defined, countries that fall into this category, varying from very big to very small, are usually considered emerging because of their developments and reforms. Hence, even though China is deemed one of the world's economic powerhouses, it is lumped into the category alongside much smaller economies with a great deal less resources, like Tunisia. Both China and Tunisia belong to this category because both have embarked on economic development and reform programs, and have begun to open up their markets and "emerge" onto the global scene. EMEs are considered to be fast-growing economies (Investopedia).

FDI

Apart from being a critical driver of economic growth, foreign direct investment (FDI) is a major source of non-debt financial resource for the economic development of India. Foreign companies invest in India to take advantage of relatively lower wages, special investment privileges such as tax exemptions, etc. For a country where foreign investments are being made, it also means achieving technical know-how and generating employment (ifeb.org).

The Indian government’s favorable policy regime and robust business environment have ensured that foreign capital keeps flowing into the country. The government has taken many initiatives in recent years such as relaxing FDI norms across sectors such as Defense, PSU oil refineries, telecom, power exchanges, and stock exchanges, among others (ifeb.org).

OUTWARD FDI

The Reserve Bank said overseas direct investments by Indian companies, including Bharti Airtel, totaled US$ 2.37 billion in February, 2014, up about 30.25 per cent year-on-year. The investments or financial commitments in form of equities, loans and guarantees were US $ 6.55 billion in January 2014 and US $ 1.82 billion in February 2014. Bharti Airtel issued guarantee worth US $ 1.01 billion to its Netherlands based joint venture, through which it looks after Africa operation.

RBI said in February, the overseas direct investment in form of equities, loan and guarantee was US $ 279.18 million, US $ 98.61 million and US $ 1.99 billion, respectively. In another press release, the Reserve Bank said exports of services in January totaled US $ 13.92 billion, up from US $ 12.86 billion in the previous month. On the other hand, imports were up at US $ 7.26 billion in January as against US $ 6.72 billion in December, 2014.
EVOLUTION OF OUTWARD FOREIGN INVESTMENT POLICY IN INDIA

Phase I (1992 to 1995): Period of Liberalization of Indian economy
Guidelines on outward FDI were in place before the process of liberalization and globalization of Indian economy in 1991-92. Policy changes since 1992 were undertaken keeping in view the changing needs of a growing economy. Understandably, the rules were quite restrictive and subject to conditions of no cash remittance and mandatory repatriation of dividend from the profits from the overseas projects. In 1992, the ‘automatic route’ for overseas investments was introduced and cash remittances were allowed for the first time. Nonetheless, the total value was restricted to US$ 2 million with a cash component not exceeding US$ 0.5 million in a block of 3 years.

Phase II (1995 to 2000): Creation of a Fast Track Route
In 1995, a comprehensive policy framework was laid down and the work relating to approvals for overseas investment was transferred from Ministry of Commerce to the Reserve Bank of India to provide a single window clearance mechanism. The policy framework articulated a cohesive approach that was flexible enough to respond to likely future trends. It reflected the need for transparency, recognition of global developments, capturing of Indian realities and learning of lessons from the past. The basic objectives of the policy, inter alia, was to ensure that such outflows, were determined by commercial interests but were also consistent with the macroeconomic and balance of payment compulsions of the country, particularly in terms of the magnitude of the capital flows. In terms of the overseas investment policy, a fast track route was adopted where the limits were raised from US$ 2 million to US$ 4 million and linked to average export earnings of the preceding three years. Cash remittance continued to be restricted to US$ 0.5 million. Beyond US$ 4 million, approvals were considered under the ‘Normal Route’ approved by a Special Committee comprising the senior representatives of the Reserve Bank of India (Chairman) and the Ministries of Finance, External Affairs and Commerce (members). Investment proposals in excess of US$ 15 million were considered by the Ministry of Finance with the recommendations of the Special Committee and were generally approved if the required resources were raised through the global depository route (GDR) route.

In March 1997, exchange earners, other than exporters, were also brought under the fast track route. Indian promoters were allowed to set up second and subsequent generation companies, provided the first generation company was set up under the Fast Track Route. A series of measures to encourage the software industry in India to expand capacity, reduce costs, improve quality and also invest abroad were put in place. As part of the reforms process preceding the introduction of FEMA, the neutrality condition attached to the Overseas Direct Investment was done away with in 1999. The scope for outward FDI, however, expanded significantly after the introduction of the Foreign Exchange Management Act (FEMA) in June 2000.

Phase III (2000 till date): Liberalized framework under FEMA
In 2002, the per annum upper limit for automatic approval was raised to US$100 million. Such upper limit was, however, discontinued when the automatic route for outward FDI was further liberalized in March 2003 to enable Indian parties to invest to the extent of 100 per cent of their net worth. Since then the limit of outward FDI has been gradually increased to 400 per cent. The ceiling of 400 per cent of net worth, however, is not applicable for- (I) investments made out of balances held in the Exchange Earners’ Foreign Currency (EEFC) account of the Indian party or out of funds raised abroad through ADRs/GDRs. (II) Indian companies engaged in the energy and natural resources sectors, such as, oil, gas, coal and mineral ores, though they would require prior approval of the Reserve Bank of India.

Overseas investments in unincorporated entities in oil sector (e.g. by way of taking up participation interest) by Navaratna Public Sector Undertakings were allowed under the automatic route and subsequently the facility was extended to other Indian entities as well. Further, in 2004, the External
Commercial Borrowing policy was modified and funding of JVs/WOS abroad was included as a permissible end-use of the funds raised.

At present, any Indian party can make overseas direct investment in any bona-fide activity except certain real estate activities (i.e., buying and selling of real estate or trading in Transferable Development Rights (TDRs)) and banking business (which are considered by an inter-Ministerial group) that are specifically prohibited. For undertaking activities in the financial services sector, certain conditions as specified by the Reserve Bank, however, need to be adhered to. Access to international financial markets was also progressively liberalized for the Indian corporate sector and they were allowed to use special purpose vehicles (SPVs) in international capital markets to finance their cross-border acquisitions. The impact of policy liberalization is now reflected in cross-border acquisitions by Indian corporate growing at an accelerated pace.

**OBJECTIVE**

- To analyze the scope of Indian multi-national enterprises in overseas market
- To analyze the trend of outward foreign direct investment in India

**RESEARCH METHODOLOGY**

This study is based secondary data source which have been drawn from the published records of RBI such as RBI Bulletins, RBI website source on Hand Book of Statistics on Indian Economy, world investment reports of UNCTAD, 2011, 2012, 2013 2014, 2015. The data collected through these published documents and have been analyzed and presented in the form of tables and diagrams.

**Trend of outward investments during the past one decade**

A trend analysis shows that the level of outward FDI from India has increased manifold since 1999-2000. The level of net outward FDI flows (on Balance of Payment basis), however, recorded a sharp uptrend at US$ 74.3 billion during the second half of 2000s (2005-06 to 2009-10) as compared to US$ 8.2 billion in the first half of 2000s (2000-01 to 2004-05). Even though trend in India’s outward FDI was moderately affected during crisis year of 2009-10, a sharp rebound was seen in 2010-11.. However, past two years witnessed a decline in these investments from $ 17,195 million in FY11 to $ 11,097 million in FY12 to $ 7,134 million in FY13, but a sign of growth were shown in 2014.

**Table 1: Outward FDI from India 2003-2013**

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount in Millions of Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>1819</td>
</tr>
<tr>
<td>2004</td>
<td>1934</td>
</tr>
<tr>
<td>2005</td>
<td>2274</td>
</tr>
<tr>
<td>2006</td>
<td>5867</td>
</tr>
<tr>
<td>2007</td>
<td>15046</td>
</tr>
<tr>
<td>2008</td>
<td>18835</td>
</tr>
<tr>
<td>2009</td>
<td>19365</td>
</tr>
<tr>
<td>2010</td>
<td>15144</td>
</tr>
<tr>
<td>2011</td>
<td>17195</td>
</tr>
<tr>
<td>2012</td>
<td>11097</td>
</tr>
<tr>
<td>2013</td>
<td>7134</td>
</tr>
</tbody>
</table>
Table 2: Country wise FDI Investment by India ($ million)

<table>
<thead>
<tr>
<th>Countries</th>
<th>Equities</th>
<th>Loan</th>
<th>Guarantees issued</th>
<th>Total</th>
<th>Share in total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>144</td>
<td>1,029</td>
<td>7,254</td>
<td>8,427</td>
<td>28.8</td>
</tr>
<tr>
<td>Singapore</td>
<td>566</td>
<td>486</td>
<td>3,402</td>
<td>4,454</td>
<td>15.2</td>
</tr>
<tr>
<td>British Virgin Islands</td>
<td>3,101</td>
<td>113</td>
<td>474</td>
<td>3,687</td>
<td>12.6</td>
</tr>
<tr>
<td>Mauritius</td>
<td>518</td>
<td>563</td>
<td>1,948</td>
<td>3,029</td>
<td>10.3</td>
</tr>
<tr>
<td>United States of America</td>
<td>527</td>
<td>372</td>
<td>1,153</td>
<td>2,052</td>
<td>7.0</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>97</td>
<td>116</td>
<td>1,233</td>
<td>1,446</td>
<td>4.9</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>198</td>
<td>155</td>
<td>1,003</td>
<td>1,356</td>
<td>4.6</td>
</tr>
<tr>
<td>Switzerland</td>
<td>240</td>
<td>130</td>
<td>624</td>
<td>994</td>
<td>3.4</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>814</td>
<td>0</td>
<td>0</td>
<td>814</td>
<td>2.8</td>
</tr>
<tr>
<td>Cayman Island</td>
<td>83</td>
<td>8</td>
<td>433</td>
<td>523</td>
<td>1.8</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>14</td>
<td>19</td>
<td>275</td>
<td>309</td>
<td>1.1</td>
</tr>
<tr>
<td>Cyprus</td>
<td>78</td>
<td>16</td>
<td>181</td>
<td>275</td>
<td>0.9</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>0</td>
<td>0</td>
<td>269</td>
<td>269</td>
<td>0.9</td>
</tr>
<tr>
<td>Belgium</td>
<td>6</td>
<td>18</td>
<td>155</td>
<td>180</td>
<td>0.6</td>
</tr>
<tr>
<td>Oman</td>
<td>5</td>
<td>0</td>
<td>116</td>
<td>121</td>
<td>0.4</td>
</tr>
<tr>
<td>Total</td>
<td>7,007</td>
<td>3,208</td>
<td>19,079</td>
<td>29,294</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: RBI

Table 3: Developed-economy MNEs

<table>
<thead>
<tr>
<th>Year</th>
<th>Equity</th>
<th>Re-investment</th>
<th>others</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>53</td>
<td>34</td>
<td>12</td>
</tr>
<tr>
<td>2008</td>
<td>51</td>
<td>23</td>
<td>27</td>
</tr>
<tr>
<td>2009</td>
<td>45</td>
<td>50</td>
<td>5</td>
</tr>
<tr>
<td>2010</td>
<td>41</td>
<td>59</td>
<td>1</td>
</tr>
<tr>
<td>2011</td>
<td>40</td>
<td>51</td>
<td>8</td>
</tr>
<tr>
<td>2012</td>
<td>34</td>
<td>62</td>
<td>4</td>
</tr>
<tr>
<td>2013</td>
<td>17</td>
<td>74</td>
<td>10</td>
</tr>
<tr>
<td>2014</td>
<td>10</td>
<td>81</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics)

Table 4: Developing-economy MNEs

<table>
<thead>
<tr>
<th>Year</th>
<th>Equity</th>
<th>Re-investment</th>
<th>others</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>54</td>
<td>27</td>
<td>20</td>
</tr>
<tr>
<td>2008</td>
<td>50</td>
<td>31</td>
<td>20</td>
</tr>
<tr>
<td>2009</td>
<td>66</td>
<td>40</td>
<td>-6</td>
</tr>
<tr>
<td>2010</td>
<td>54</td>
<td>45</td>
<td>2</td>
</tr>
<tr>
<td>2011</td>
<td>45</td>
<td>49</td>
<td>6</td>
</tr>
<tr>
<td>2012</td>
<td>40</td>
<td>44</td>
<td>16</td>
</tr>
</tbody>
</table>
Table 5: FDI outflows, by group of economies and region, 2012–2014 (Billions of dollars)

<table>
<thead>
<tr>
<th>Years</th>
<th>Developing Asia</th>
<th>North America</th>
<th>Europe</th>
<th>Other Developed countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>299</td>
<td>365</td>
<td>376</td>
<td>131</td>
</tr>
<tr>
<td>2013</td>
<td>335</td>
<td>379</td>
<td>317</td>
<td>138</td>
</tr>
<tr>
<td>2014</td>
<td>432</td>
<td>390</td>
<td>316</td>
<td>117</td>
</tr>
</tbody>
</table>

Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).

Table 6: Outflows FDI: top 5 East Asia and south east Asia economies (Billions of dollars, and 2014 growth)

<table>
<thead>
<tr>
<th>Country</th>
<th>Amount in Billions of Dollars</th>
<th>2014 growth rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hong Kong, China</td>
<td>142.7</td>
<td>76.7</td>
</tr>
<tr>
<td>China</td>
<td>116</td>
<td>14.9</td>
</tr>
<tr>
<td>Singapore</td>
<td>40.7</td>
<td>41.1</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>30.6</td>
<td>7.8</td>
</tr>
<tr>
<td>Malaysia</td>
<td>16.4</td>
<td>16.6</td>
</tr>
</tbody>
</table>

Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).

Table 7: Outflows FDI: top 5 South Asia economies (Billions of dollars, and 2014 growth)

<table>
<thead>
<tr>
<th>Country</th>
<th>Amount in Billions of Dollars</th>
<th>2014 growth rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>9.8</td>
<td>486</td>
</tr>
<tr>
<td>Islamic republic of Iran</td>
<td>0.6</td>
<td>31.5</td>
</tr>
<tr>
<td>Pakistan</td>
<td>0.1</td>
<td>-45</td>
</tr>
<tr>
<td>Srilanka</td>
<td>0.07</td>
<td>2.7</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>0.05</td>
<td>43</td>
</tr>
</tbody>
</table>

Source: UNCTAD report 2015

SCOPE OF INDIAN MULTINATIONAL ENTERPRISES

FDI outflows from South Asia originate mainly from India. In 2014, Indian outflows saw a five-fold jump to $10 billion, recovering from a sharp decline in 2013. As the performance of the Indian economy has improved, the large Indian MNEs have stopped large-scale divestments and, some have resumed international expansion, including announcements of some intraregional investments in manufacturing in neighboring countries.

We have seen the growth rate of India in outward foreign direct investment is nearly 500. In recent past Mahindra & Mahindra invested approx. 227 Millions of Dollars in Bangladesh in 2013 for Light trucks and utility vehicles industry. More recent also in Bangladesh Asian Paints invested 81 Millions of Dollars.

CONCLUSION

- Most of the investments made abroad are in the form of guarantees issued. Ultimately a very small proportion would be invoked. Hence, the equity and debt components would be relevant
from the point of view of outward flow of dollars. Bharti Airtel issued guarantee worth US $ 1.01 billion to its Netherlands based joint venture, through which it looks after Africa operation.

- FY07-FY11 period has been buoyant times for such investment, but there has been a slowdown since then. It declines in FY12 & FY13, but there has been a recovery in FY14, and seen a potential growth in Indian outward foreign direct investment. Showing the growth rate of outward FDI from India, We can say that, there is a positive signs for Indian multinational enterprises.

- Based on sectoral break up, highest investments are made in transport, storage & communication services followed manufacturing activities and agriculture and mining. Mahindra & Mahindra invested in Vehicle and Automobile sector, Asian Paints invested in chemical industry.

- Netherlands and Singapore are the countries which attracts a large amount of investments from India. Mauritius also makes a significant impact to attract the investment from India.

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Obligation and Liability of the Carrier under the Rotterdam Rules: An Appraisal

Keywords: The United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea, Rotterdam Rules, Obligation of the Carrier, Liability of the Carrier, Carriage of Goods by Sea

INTRODUCTION

At the international level, conventions on the contracts for the carriage of goods by sea were gradually developed and four major legal regimes have been emerged, namely, the International Convention for the Unification of Certain Rules of Law relating to Bills of Lading 1924 (the Hague Rules); the Hague Rules as Amended by the Brussels Protocol 1968 (the Hague-Visby Rules); the United Nations Convention on the Carriage of Goods by Sea 1978 (the Hamburg Rules); and the United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea 2008 (the Rotterdam Rules). There were concerns over lack of uniformity among the previous legal regimes governing the international carriage of goods by sea, i.e., the Hague Rules, the Hague-Visby Rules and the Hamburg Rules. There was also no universal regime to govern contracts of carriage involving various modes of transport in connection with contracts of carriage by sea. In addition, they do not provide any legal basis for modern transport practices such as containerisation, the use of electronic transport documents and door-to-door transport contracts (see the Preamble of the Rotterdam Rules).

In view of that, the Comité Maritime International (CMI) initially prepared a draft Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea. Then, the series of negotiations took place at the United Nations Commission for International Trade Law (UNCITRAL) during 2001 to 2008 and the result was the adoption of the Rotterdam Rules (Rotterdam Rules 2009 Secretariat, 2009). On 11 December 2008, the United Nations General Assembly adopted the Rotterdam Rules and these rules establish a uniform and modern legal regime to govern international contracts of carriage wholly or partly by sea with the intention to provide legal certainty, new access and efficiency of international carriage of goods wholly or partly by sea. These rules further provide legal basis for several commercial and technological developments occurred in maritime transport, i.e., containerisation, the use of electronic transport documents and door-to-door transport contracts (UNCITRAL, 2015). The Rotterdam Rules facilitate a modern alternative to earlier international carriage of goods by sea regimes (Davis, 2010). Therefore, it is obvious that the Rotterdam Rules can play a crucial role in promoting trade and economic development at both domestic and international level.

On 23 September 2009, the Rotterdam Rules were opened for signature in Rotterdam, the Netherlands. It currently has 25 signatories, namely, Armenia, Cameroon, Congo, Democratic Republic of the Congo, Denmark, France, Gabon, Ghana, Greece, Guinea, Guinea-Bissau, Luxembourg, Madagascar, Mali,
Netherlands, Niger, Nigeria, Norway, Poland, Senegal, Spain, Sweden, Switzerland, Togo and the United States of America. The signatory States will have to replace their carriage of goods by sea regimes with the Rotterdam Rules after the ratification and its entry into force. Out of 25 signatories, only three States (i.e., Congo, Spain and Togo) had ratified it as at 30 September 2015. Article 94 of the Rotterdam Rules provides that “this Convention enters into force on the first day of the month following the expiration of one year after the date of deposit of the twentieth instrument of ratification, acceptance, approval or accession” (United Nations, 2015). It is, therefore, not yet even entered into force after being elapsed for six years. This is mainly because the major maritime countries are not much in favour of the Rotterdam Rules which increase the obligation and liability of a carrier in comparison to previous international carriage of goods by sea regimes. Even Spain has been subjected to numerous criticisms made by academics as well as economic sectors. The ratification of Rotterdam Rules has negative impacts towards Spain as it has one of the major maritime transportation industries (Castells, 2015). Accordingly, this paper aims at examining to what extend the carrier’s obligation as well as liability is extended under the Rotterdam Rules.

**SCOPE OF APPLICATION OF THE ROTTERDAM RULES**

The Rotterdam Rules do not limit the mode of transportation to be by sea only as in the previous carriage of goods by sea regimes. Basically, it defines a “contract of carriage” as “a contract in which a carrier undertakes to carry goods from one place to another for the payment of freight. The contract shall provide for carriage by sea and may provide for carriage by other modes of transport in addition to the sea carriage” (Article 1 (1)). Therefore, the parties in a contract of carriage under these rules may involve other modes of transportation such as carriage of goods by rail, road, air and so forth. Therefore, it can be said that the Rotterdam Rules extend its application to the multimodal transportation of goods by sea carriers.

These rules also draw attention to differentiate the types of transportation such as liner transportation and non-liner transportation. “Liner transportation” means “a transportation service that is offered to the public through publication or similar means and includes transportation by ships operating on a regular schedule between specified ports in accordance with publicly available timetables of sailing dates” (Article 1 (3)). In other words, a liner transport is a transport service that takes place in which transportation by ships operating on a regular basis and in accordance with a schedule for the dates of sailing between specified ports and available to the public. “Non-liner transportation” refers to “any transportation that is not liner transportation” (Article 1 (4)). A non-liner transport is hired for a specific schedule of sailing agreed by the parties on an irregular basis and, therefore, it is not available to the public.

The Rotterdam Rules simply define the term “carrier” as “a person that enters into a contract of carriage with a shipper” (Article 1 (5)). In its literal meaning, a carrier is not necessarily to be the actual carrier and, thus, it further distinguishes the contractual carrier from the actual carrier. Under the Rotterdam Rules, an actual carrier is regarded as “performing party” means “a person other than the carrier that performs or undertakes to perform any of the carrier’s obligations under a contract of carriage with respect to the receipt, loading, handling, stowage, carriage, care, unloading or delivery of the goods, to the extent that such person acts, either directly or indirectly, at the carrier’s request or under the carrier’s supervision or control” (Article 1 (6) (a)). In certain circumstance, the contractual carrier who concludes the contract of carriage with the shipper may assign his duty to a performing party under his supervision or control. It cannot be regarded as a performing party under the Rotterdam Rules if such a third party is directly or indirectly hired by a shipper, a documentary shipper, the controlling party or the consignee other than the carrier (Article 1 (6) (b)).
Since the Rotterdam Rules deal with the multimodal transportation, it also makes a distinction between mere performing party and maritime performing party. “Maritime performing party” is defined as “a performing party to the extent that it performs or undertakes to perform any of the carrier’s obligations during the period between the arrival of the goods at the port of loading of a ship and their departure from the port of discharge of a ship. An inland carrier is a maritime performing party only if it performs or undertakes to perform its services exclusively within a port area” (Article 1 (7)). Under this provision, maritime performing party is limited only to the sea carrier and, thus, the land carrier and the air carrier can merely be regarded as mere performing party.

The term “shipper” is defined as “a person that enters into a contract of carriage with a carrier” (Article 1 (8)). Apart from the shipper, there can also be documentary shipper under the Rotterdam Rules. “Documentary shipper” is “a person who accepts to be named as ‘shipper’ in the transport document or electronic transport record” (Article 1 (9)). The rationale behind distinguishing the documentary shipper from the actual shipper is to avoid the application of the doctrine of “privity” in which only the parties to a contract can sue each other in case of breach and the third party does not have any right to claim against a party in the contract.

The application of such doctrine is not desirable at all in a contract of carriage of goods by sea. As an example, when the seller concludes a contract of carriage of goods by sea with a carrier, he becomes the shipper. It is apparent that only the seller-shipper can sue the carrier if any lost of or damage to the goods occurred during the voyage. Difficulties arise when the goods are transported to the port of destination and the buyer finds any lost of or damage to the goods because he is not entitled to sue the carrier as he is not a party to the contract of carriage. He can only claim damages from the seller and the seller will then sue the carrier for the lost of or damage to the goods. In order to avoid such a situation, the concept of documentary shipper is designed in a contract of carriage of goods by sea. Usually, the seller-shipper requests the carrier to mention the buyer as the shipper in the transport document or electronic transport record. Only when the buyer appears as the documentary shipper in the transport document or electronic transport record and he will be able to sue directly against the carrier in relation to any lost of or damage to the goods during the period of responsibility of the carrier.

Moreover, the Rotterdam Rules define “goods” as “the wares, merchandise, and articles of every kind whatsoever that a carrier undertakes to carry under a contract of carriage and includes the packing and any equipment and container not supplied by or on behalf of the carrier” (Article 1 (24)). It basically deals with almost all types of goods and also covers the transportation goods in the containers. The term vehicle under the Rotterdam Rules does not deal with any ship or vessel as it separately defines the term “vehicle” as “a road or railroad cargo vehicle” (Article 1 (27)) from the term “ship” which refers to “any vessel used to carry goods by sea” (Article 1 (25)).

As far as the geographical scope of application is concerned, the Rotterdam Rules are applicable to “contracts of carriage in which the place of receipt and the place of delivery are in different States and the port of loading of a sea carriage and the port of discharge of the same sea carriage are in different States. These rules are also applicable if any one of the following places is located in a Contracting State:

(a) The place of receipt (place of loading or port shipment);
(b) The port of loading (place of loading or port shipment);
(c) The place of delivery (place or port of destination); or
(d) The port of discharge (place of port destination)” (Article 5 (1)).

It is, thus, obvious that the general requirement for the application of these rules is that the place of loading or shipment and the place or port of destination must be in different states and, at least, one of them must be in a contracting state. These rules further apply “without regard to the nationality of the
Obligation and Liability of the Carrier under the Rotterdam Rules: An Appraisal

vessel, the carrier, the performing parties, the shipper, the consignee, or any other interested parties” (Article 5 (2)). Therefore, a contract of carriage can be governed by the Rotterdam Rules without taking into account of the nationality of the vessel, the nationality of the carrier or the performing parties to the transportation, the shipper, the nationality of the consignee or any other party who has interest.

The Rotterdam Rules are not applicable to liner transportation which involves (a) charter parties; and (b) other contracts for the use of a ship or any space thereon (Article 6 (1)). It means that the ship must be fully controlled by the carrier rather than the involvement of the shipper in the management of the ship in transporting the goods. In the same vein, these rules are not applicable to the contracts of carriage in non-liner transportation except when: (a) there is no charter party or other contract between the parties for the use of a ship or of any space thereon; and (b) a transport document or an electronic transport record is issued (Article 6 (2)). Therefore, it is observable that these rules are not applicable to the charter parties and other similar types of carriage contracts in both liner and non-liner transportation. If it is non-liner transportation, a transport document or an electronic transport record must be issued to be governed under the Rotterdam Rules.

OBLIGATION OF THE CARRIER

Carriage and delivery of the goods
Under the Rotterdam Rules, the carrier is primarily responsible to carry the goods from the place of loading to the place of destination and deliver them to the consignee. It is provided that the carrier shall carry the goods to the place of destination and deliver them to the consignee subject to this Convention and in accordance with the terms of the contract of carriage (Article 11).

Period of responsibility of the carrier
The period of responsibility of the carrier is longer than any other carriage of goods by sea regimes. The period begins when the carrier or a performing party receives the goods for carriage and ends when the goods are delivered (Article 12 (1)). Accordingly, it is observed that the period of responsibility starts from the time in which the carrier or a performing party received the goods from the seller for the purpose of carrying them to the place of destination until the time in which the goods have been handed over or delivered to the consignee, usually the buyer. Therefore, it is obvious that the period of responsibility of the carrier under the Rotterdam Rules will apply from “door to door” (Davis, 2010) which is an extended period in comparison to the Hague Rules as well as the Hague-Visby Rules which apply from “tackle to tackle” (Hamid, 2004) and the Hamburg Rules which apply from “port to port” (Chami, 2009).

However, if the law or regulations of the place of receipt (place of shipment or loading) require the goods to be handed over to an authority or other third party from which the carrier may collect them, the period of responsibility of the carrier begins when the carrier collects the goods from the authority or other third party (Article 12 (2) (a)). Similarly, if the law or regulations of the place of delivery (place of destination) require the carrier to hand over the goods to an authority or other third party from which the consignee may collect them, the period of responsibility of the carrier ends when the carrier hands the goods over to the authority or other third party (Article 12 (2) (b)). In this case, therefore, the carrier will only be responsible starting from the times in which the carrier or a performing party received the goods from the authority or other third party at the place of loading until the time in which the goods have been handed over or delivered to the authority or other third party at the place of destination.

Furthermore, in determining the carrier’s period of responsibility, the parties may also stipulate on the time and location of receipt and delivery of the goods (Article 12 (3)). However, a provision in a contract of carriage is void if it provides that the time of receipt of the goods is subsequent to the beginning of their initial loading under the contract of carriage (Article 12 (3) (a)); or the time of delivery of the goods is prior to the completion of their final unloading under the contract of carriage (Article 12 (3) (b)).
Hence, although the parties may decide the period of responsibility of the carrier, the period of responsibility agreed by the parties shall be from the time when the loading begins until the time when the unloading ends. The contract of carriage is null and void if the period of responsibility specified by the parties is after the beginning of loading and before the ending of unloading.

**Specific obligations**

The Rotterdam Rules follow the Hague Rules and Hague-Visby Rules models in imposing specific duties on the carrier (Chami, 2009). During the period of responsibility as provided in Article 12, the carrier is specifically obliged to properly and carefully receive, load, handle, stow, carry, keep, care for, unload and deliver the goods (Article 13 (1)). However the carrier and the shipper may agree that the loading, handling, stowing or unloading of the goods is to be performed by the shipper, the documentary shipper or the consignee. In this case, such an agreement shall be mentioned clearly in detail in the contract of carriage (Article 13 (2)).

**Specific obligations applicable to the voyage by sea**

With regard to specific obligations applicable to the voyage by sea, the Rotterdam Rules maintain the same notions as in the Hague Rules and Hague-Visby Rules. The carrier is obliged to exercise due diligence before, at the beginning of, and during the voyage by sea (Article 14). The exercise of due diligence include activities such as to make and keep the ship seaworthy (Article 14 (a)); to properly crew, equip and supply the ship and keep the ship so crewed, equipped and supplied throughout the voyage (Article 14 (b)); and to make and keep the holds and all other parts of the ship in which the goods are carried, and any containers supplied by the carrier in or upon which the goods are carried, fit and safe for their reception, carriage and preservation (Article 14 (c)). In this aspect, it can be observed that the carrier obligation is slightly extended under the Rotterdam Rules as he has to exercise due diligence not only before and at the beginning of the voyage but also during the whole period of the voyage by sea.

**LIABILITY OF THE CARRIER AND THE LIMITATION**

**Basic of the carrier’s liability**

The carrier will basically be liable for loss or damage or delay in delivery if the claimant can prove that the loss, damage and delay occurred during the period of responsibility of the carrier (Article 17 (1)). The carrier, on the other hand, is relieved from the liability if the loss, damage, or delay is not attributable to him, any performing party, the master or crew of the ship, employees of the carrier or a performing party, or any other person that perform carrier’s obligation (Article 17 (2)). The carrier is also relieved of all or part of his liability if it proves that “one or more of the following events or circumstances caused or contributed to the loss, damage, or delay:

- (a) Act of God;
- (b) Perils, dangers, and accidents of the sea or other navigable waters;
- (c) War, hostilities, armed conflict, piracy, terrorism, riots, and civil commotions;
- (d) Quarantine restrictions; interference by or impediments created by governments, public authorities, rulers, or people including detention, arrest, or seizure not attributable to the carrier or any person referred to in article 18;
- (e) Strikes, lockouts, stoppages, or restraints of labour;
- (f) Fire on the ship;
- (g) Latent defects not discoverable by due diligence;
- (h) Act or omission of the shipper, the documentary shipper, the controlling party, or any other person for whose acts the shipper or the documentary shipper is liable pursuant to article 33 or 34;
Obligation and Liability of the Carrier under the Rotterdam Rules: An Appraisal

AGBA 12th World Congress
Page 325 of 1173

(i) Loading, handling, stowing, or unloading of the goods performed pursuant to an agreement in accordance with article 13, paragraph 2, unless the carrier or a performing party performs such activity on behalf of the shipper, the documentary shipper or the consignee;

(j) Wastage in bulk or weight or any other loss or damage arising from inherent defect, quality, or vice of the goods;

(k) Insufficiency or defective condition of packing or marking not performed by or on behalf of the carrier;

(l) Saving or attempting to save life at sea;

(m) Reasonable measures to save or attempt to save property at sea;

(n) Reasonable measures to avoid or attempt to avoid damage to the environment; or

(o) Acts of the carrier in pursuance of the powers conferred by articles 15 and 16” (Article 17 (3)).

The events or circumstances listed down in the above provision are basically similar to the Hague Rules and the Hague-Visby Rules except the exclusion of the act, neglect or default in the navigation or in the management of the ship (Sooksripaisarnkit, 2014). This elimination marks as the major improvement to the limitation of the carrier under the Rotterdam Rules (Weitz, 1998).

Nevertheless, the carrier is still liable if he is unable to justify that none of the events or circumstances mentioned above caused the loss, damage, or delay (Article 17 (5) (b)). He is also liable if the shipper is able to prove that the loss, damage, or delay was or was probably caused by the unseaworthiness of the ship; the improper crewing, equipping and supplying of the ship; or the fact that the holds or other parts of the ship in which the goods are carried were not fit and safe for reception, carriage and preservation of the goods (Article 17 (5) (a)). The carrier can still be relieved partly from his liability if he can prove that part of the loss, damage or delay is due to the aforesaid event or circumstance (Article 17 (6)).

The carrier is liable not only for the breach of obligation caused by his own act or omission but also for the act or omission of the others parties involve in the chain of the carriage of goods. He is liable for the act and the omission of any performing party; the master or the crew of the ship; employees of the carrier or a performing party; or any other person that perform or undertakes to perform any of the carrier’s obligations at his request or under his supervision (Article 18). Therefore, under the Rotterdam Rules, the liability of the carrier is extended to include act and the omission of people under his control. Moreover, the carrier and the persons under his control as specified in the above provision are not even entitled to the limitation of liability under the Rotterdam Rules if the claimant proves that the loss of or damage to the goods or delay in delivery is attributable to a personal act or omission of the person claiming a right to limit done with the deliberate intention to cause so (Article 61).

The liability of a maritime performing party is similar to the carrier in term of defenses and limits of liability as provided under the Rotterdam Rules if the maritime party received the goods for carriage in Contracting State, delivered them in a Contracting State or performed its activities with respect to the goods in a port of a Contracting State. The maritime performing party is liable for the loss, damage or delay took place during the period between the arrival of the goods at the port of loading of the ship and their departure from the port of discharge from the ship; while the maritime performing party had custody of the goods; or at any other time to the extent that it was participating in the performance of any of the activities contemplated by the contract of carriage (Article 19 (1)).

The maritime performing party will not be bound for any additional obligations and higher limitation of liability other than that have been imposed by the Rotterdam Rules even if the carrier agrees in the contract of carriage (Article 19 (2)). This is because the carrier is the one who enters into the contract of carriage with the shipper but not the maritime performing party. Similar to that of the carrier, the maritime performing party is also liable for the breach of its obligations caused by the acts or omissions of any person to which it has entrusted the performance of any of the carrier’s obligations under the
contract of carriage (Article 19 (3)). The Rotterdam Rules do not impose any liability on the master, crew of the ship or an employee of the carrier or of a maritime party (Article 19 (4)). The carrier and the maritime performing party are jointly or severally liable if there is any loss of, damage to, or delay in delivery of the goods. Of course, their liabilities are only up to the limits provided by the Rotterdam Rules (Article 20).

As it has discussed above, under the Rotterdam Rules, the carrier is liable not only for loss of or damage to the goods but also for delay in delivery of goods. It assume that the delay in delivery of goods occurs when the goods are not delivered at the place of destination provided for in the contract of carriage within the time agreed (Article 21). Therefore, literally speaking, the carrier is not liable for the delay if there is no agreed time for the delivery of goods in the contract of carriage (Hjalmarsson & Ozdel, 2010). Moreover, the carrier will not be liable if the delay has been caused by the exemptions enumerated under Article 17 (3). For example, the delay caused due to the engine breakdown during the voyage does not fall under events and circumstances under Article 17 (3) (Diamond, 2008). In fact, these defenses for delay under Article 17 (3) make the Rotterdam Rules in favour of the carrier (Hjalmarsson & Ozdel, 2010).

Again, the claimant must notify the carrier about the loss of or damage to the goods due to delay within twenty-one consecutive days from the date of delivery of the goods. Otherwise, he will have no right to claim for the compensation if he does not do so within the provided time frame (Article 23 (4)). Under the Rotterdam Rules, although a deviation constitutes a breach of the carrier’s obligations, such a deviation alone does not automatically deprive the carrier or the maritime performing party from any defense or limitation set out under the Rotterdam Rules (Article 24). The carrier can still be relieved from his liability if the deviation was necessary to be done due to any event or circumstance mentioned under Article 17 (3).

The Hague Rules and the Hague Visby Rules are not applicable to the cargo which is stated in the contract of carriage to be carried on deck and is, in fact, carries on deck. Conversely, the Rotterdam Rules are applicable to deck cargo on ships in three situations, i.e., where it is required by the law; where the goods are carried in or on containers or road or railroad vehicles that are fit for deck carriage; or where the goods have been so carried in cases other than those has been listed in the above provision (Article 25 (3)). Nevertheless, the carrier is not liable for any loss of or damage to the goods or delay in the delivery of goods carried on deck due to the special risks involved in their carriage on deck (Article 25 (2)).

**Limitation of the carrier’s liability**

Subject to the limits of liability in Article 59, the carrier has to pay compensation for loss of or damage to the goods in accordance with the calculation refering to the value of such goods at the time and place of delivery (Article 22 (1)). The value of the goods is normally fixed in correspondence with the commodity exchange price. However, if there is no such price, the calculation would be based on the market price of the place of delivery. Where there is also no such market price is available, it would refer to the normal value of the goods of the same kind and quality at the place of the delivery (Article 22 (2)). The carrier is not liable for any payment of compensation beyond the aforementioned limits (Article 22 (3)).

The Rotterdam Rules generally limit the liability of a carrier for breaches of its obligations to 875 units per package or other shipping unit, or 3 units of account per kilogram of the gross weight of the goods whichever amount is higher. The unit in this provision refers to the Special Drawing Right (SDR) as defined by the International Monetary Fund (IMF). The amount of SDR units mentioned above are to be converted into the national currency of a State in accordance with the value of such currency at the date of judgement, award or the date agreed upon by the parties. However, the carrier is liable to pay for the full value of goods if it has been declared by the shipper in the contract of carriage or even a higher amount...
than the amount of limitation of liability set out in the Rotterdam Rules if the carrier and the shipper agree such a compensation for the goods in the contract of carriage when there is any loss of or damage to the goods (Article 59).

The carrier’s liability to compensate for loss of or damage to the goods due to delay is calculated in accordance with Article 22 which has been discussed above. In addition, the carrier is liable to pay an amount equivalent to two and one-half times of the freight payable for the economic loss suffered by the shipper due to delay. If the goods are totally loss because of the delay, the total amount payable under this provision may not exceed in any case the limit set out under Article 59. The Rotterdam Rules do not define the term “economic loss” and, thus, it can perhaps be a claim for loss of resale or profits due to delay (Diamond, 2008). It can also be cost for the arrangements to take delivery of the goods in cases where there is no loss of or damage to the goods; or loss of resale or profits due to delay. The Rotterdam Rules prohibit the exclusion or limitation of the obligation and liability of the carrier or a maritime performing party directly or indirectly in the contracts of carriage (Article 79).

CONCLUSION

In a nutshell, the Rotterdam Rules offer substantial changes to the Hague Rules, the Hague-Visby Rules and the Hamburg Rules in various perspectives. First of all, the contract of carriage under the Rotterdam Rules covers not only carriage of goods by sea but also other modes of transport in connection to the sea carriage. These rules are applicable to cargo regardless of whether it is carried on or under the deck whereas deck cargoes are excluded from the scope of application of the Hague Rules and the Hague-Visby Rules. It obliged the carrier to be responsible for the goods so carried from the place of loading to the place of destination and deliver them to the consignee. Hence, the period of responsibility of the carrier is extended under the Rotterdam Rules compare to the Hague Rules, the Hague-Visby Rules and the Hamburg Rules. Moreover, the Rotterdam Rules further extend the carrier’s obligation to exercise due diligence not only before and at the beginning of the voyage but also during the whole period of the voyage by sea. Under the Rotterdam Rules, the carrier is liable for loss of or damage to the goods or delay in delivery of goods. Furthermore, the carrier is liable not only for the breach of obligation caused by his act or omission but also for the act or omission of the others parties involve in the chain of the carriage of goods. Another major improvement in the Rotterdam Rules is that of the exclusion of the act, neglect or default in the navigation or in the management of the ship as one of the defences available for the carrier. It reasonably increases the carrier’s liability to compensate for loss of or damage to the goods or delay in delivery of goods. It further provides legal basis for deviation which is not given attention at all under the Hague Rules and the Hague-Visby Rules.

Despite the fact that the Rotterdam Rules facilitate a modern alternative to earlier international carriage of goods by sea regimes, it has not yet even entered into force. This is mainly because the major maritime countries are not much in favour of Rotterdam Rules which increase the obligation and liability of a carrier in comparison to previous international carriage of goods by sea regimes. The obligation and liability of the carrier set out under the Rotterdam Rules are reasonable and, thus, it should be honoured by the States to provide the balance of interest between the shipping companies and shippers. The support for the Rotterdam Rules is also mooted by various renowned international organisations across the world in the maritime transport industry, these include, the Comité Maritime International (CMI), the International Chamber of Commerce (ICC), the International Chamber of Shipping (ICS) and the European Community Shipowners’ Associations (ECSA) and so forth. After the careful analysis of the obligation and liability of the carrier envisaged in the Rotterdam Rules, authors propose that it would be very beneficial for States which have little or no maritime transportation industry to go for ratification, acceptance, approval or accession of the Rotterdam Rules and to become parties to it.
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Development of Network Marketing in Indian Telecom Sector

Keywords: Direct Selling, Network Marketing, Telecom Business, Indian Telecom Sector, Demographics.

INTRODUCTION

Indian Telecom Sector
The Indian Telecom Sector is widely accepted as an imperative tool for socio-economic development. It is recognised as one of the important infrastructure to develop the Industries, Education, Science & Technology, Health, Information & Communication Technology (ICT), etc. The Indian Telecom sector started growing exponentially since 21st century. In India, though the Wired line customers are decreased from 39.42 million in 2008 to 27.0 million in 2014, the Wireless customers are increased from 261.07 million in 2008 to 944.01 million in 2014. At the same time, the Broadband customer base is raised from 2.34 million in 2008 to 85.74 million in 2014 (Diagram 1).

The Tele-density in the country increased from 18.22 % (2007) to 75.23 % (2014). Among that the rural area Tele-density increased from 5.89 % (2007) to 44.01 % (2014), but the Urban Tele-density is sharply raised from 48.10 % (2007) to 145.46 % (2014). That shows, the Telecom sector in India has shown drastic improvement in its growth over the recent years. (Ref. Diagram 2).

From that it is realized that there is tremendous scope for Network marketing in Indian Telecom Sector. A good number of MNCs and private companies are actively participating in providing services all over the country. On improvised Government policies i.e. 100% of FDI, the Foreign MNCs are also showing keen interest to invest and extending their services. Major Global Telecom players viz. Vodafone, SIEMENS, etc. in the market are attempting to put their footprints in India considering its large population and increasing purchasing power, thereby, those also contributing for the socio-economic development of the country. The DOT has fixed certain National targets to the industry. On noticing the growing Telecom demand, the private service providers like Bharti Airtel Ltd., Reliance Communications Ltd., Vodafone, Tata Communications etc., are contributing their market share along with the Government owned Public Sector units like BSNL and MTNL as shown. (Ref. Diagram 3).

Direct Selling
Direct Selling (DS) is a basic marketing model in which selling the products directly to the consumer varied from a fixed retail location. It is a dynamic and rapidly expanding channel of distribution for the marketing of products and services. DS is known for ‘Low investments and high returns’ and also a key driver of Socio-economic growth of the country. NM and Multi-level Marketing (MLM) are synonyms of DS. It covers Business-to-Business (B2B) & Business-to-Commerce (B2C) aspects. The Indian Direct Selling Industry (IDSI) revenues are doubled and are anticipated to grow by 100% in next 4 yrs. The IDSI having a vision of INR 40 billion business in the current year and its annual compound growth rate is expected to be 12% to 15% over last year.

Network Marketing
Network Marketing (NM) is a proven concept helping the ordinary people to develop as successful entrepreneurs. Basically, this concept speaks about distributing the products directly from the manufacturer to the end consumer sharing the entire business benefit with the consumer. Of late, India is an emerging economy poised for accelerated growth in NM segment. In the world, NM is more than $100 billion worth industry having presence in 125 countries. As India being highest populated country and largest independent consumer market in the world, there is a great scope for Network marketing, provided that is customized to suit to Indian culture as well as its requirement. For India, to reach at least 3% of its population of 350 million, 10 million people will be involved in NM, which is 10 times the present number of people involved in the industry. It will certainly help to reduce unemployment problem and enhance business opportunities for middle class society. Companies need to build efficient and potential human capital to improve its sales paradise in the NM and to reduce various attritions in customers/public.

Growth Factors for NM
1. **Rise in per capita income (PCI):** Though the people are getting a regular income on their present business/profession, they may opt for NM for getting an additional income from this business; thereby, the National Income of the will increase.

2. **Women participation:** The women participation in this business in India is 68% (IDSA, 2009). The home-makers (housewives) participation is increasing progressively compared to working women. They wish to utilise their spare time involving themselves in this business as well as in their social gatherings like kitty parties and Ladies’ Clubs. The DWACRA Mahila (female) groups in Andhra Pradesh, India are the best examples for their success in this business earning additional income and flourished.

3. **Additional savings:** By virtue of participating in NM, they are able to acquire additional income; thereby their personnel savings are also increased caused to improve their financial condition and their purchasing power.

4. **Ownership of the business:** In general, the middle class people in India feel that NM is their own business & Unique Selling Proposition (USP) as it involves ‘Low investment risk and high returns’ attracting the large section of society makes it popular.

5. **Social networking:** NM is a promising marketing model providing an opportunity to its employees as well as its participants to get connected widely with the homogenous and heterogeneous groups of the society so as to improve their business network.

6. **Empowerment of youth:** In India, particularly in rural sector, the youth is largely getting unemployed due to heavy losses in agriculture sector besides various other reasons. Sometimes they are involving in petty crimes to meet their day-to-day personal expenditure. Their active involvement in NM will certainly engage them in productive work generating their own earnings. Thus, the local crime rate may reduce. Their confidential levels also boosted up because of their lawful earnings.

7. **Improvement in standard of living:** On active involvement of housewives, retired people, unemployed youth, physically challenged, and students in NM, their purchasing capability will improve, in turn; causes to change their life style, that reflects on the region.

**NM in Telecom Sector**
In India, there is a tremendous scope of telecom business through NM to the extent of INR 40 billion for FY 2014-15 and is expecting to increase in multi-fold in future. Basically, the Telecom user business is categorised into Service marketing and User product marketing. Revenue on telecom market including Infra and Services in FY 2014-2015 is INR 4647.2 billion worth with 10.22% growth increase on earlier year (Diagram. 4) & (Table 2).

**Service marketing:** The telecom service marketing in India covers Voice, Data, Broadband, Leased circuits, etc. The total telecom services revenue in India for FY 2014-2015 is worth of INR 2539 billion with an increase of 8.60% over previous year (Ref. Table 2). The service marketing is carried out by both

*AGBA 12th World Congress*
*Page 330 of 1173*
Govt. operated PSUs and a good no. of Private Service Providers are covering all over India. The Government owned PSUs are Bharat Sanchar Nigam Limited and Mahanagar Telecom Limited (MTNL). The Private Service Providers are Bharti Airtel, Vodafone, Reliance and TATA, etc. Both the Public and Private Service Providers (SP) are catering their services through 3-layer marketing system i.e. Customer Service Centres (CSC), Franchising system (FS) and Channel partners (CP). The Conceptual Model of Indian SP is given below (Diagram.5).

Customer service centres (CSC): In the Customer Service Centre, Service Providers (SP) are used to engage their own employees for providing services, sales, billing and receipts, complaints, redresses, etc. It is nothing but direct sale to the customers on B2C Marketing concept. The SPs having hundreds of their company maintained CSCs throughout India for covering their marketing needs/outlets.

Franchisee system (FS): The Service Provider engages the franchisees on commission basis to serve certain services to their customers on behalf their company. The back ground support in Advertisement and in Marketing is extending by the SP by means of technical training & supplying advertising material, publicity. Generally Franchisees are empowered / authorized to engage their own Agents / Sub-Agents (either men or women) to cover the remote / rural spread over areas to expand their business activities to the user end, which will help to grab potential market. It may create wide self-employment opportunities especially to the Home-makers (women, who used to have good communication skills) to make the public well aware of their telecom Products / Services. It may not be out of place to mention if the Franchisees are offered attractive Discounts, Bonus, Gifts, Cash Awards along with award of Certificates grading based on the volume of market they made. It is needless to say if this policy is adopted by the Franchisees to their Agents / Sub-Agents, will definitely have more impact. Wide media publicity, door-to-door canvas, road-shows, may play vital role in spreading NM.

Channel partners (CP): The Service Provider extends their Value Added Services (VAS) like Caller tunes, Sports Information & News, Advertisements, Polling surveys, etc. to the customers through their Channel Partners (CP) on revenue sharing basis. The CPs is also used for Word of Mouth market propaganda and for Customer Relation Management (CRM) for attaining utmost customer satisfaction. The CPs in India are Hungama service, AIGES, etc.

The Contact Centres (CC) generally known as Call Centres are extending their services like fault booking, tracking and final reports to satisfy the customer. The CCs also market the various existing/ new services and customer friendly plans, etc. to support the SP giving ‘word of mouth’ business promotion. Ultimately CCs are also widely contributing to the Network Marketing enhancing the revenues on sharing basis.

In India, the Government has authorised many telecom service providers to meet the growing demand. The list of top leaders providing Telecom Services in India is hereunder: (Ref. Table1)

User product marketing: The telecom business covers the marketing of various user devices like fixed Telephone Instruments, Mobile phone Instruments & its accessories, Data cards, SIM cards, other Electronic gadgets related to ICT. In the user product marketing, the private sector as well as PSUs are playing their own exorbitant role in India. Here, the Govt. owned PSU is Indian Telecom Industry (ITI) having comparatively less roll. The private user product marketers are Samsung, Nokia, LG, Huawei, ZTE, UT Starcom, etc. (Ref. Table 3). The user devices marketing share is INR 1094 billion in FY 2014-15 with a raise of 17% growth over yester year (Ref. Diagram.6) & (Ref. Table 4). Mostly the user product manufacturers appointing their Dealers Region-wise, Distributors Zonal-wise and retail marketers based on the market segment in each town. Those are creating a great employment opportunities to skilled as well as to semi skilled ones covering their sales and service of their products.
In Indian Telecom field, the Service sector is earning INR 2539 billion while the user devices revenue earning is INR 1094 billion. Out of that, INR 40 Billion business is thrown for NM. If this business is explored in a right way, there will be a lot of scope for creation of enormous employment besides generating additional income to the individuals, thereby; Per Capita Income (PCI) of the citizen and the country GDP will rise exorbitantly. In NM, there is wide opportunity to create women empowerment and youth employment.

Definitions
Indian Direct Selling Association (IDSA) defines that Network Marketing as the act of marketing of consumer goods and services through personal contact, away from a fixed location or a shop. Direct selling involves the marketing of products and services directly to consumers in a face-to-face manner, away from permanent retail locations. Network Marketing and Direct Selling are used inter-changeably.

The World Federation of Direct Selling Associations (WFDSA) defines Direct selling as ‘a dynamic, vibrant, rapidly expanding channel of distribution for the marketing of products and services directly to the consumers’.

Federation of European Direct Selling Associations (FEDSA) which was founded in 1978 defines Network Marketing as “the marketing of goods and services directly to consumers principally in a face-to-face manner, generally in their homes or the homes of others, at their workplace and other places away from permanent retail locations. Direct selling typically occurs through explanation or demonstration of the products by salespersons, referred to as direct sellers”.

Ostrow & Smith (1988) defines that “Direct Selling commonly refers to such activities as telephone sales, door-to-door selling, or in-home parties.”

Clemente (1992) defines that “A sales approach characterized by personal product explanations and demonstrations, often in the consumer’s home or retailer’s establishment.”

LITERATURE REVIEW

Review of Literature is most vital to identify the research problem of the study, which can be solved by collection of data. It helps to avoid the mistakes, which were already done by a researcher. In the existing literature, based on the research gaps, hypotheses may provide meaningful insights to the Network distributors, executives and policy makers. Network Marketing is an extension of direct selling and its basis is positive ‘Word of Mouth’ publicity. It can do anything and everything for the rapid spread of what it intends to spread. Even though NM is quite a new territory for most Indian marketing experts, some of the interested scholars and researchers have furnished many valuable opinions concerning what constitutes a NM. It is always good and useful to explore what research scholars and eminent writers in the field of NM have done so far. That will give us an idea of the area covered so far and what yet remains to be addressed. Also, it will save a researcher from repeating what has been done before. Gazing at the reliable research work done earlier by the authentic researchers is like standing on their shoulders to look afar, that is, the research work done earlier can serve as a useful guide for further investigation. Therefore, in this chapter an attempt has been made to review the relevant literature on this topic which might prove to be highly rewarding.

DEMOGRAPHICS

In Indian Telecom sector the demographic profile change is inevitable as it is characterized by a large end population and major share of middle class people with growing literacy, adaptability of high technology and increasing purchasing capacity. Telecom Industry has experienced exponential growth over a decade.
contributing raise in economic growth creating neck to neck competition and intense tariff wars. Moreover, India is one of the attractive Telecom markets because of its lowest penetration in the rural and far-flung areas. Hence NM is having wide scope for multi fold improvement in India. The burgeoning middle class and increase in spending power, the Government of India brought out vast reforms to increase the rural telecom coverage and favourable investment cum environment.

The liberal reform policies of Government of India have become an instrument for improving the strong consumer demand and thrive for the rapid growth in the Indian Telecom sector. The de-regularization and increasing 100% FDI norms contribute for fast growth and high employment opportunities generating in the country. To analyze the demographic influences in the network growth in Indian Telecom sector the following important factors are identified and discussed:

1. **Rural**: The country tele-density is much higher than the rural tele-density. This indicates that there is vast scope for doing NM to improve the rural coverage. That is why the Government is giving top priority for rural telephony and rural Broadband for extending the e-medical, e-education, e-agriculture facilities. A lot of budget is allotted and subsidies are offered from Universal Service Obligation (USO) Fund for telecom rural development.

2. **Gender**: In Indian NM of Telecom Sector, mostly men participation is on higher side though the gender ratio in India is more or less the same. In general NM women participation is on higher side i.e. 68% while the men participation is 32%. But in Telecom Sector the situation is reverse.

According to the Indian culture, generally most of the women are dedicated for their family care. Thus their abilities are underutilized. If their abilities are diverted to do this business it will be revolutionary results in the NM as they are well conversant to convince others by their soft and efficient approach. They can also use them in-house meetings for improving the NM in Telecom field.

3. **Retired employees**: In the Telecom sector itself every year thousands of employees are retiring and very few people are using their energy and talent in other business activities. If their talents and experience are utilized for developing the network marketing in Telecom field, the NM in Telecom Sector can be explored effectively for yielding better results. Normally people trust and believe in the information obtained from the professionals of the fields concerned. This definitely adds a tag to improve the NM in the Telecom environment.

4. **Telecom employees and family members**: In Indian Telecom Sector lakhs of employees are involved directly or indirectly participating in private as well as in public sector. If the educated but unemployed family members are made involved in the NM they can contribute for the enormous growth due to their background / family support. This also adds income to the family or to the person causing to get higher per capita income and purchasing capacity. They can use as agents through franchise system.

5. **Youth**: In India youth strength is highest in the world. The youth is migrating every year to various countries for want of jobs. But the youth in India become jobless due to shortage of employment opportunities. If the youth is engaged they can move dynamically to spread the Telecom network marketing in the widespread rural regions.

Most of the educated youth is passing the time as students doing one course and after another due to inadequate employment opportunities. They become additional burden to the family and society being a non-earning member and there is a fear of becoming un-social elements. At the same time they are unable to involve in their family business, particularly in agricultural sector. Therefore, they are migrating to urban areas for seeking petty jobs even for a meagre salary. If such students are made involved in NM of Telecom projects / services by giving a suitable training they can certainly do better in
propagating the telecom values and improving the remote areas of India. By that way they will get some pocket money to meet their daily needs and essential academic expenditure.

By observing the above illustrations it can be seen that the demographic factors are having high influence in network marketing development in Telecom Sector.

**CHALLENGES IN NM IN TELECOM SECTOR**

In Indian telecom sector, there is enormous scope for developing NM to explore in far-flung areas, as there is assessment of INR 40 billion worth of business. But there are umpteen numbers of challenges to take ahead in NM in India. Out of those, a few critical challenges are discussed below.

1. **Lead generations:** In general, in telecom sector, NM is restricted to two levels i.e. franchisor and agent. This can be very much taken down the line to spread the market roots to the interior parts of India. Unfortunately, the market leaders are facing problems in lead generation due to non availability of the skilled/semi skilled educated youth in the rural areas, as most of the educated youth are migrated to the nearby towns.

2. **Attributions:** NM has become unpopular in certain fields, where pyramid schemes involve money multiplications, due to fraudulent attitude of the market organizers. The people are not coming forward to become agents/sub-agents because of unknown fears, there by the deep penetration of NM are just defeated. The Pyramid schemes are identified as fraudulent marketing concept particularly money gains (by National Consumer League, 1997). Hence, the Government of India imposed certain strictures on NM involved in money multiplication schemes.

3. **Government policies:** On finding frequent frauds in NM marketing schemes the police as well as the other local authorities are rottenly discouraging them and keeping a vigilant eye on its progression. Consequently, the new members scared to join afresh. For that the Government has to announce certain favourable policies to encourage the NM market in the form of some subsidies for its easy and fast spread. It can also make suitable laws to curb the frauds in the NM to develop confidence in the people.

4. **Slackness in follow up:** Most of the agents in NM are part time employees and house-wives. Their commitment to the business is not full-fledged. Hence, they are having less follow-up action in enrolling the new members and enrich them with updates. Moreover they are not financially dependent on this business alone. Ultimately it is adversely affecting the NM penetration in the uncovered areas.

5. **Low marginal incentives:** In telecom sector, the incentives offered to the franchisor/agent are 2 - 3% of their business made while in other areas like Insurance, Amway, Herbal life, Oriflame, etc. the incentive is offered minimum 10%. Having less incentives and non-availability of encouragement schemes, the new agents are not showing interest in telecom sector NM.

6. **Skills:** In rural sector, the skilled agents are not available due to migration of the educated youth to the urban areas, which ultimately reflects adversely on the Telecom NM. The left over people in the villages are not much educated and mostly agriculture dependents. Generally, the telecom advancements are fast moving and involving high technology, which requires skilled people to understand and capable of convincing their customers in purchasing their tele-services/products.

7. **Knowledge transfer:** The Service Providers are spending much on updating and improving the skills of their own employees but not on their Franchisees/Agents. Due to lack of up-dated technological/commercial knowledge, the front end workers are not able to convince their customers, who are having more updated knowledge about their products/services through the E-media and advertisements.
A few critical challenges only are discussed here but many more challenges are encountered by the NM in spreading over their market in the remote areas.

**Scope of Future Research:** From the study, the scope for future research will be in the following domains:

i. Identifying a suitable NM model for telecom industry in Indian context.
ii. To study the impact of the demographics in adopting NM as a successful model in telecom industry.
iii. To study the relevance of Government policy in enabling the NM to be an effective approach to market telecom products.
iv. To study the factors influencing the success of NM in telecom sector.

**CONCLUSIONS**

In Indian Telecom Sector, there is a large expanding market scope; out of that the NM itself anticipated INR 40 billion worth business 2015-2016. The NM has vast business scope in the unexplored remote areas. India is a second largest populated country in the world having high capable work force but majority of it is suffering from unemployment and under-utilised women force. On introducing the NM in telecom sector, a greater employment can be created besides giving greater support to raise their residual income. Since the NM is offering part-time job to the working employees as well as retired employees of the telecom field, their technical skills and experiences can well be utilised so that the business through NM in telecom field can be widened. On introduction of 100% FDI, liberalisation and globalisation of financial policies, the Government of India opened the flood gates for large scale investments in the Indian Telecom sector.

NM in telecom sector restricted its multi-level marketing to the two levels (i.e. Franchisor / Agent) only. If it is further stretched to the a few more levels down in the form of Sub- Agents and door-to-door promoters, they can well organise the road-shows, door-to-door canvases and ‘Word of Mouth’ propaganda for getting the uncovered business treasure. Here the SP has to extend financial and advertising support to get better results. Particularly in rural areas, if the educated and capable youth migrated to urban areas is utilised in their respective domains, they could do marvellous business as the NM is having advantages of low financial risks and does not require any initial experience. As NM is having flexible time of working, the working employees, home-makers, students also can be employed to a large extent to develop the business.

In India, there are 5,564 Mandals and 5,93,643 villages (Indian Census Report, 2011) out of which more than 40% of village areas are not having sufficient telecom marketing spread over. Whenever the villagers come to nearby towns for attending weekend fairs; then only they are able to purchase the telecom services / products. If NM is spread its roots to those villages, it will be more advantage for them to have better communication facilities. Small retail vendors in the Gram Panchayats may also be involved because of low investments in NM.

The Government of India itself promoting rural Broadband schemes by allocating INR 5.0 billion (Indian Budget 2015-16) for extending e-medicine, e-business, e-education, etc. to the remote areas. If NM is extended its branches to cover all these Gram Panchayats, it will have exorbitant business besides creating large employment in the rural sector.

If the SPs in telecom Sector as well as the NM business-heads introduce attractive incentive schemes to the Agents / Sub-Agents, there is tremendous scope for development of NM in Indian Telecom sector. They should work out certain strategies to engage the capable skilled youth and to transfer the
technical/commercial up-dates by conducting trainings/seminars/workshops from time to time. By using the wide spread mobile communication, the knowledge transfer about new products/plans/schemes shall be shared to up-date the skills of NM society.

It may be concluded that the development of the NM in Indian telecom sector is having welcoming trend to the multinational telecom promoters, prospective investors and entrepreneurs.

APPENDIX

Figure 1: Indian Telecom Customer Base (Wired / Wireless / Broadband) Y 2007 to 2014 (in millions)

Source: as per the TRAI Annual Reports period Y 2007-14

Figure 2: Tele-density in India (Urban / Rural / Overall)
Obligation and Liability of the Carrier under the Rotterdam Rules: An Appraisal

Figure 3: Service Provider-wise Telecom Market Share in India in the Year 2014-2015

Source: As per the TRAI Annual Reports Y2014-15.

Figure 4: Indian Telecom Market Infra Vs Service FY 2014-2015

Source: As per the TRAI Annual Reports for the period Y 2007-14.
Source: Voice & Data/ August 2015 & Voicendata.com/ a cyber media publication

Figure 5: NM Conceptual Framework

Service Provider

- CSC
- Franchisee
- CP

Agent 1

Agent 2

Agent N

VAS

CC

CSC: Customer Service Centre
CP: Channel Partner
VAS: Value Added Services
CC: Contact Centres

Figure 6: Telecom User Device Market share in FY 2014-2015
Table 1: Top Leaders in Telecom Services for the Year 2014-2015

<table>
<thead>
<tr>
<th>Segment</th>
<th>Leader</th>
<th>Revenue (INR in Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wireless (Mobile) Services</td>
<td>Airtel</td>
<td>40,947</td>
</tr>
<tr>
<td>Wireline (Fixed) Services</td>
<td>BSNL</td>
<td>12,496</td>
</tr>
<tr>
<td>Internet Services</td>
<td>Airtel</td>
<td>11,879</td>
</tr>
<tr>
<td>Broadband Internet Services</td>
<td>BSNL</td>
<td>8,850</td>
</tr>
<tr>
<td>Broadband Wireless Access Services</td>
<td>Airtel</td>
<td>4,273</td>
</tr>
<tr>
<td>VSAT Services</td>
<td>Hughes</td>
<td>225</td>
</tr>
<tr>
<td>Enterprise Services</td>
<td>Tata</td>
<td>17,785</td>
</tr>
</tbody>
</table>

Source: As per the Voice and Data, August 2015, (p-14), Cyber Media Publications.

Table 2: Telecom Service Revenue Rise

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice</td>
<td>162,666</td>
<td>153,730</td>
<td>5.8%</td>
</tr>
<tr>
<td>Data</td>
<td>68,498</td>
<td>57,914</td>
<td>18.3%</td>
</tr>
<tr>
<td>Other Service</td>
<td>22,752</td>
<td>22,149</td>
<td>2.72%</td>
</tr>
<tr>
<td>Total Telecom Services</td>
<td>253,915</td>
<td>233,793</td>
<td>8.60%</td>
</tr>
<tr>
<td>Total Telecom Market (Infra &amp; Services)</td>
<td>464,721</td>
<td>421,596</td>
<td>10.22%</td>
</tr>
</tbody>
</table>

Source: As per the Voice and Data, August 2015, (p-15), Cyber Media Publications.
Table 3: Leading Companies in User Device Manufacturers (Year 2014-15)

<table>
<thead>
<tr>
<th>Segment</th>
<th>Leader</th>
<th>Revenue (INR in Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desk Phones</td>
<td>Cisco</td>
<td>610</td>
</tr>
<tr>
<td>PBX Systems</td>
<td>Cisco</td>
<td>319</td>
</tr>
<tr>
<td>Conferencing &amp; Collaboration</td>
<td>Cisco</td>
<td>345</td>
</tr>
<tr>
<td>Mobile Phones</td>
<td>Samsung</td>
<td>28,208</td>
</tr>
<tr>
<td>Tablets</td>
<td>Samsung</td>
<td>1,423</td>
</tr>
<tr>
<td>Data Cards</td>
<td>Huawei</td>
<td>399</td>
</tr>
</tbody>
</table>

Source: As per the Voice and Data, August 2015, (p-14), Cyber Media Publications.

Table 4: Telecom User Product Market Rise (Service/Infra)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrier Infra</td>
<td>85,410</td>
<td>79,597</td>
<td>7%</td>
</tr>
<tr>
<td>Enterprise Communication</td>
<td>15,986</td>
<td>15,079</td>
<td>6%</td>
</tr>
<tr>
<td>User Devices</td>
<td>109,410</td>
<td>93,675</td>
<td>17%</td>
</tr>
<tr>
<td>Total Telecom Infra Market</td>
<td>210,806</td>
<td>187,803</td>
<td>12%</td>
</tr>
</tbody>
</table>

Source: As per the Voice and Data, August 2015, (p-16), Cyber Media Publications.

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For a complete copy of this paper with omitted endnotes and references see author(s).
Financial Non-Neutrality: The Inextricable Link between Finance and Inequality

Key words: Inequality, Finance and Inequality, Finance and Growth, Monetary Policy, Socio-economic Dynamics, Access to Finance, Loan Maturity, Maturity Structure, FDIC.

INTRODUCTION

The study of inequality in current times is of a pressing nature. It is a paramount societal concern for both North American and European constituencies (PewResearch Group, 2014). The study of inequality has grown exponentially in the past century, yet advances in our understanding are often countered by opposing realizations, leaving us with an uncomfortable ambiguity. This paper approaches the issue with the a priori that inequality in the U.S. is in itself harmful. Although the research has not consistently been able to demonstrate the detrimental effects of inequalities on economic growth and social health, the intuition, moral position, and the direction of the literature is that inequality, in this day and age, in the United States, is harmful and undesirable. This attention, if addressed by adequate policies, can find political support for those who wish to pursue it. This paper studies the American case for financial inequality-alleviating channels that are geared towards policy recommendation within the framework of monetary policy. The intra-national results suggest that this can be accomplished by easing credit constraints through the direction of monetary policy, all the while without compromising growth or political support. Inequality policies must be considered to be politically viable separately from their effectiveness. Americans are more politically polarized than ever and are more likely to follow party lines. Of these basic red-blue polarizing doctrines is the government’s position with regards to wealth redistribution and its treasury’s deficit. Demirgüç-Kunt and Levine (2009) also address the issues of political sensitivity and came to the conclusion that the financial channel is typically less tense.

Combining what we know of American community banks and the results of this paper, we are left with an understanding that suggests the fostering of relationship lending, for it is both economically and politically viable. This approach should not meet the same political resistance as direct redistributive policies and stimulating monetary policy. Monetary policy, as it is administered now, produces credit expansion through interest rate controls of specific bands of the yield curve, have a disproportionately beneficial effect to the institutions. This in turn only reinforces credit constraints and the entrenching of financial access. The results of this research suggest that maturity and interest rates are the most binding constraint and as such pushes us to reconsider fiscal and monetary intervention, if at least adding a new layer to our paradigm. The consideration of socio-economic policies in the financial policy debate is argued here to be necessary to an objective and effective dialogue. Economic growth, full employment, financial and price stability are today’s pillars of targeting policy, yet equality of opportunity and equalization of wealth are just as fundamental to promoting these priorities as they are to influencing inequality. This paper gauges this effect at the macroeconomic level and provides substantiating evidence by using publicly available data consolidated into a unique panel data set.

In the first part of this paper a summary of relevant financial variables and indicators is presented in relation to inequality. The second and third parts of this paper develop and present the data and empirical models used to substantiate the results in section four. Section five uses all the above to justify the inclusion of inequality in the financial and monetary policy debate.

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AGBA 12th World Congress
Page 342 of 1173
LITERATURE

The study of inequality has been summarized by three general relationships:

1. Growth and Inequality: initiated by the seminal work of Simon Kuznets (1955). This vein of research has concluded that growth is good for inequality.
2. Inequality and Growth: a reduced form regression type of analysis evaluating the impact of inequality on growth. The results are not unanimous. The ambiguity of the overall research promotes the investigation of underlying channels instead of universal patterns.
3. Underlying channels of four principal orders:
   a. Financial Market Imperfections
   b. Aggregate Savings
   c. Socio-Political Instability
   d. Fiscal Policy

This paper focuses solely on aspect 3.a. of the inequality nexus and only within the United-States. For an extensive review of the overarching literature the reader can refer to Neves and Silva (2014) and the meta-analysis by Dominicis, Florax, and Groot (2008). A similar study in the context of point 3.a. within the U.S. by Beck, Levine, and Levkov (2010) has paved the way for the following research in the sense that it also studies the financial systems’ influence on inequality and have capitalized on the exogenous banking sector deregulation in the U.S. between 1976 and 1994. The natural experiment allowed the study to utilize difference-in-difference and address the issues of endogeneity and state and time specific effects. The results disentangle the banking deregulation in such a way to isolate the effect of increased banking competition to provide better loans. This effect is shown to be pro-poor despite the general increase in inequality over that time period. Where the following paper differs is the specificity of loan characteristic in defining credit and the link these variables may have with inequality, and the time period considered is post-deregulation, implying that there are new mechanics at work in the relationship. This differentiation is what establishes this paper’s relevance to the policy debate of finance and inequality.

By definition, financial market imperfections are shortcomings of the financial system that will hinder it from connecting viable projects to funding. The imperfections fall under two principal categories: asymmetric information (ex-post, monitoring, limited liability) and moral hazard (screening, interest rate risk and self selection, ex ante). It should be evident that these imperfections will affect socio-economic classes unevenly; simply considering, amongst other things, general wealth, income security, and access to peripheral services like lawyers and accountants. A study based on the American Survey of Consumer Finances finds that controlling for financial factors low-income and minority groups are more likely to be denied credit (Weller, 2007). Financial market imperfections have been proxied principally by private credit-to-GDP and loan-to-value banking data, both of which estimate the financial depth of an economy. The assumption in this case is the deeper or more leveraged an economy the greater the level of financial competition. This should in turn reduce credit constraints across the board, even if disproportionately. At this point in the paper it is important to clarify a distinguishing element of an American study; the United-States is currently second (after New-Zealand) as greatest provider of credit. This being said, the channels and policy recommendations brought up in the literature such as physical access and legal infrastructures are simply not as relevant in this case. The advantage of this specification is that much of the cross-country variability possibly driving inequality is removed. This paper endeavours to specify more precise definitions of imperfections to actually gauge this unequal nature of financial channels. With a better understanding of financial constraints, we are better equipped to discern and design financial policies. Policies must be created to alleviate and equalize financial access in such a way that reduces market imperfection and increases access to credit without compromising economic growth, i.e. considering the equity-efficiency trade-off.
Separating the concepts below to identify the forces at work may mislead the reader to deduce singularity of forces whereas they are all highly interconnected; a point I will try and emphasize especially with regards to the administration of monetary policy.

**Competition and Depth**

Two distinct forces, market competition and financial depth, are lumped together in this analysis and many others because the proxy “total bank credit/GDP” gauges both. The Herfindahl and the Lerner indices are alternate definitions used to measure market concentration; however in the case of the United States, a well developed and competitive financial system, the amount of credit in a system will also reflect the level of competition. It is also the case that market concentration indexes developed on the state level will be riddled with misleading biases resulting from such large geographic areas. Furthermore, the theory suggests that these two forces work in the same direction with regards to alleviating credit constraints. Greater competition reduces general financing obstacles (Beck, Demirguc-Kunt, & Maksimovic, 2004) that in turn pushes lenders to rely on screening rather than on collateral (Hainz, Weill, & Godlewski, 2013), and as a whole can potentially create greater stability (Schaeck, Cihak, & Wolfe, 2009)– (Anginer, Demirguc-Kunt, & Zhu, 2012). There is a caveat to increased market competition demonstrated in the financial crisis of 2008 (Dell’Ariccia, Igan, & Laeven, 2012) and can be summarized by the concept of the competition-stability trade-off (Boyd & De Nicolo, 2005). The channels that can cause variability in the competition-stability trade-off are explored in (Beck, De Jonghe, & Schepens, 2013).

**Relationship vs. Transactional Lending**

Community banks are generally relationship lenders. They are more receptive to borrower “soft” information and can capitalize on that knowledge in a reduction of the risk mitigating tools used by transactional lenders. These risk-mitigating tools, as we will see, are interest rate premiums, collateral requirements, and maturity restriction (Berger, Hasan, & Klapper, 2004) (Kabir & Hippler, 2014). The concept presented here is the contextualization of potential policy responses contingent on the results found in the analysis. The 2012 Community Banking Study by the Federal Deposit Insurance Corporation (FDIC) emphasizes the importance of smaller relationship banks. The American economic reality as of 2011 is that 46% of private sector loans to small farms and businesses were provided by community banks. In contrast, only 14% of the banking industry’s assets were held by those banks. In 2010, the number of firms within the US that employed less than 20 workers accounted for almost 98% of all firms. The juxtaposition of these statistics is intended to highlight the importance of community banks and the credit constraint alleviation role they play. Although the FDIC and the Federal Reserve Banks acknowledge the important role these banks play, the number of community banks is shrinking and the gap in credit provision between community and non-community banks is widening. This is fundamentally important to consider when evaluating the effectiveness of fiscal and monetary policy that disproportionatelty favours larger commercial and investment banks by the nature of their operations.

**Interest Rates**

The principal tool used by central banks is the control of the yield curve most typically in the very short term with respect to market liquidity. Debt policy indirectly moves interest rates by controlling the supply of sovereign debt or other assets in the market. “Usual” monetary policy involves controlling the short end of the yield curve with the intent to control liquidity and inflation. When these measures are no longer effective in a near zero interest rate environment policy must resort to “extreme” measures known as quantitative easing (QE), and most recently in the Eurozone as outright monetary transactions (sterilized and conditional QE) where intervention is made in the longer term section of the yield curve (2 to 10 years).

The method all monetary and fiscal policy is administered by is always contingent on the holders or purchasers of certain assets (typically government bonds or mortgage backed securities). This being said,
there are two effects with regard to inequality relevant to the study in question: the sales and purchases of assets, and the intervention influenced maturity structure modification.

First, sales and purchases of assets directly benefit parties involved in the transaction and indirectly benefit those holding the assets in which prices have moved. In the case of the UK this phenomenon was analyzed in a report drafted by the Bank of England entitled “Distributional Effects of Asset Purchases” in 2012. It observed that the top 10% of the population held 40% of total household assets. This relationship also carries over to businesses that are participants in the markets under governmental supervision. Therefore, considering large commercial banks and alternative financial institutions who have a greater share of activities outside the realm of simple savings and loans of community banks, this market intervention will also favor them and reinforce their practices which disadvantage small and medium enterprises and their respective practices. This is perhaps one contributing channel to the growing gap between types of banks described by Kabir and Hippler (2014).

The second indirect channel in question when considering interest rates is the maturity structure modification implied by monetary policy. Normal monetary policy implies sales and purchases of short-term assets and in cases of extreme measures the sales and purchases of longer-term assets. The assumption here is that players, in our case the banks, will re-adjust their assets, in order to keep the maturity structure intact, by replacing the assets with others of similar maturities. The point that needs to be emphasized here is that banks can replace those assets (usually sovereign bonds or mortgage backed securities) with assets of a similar risk or deepen the risk profile. In both scenarios, the adjustments made will reasonably fall around the assets being replaced and neither of them can directly help SMEs but marginally, as we will explain when we tie all the factors together. This intuition can be illustrated by looking at graphs 1 and 2 in appendix B plotting the relationship between inequality and interest rate movements, and average loan maturity in the U.S. It is foretelling that considering this trinity of interest rates, maturity, and risk, in the context of monetary policy and socio-economic dynamics, will be a principal contribution to this paper.

**Collateral**
Collateral and its quality is an effective way of dealing with opaque borrowers and risky projects. It requires that the borrower “put his skin in the game”, i.e. addresses limited liability. It is evidently clear that this mechanism will naturally reflect the wealth structure of an economy. Collateral, or the lack thereof, can be partially compensated for in terms of risk exposure by adjustments in maturity, interest rates, and screening. Collateral can also be dealt with by capitalizing on soft information in cases of relationship lending. It has also been the case that in periods of high competition, collateral requirements for new borrowers is done away with completely at the expense of a systemic risk exposure.

**Maturity**
Maturity is the keystone on which all other variables depend. In essence, finance is the dealings of capital through time or the actualization of cash flows that otherwise would be left to the future. Interest rates are the temporal exchange rates of this capital. Furthermore, the contractual concepts of limited liability and asymmetric information are subject to time as well. Banks are also responsible for the maturity transformation of short-term liabilities into long-term assets while uncompromising market liquidity.

**Filter capital**
Filter capital deals with informational asymmetries by shortening loan maturity. The idea is that creditors can shorten loans with the intent to rollover the debt in case of success and minimize asymmetric risk, i.e. reduce the window of time that the borrower can default. The risk associated with filter capital is upon renewal and is known as liquidity risk, which can force default even if the project is viable. Therefore, the shortening of the maturity structure could potentially alleviate inequality by allowing banks to take on riskier projects. However they can experience higher than expected project default rates. The use of filter-
capital is more common in transactional lending, whereas relationship lending is better suited to overcome the limitations of asymmetric information (Theoretical papers: signaling hypothesis (Flannery, 1986); the non-monotonic relationship between risk and maturity (Diamond, 1991). Empirical papers: (Ortiz-Molina & Penas, 2008), (Dennis & Sharpe, 2005), (Berger, Espinosa-Vega, Frame, & Miller, 2005).

**Debt Burden**

Debt burden is the periodic repayment of debt (a function of loan size, down payment, interest rate, and maturity) relative to income. Intuition and evidence suggest that debt maturity is the greatest contributing factor to the debt burden, and in turn alleviation of that form of credit constraint. (Appendix A)

A loan repayment schedule is principally a function of loan value, income, maturity, and interest rate. For a given amount of debt the extension of maturity increases the denominator and reduces the periodic debt payment relative to the borrowers income. This is known as the debt-burden effect. Gabriela Pasztorova (2013) noted that maturity had a greater impact on financial decisions than interest rates. This evidence is a result of the debt-burden effect. Filter-capital addresses ex-ante asymmetric information whereas the debt-burden is an ex-ante criteria evaluating loan health from the perspective of cash flows. The filter capital and debt burden effects are opposing forces, leaving the net effect of maturity on inequality ambiguous.

It should be clear that although the two forces of filter-capital and debt-burden effect work in opposing directions, the latter incurs greater risk and we should therefore expect the filter capital effect to be predominant in dealing with constraints. On that note, the concept of binding constraints must be kept in mind in this type of analysis, because, as can be inferred, a macroeconomic easing does not necessarily translate to an extension of the borrower pool versus an intensive easing. For this reason, we may consider the financial market imperfections channel as being inherently non-neutral. The acknowledgment of the role played by financial services in the context of inequality will allow research to be guided as a relief tool and not only as a capital efficiency mechanism.

**Resilience**

Stable growth is preferred to sporadic growth and a steady decline in inequality is preferred to ameliorations and reversals. This environmental dynamic can be translated to predictability, that in turn enhances investment decisions and, more basically, income security. Therefore it wise to consider the potential volatility effects of the factors under this analysis. For this demonstration, consider the distribution of a variable and plus or minus one standard deviation in such a manner to create three groups: average position and two more extreme scenarios.

<table>
<thead>
<tr>
<th>Maturity Structure and Dependents</th>
<th>GINI</th>
<th>Med Inc</th>
<th>GDPc</th>
</tr>
</thead>
<tbody>
<tr>
<td>long assets</td>
<td>μgini</td>
<td>σgini</td>
<td>μmedic</td>
</tr>
<tr>
<td>x &lt; μgass - σgass</td>
<td>.4042</td>
<td>.0262</td>
<td>4.5856</td>
</tr>
<tr>
<td>μgass - σgass ≤ x &lt; μgass + σgass</td>
<td>.4265</td>
<td>.0317</td>
<td>4.614</td>
</tr>
<tr>
<td>x ≥ μgass + σgass</td>
<td>.4462</td>
<td>.0276</td>
<td>4.6844</td>
</tr>
<tr>
<td>Total</td>
<td>.4266</td>
<td>.0324</td>
<td>4.6212</td>
</tr>
</tbody>
</table>

Table 1 presents weak evidence for the analysis that will ensue and provides simple estimates of volatility conditional on bank asset maturity structure. It is interesting to note that a shorter maturity structure has income inequality reducing pressure and less variability than its longer-term counterpart at a much higher inequality rate (over 10%). This is not true of the relationship of median income. With these two statistics
Financial Non-Neutralit

The Inextricable

Link between Finance and Inequality

in mind, we are lead to believe that the distributional changes of relative to maturity have specific beneficiaries. The reasoning is as follows: if increased maturity is associated with increases in median income yet a general reduction in the Gini coefficient, then it must be the case the changes in distribution happened in the middle and top end of the distribution. If the increased maturity structure aided the top half and as a result brought up incomes right below the median then the effect would be reflection of the statistics seen in table 1.

**DATA**

Deininger and Squire(1998) highlighted the importance of focusing research on country or region-specific subsets. This was also one of the concluding remarks of Neves and Silva (2014). The timeliness of these two papers implies that the recommendations of the late nineties were unheeded. This shift is especially necessary for the removal of cross-country variability. This accomplished, the results can better isolate the variables of interest in terms of gauging effectiveness. Furthermore, quality and comparability of data is an issue embedded in cross-country studies, which would largely be overcome in the intra-national study of the U.S.

**Inequality Dependants**

Opting for intra-national data, the next step is selecting a measure of inequality. Theoretical evidence points to the use of wealth proxies, principally due to the fact that lenders are more likely to lend against physical capital than they are against future stream of earnings. It is also the case that investment/saving decisions are largely determined by wealth and not income. However, Persson and Tabellini (1994) demonstrate that all the measures of income inequality are highly correlated, implying that the fundamental relationships will be picked up by linear models. This being said, the measure used for this analysis is the absolute value of the logarithm of the Gini index measured at an annual and state level from the American Census Bureau between 2006 and 2013, combined with data from Galbraith and Hale (2008) that consolidated and interpolated the Gini index at the state-level between 1969 and 2004. A dummy variable is used to control for inherent measurement differences in the two sources of data. An alternate and supplementary measure of inequality is the American Census Bureau’s annual and per state median income data. The combination of the two measures used in parallel better describes the demographic changes at play.

**Financial Conditions**

Three proxy measures that reflect the credit conditions faced by borrowers are obtained from the Federal Deposit Insurance Corporation (FDIC) data sets aggregated to the state and yearly levels. The first is “Bank credit to GDP” that measures in a general sense the credit environment and the importance of the financial system within an economy. Second, “share of secured credit”, defined as credit that is secured by first lien residential mortgages over all other types of loans, gauges the banking system’s use of quality collateral. The third variable is a measure of the banking system’s maturity structure and is defined as the amount of short-term credit, i.e. loans of less than five years divided by all other loans with a time to maturity of over five years. The definition was chosen as such to evaluate the countering forces of maturity on inequality: filter-capital and the debt-burden effect. An alternate measure of loan maturity is obtained from the FDIC and uses the same time definition but is a fraction that encompasses all assets and not just loans. A measure of state specific interest rates is imputed using current state average 30-year mortgage rates. The current cross-state variations are used to impute historical values based on the Federal Reserve’s historical bank prime rate in such a manner to maintain cross-state variations through time yet still pick-up historical interest rate trends. This method has its shortcomings as it assumes cross-state variations are fixed.

The alleviation of credit constraints can be intensive or extensive, such as through incumbents or new clients. The data used in this research does not distinguish between the two. However, assumptions can be
made with regards to the marginal borrower. The intuition is that credit constraint alleviation when viewed at the macro-economic scale is ambiguous in terms of whom it reaches. When an inequality measure is regressed on proxies for credit constraints, both the nature of the variable and the sign of the coefficient suggest who was the beneficiary. For example, when the constraints loosen, yet the measure of inequality increases, the constraint is only relieved at the top end of the distribution. Coupling the inequality measures, in our case the Gini and the median income distribution, will also be indicative of the targeted economic beneficiaries.

**Controls: Socio-Economic**

What is deemed control in this analysis are variables found in the literature that affect both financial services and inequality measures in order to minimize the omitted variable bias. Such variables must also be measured at the state level and be time variant. To make the list we should consider an element of socio-demographic character, economic structure, and economic conditions. For the first criteria, a data set compiled for the purpose of this study combining the American Census Bureau’s census and intercensal data on ethnic demographics at the state level from 1992 to 2013. The measure referred to is the percentage of Black Americans per state per year. Studies suggest that the economic realities faced by Black Americans are both discriminatory and self-selectively exclusionary (Weller, 2007). If the persistent negative effects experienced by Black Americans are significant then the effect between financial constraints and inequality should be attenuated once this relationship is accounted for.

There are industry specific financial and economic realities that must be considered in order to control for the relationship between finance and inequality. Capital-intensive industries require financing of a certain character to operate reflecting both the risk and timeliness of cash flows. The manufacturing production as a percentage of gross state production is a reflection of this inherent economic character. Furthermore, industries that are capital intensive can be large providers of employment, while creating income imbalances necessary for the realization of the nature of production.

A reasonable approach to proxying the health of an economy is the control of both the state of unemployment and the business cycle. Unemployment statistics will pick up interstate variation, whereas the business cycle as identified by the National Bureau of Economic Analysis (NBER) only picks up the national business cycle. In this case, a dummy variable identifies years in which the U.S. experienced the start of a recession. A robustness identification for the business cycle used in this paper is a dummy variable that takes on a value of one in an upstate of the economy defined as the period of time between a trough and a peak.

<table>
<thead>
<tr>
<th>Table 2 Summary Statistics</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>gini</td>
<td>1050</td>
<td>.427</td>
<td>.032</td>
<td>.357</td>
<td>.511</td>
</tr>
<tr>
<td>abs(ln(gini))</td>
<td>1050</td>
<td>.855</td>
<td>.076</td>
<td>.672</td>
<td>1.031</td>
</tr>
<tr>
<td>ln(median income)</td>
<td>1100</td>
<td>4.621</td>
<td>1</td>
<td>4.307</td>
<td>4.856</td>
</tr>
<tr>
<td>GDPcapita growth</td>
<td>1100</td>
<td>.016</td>
<td>.025</td>
<td>-.109</td>
<td>.163</td>
</tr>
<tr>
<td>bank credit</td>
<td>1100</td>
<td>.72</td>
<td>2.18</td>
<td>.032</td>
<td>32.202</td>
</tr>
<tr>
<td>manufacturing</td>
<td>1100</td>
<td>.143</td>
<td>.063</td>
<td>.018</td>
<td>.309</td>
</tr>
<tr>
<td>unemployment rate</td>
<td>1100</td>
<td>.056</td>
<td>.019</td>
<td>.023</td>
<td>.138</td>
</tr>
<tr>
<td>black</td>
<td>1100</td>
<td>.103</td>
<td>.095</td>
<td>.003</td>
<td>.372</td>
</tr>
<tr>
<td>state intreset rate</td>
<td>1150</td>
<td>.063</td>
<td>.016</td>
<td>.025</td>
<td>.097</td>
</tr>
<tr>
<td>first-lien secured</td>
<td>900</td>
<td>.316</td>
<td>.283</td>
<td>.012</td>
<td>6.119</td>
</tr>
<tr>
<td>short term/long term</td>
<td>900</td>
<td>5.587</td>
<td>4.992</td>
<td>.639</td>
<td>65.28</td>
</tr>
<tr>
<td>long assets</td>
<td>1100</td>
<td>.191</td>
<td>.083</td>
<td>.025</td>
<td>.56</td>
</tr>
</tbody>
</table>

AGBA 12th World Congress
Page 348 of 1173
METHODOLOGY

System GMM models
The data is perfectly balanced and continuous annually. The panel spans over 2 decades and identifies 50 American states (with the exclusion of Washington D.C.). The data displays autocorrelation tested for by the xtserial command in stata (Drukker, 2003) based on the Wooldridge test for autocorrelation (2002). The data also displays heteroskedasticity tested for by a likelihood ratio test for a homoscedastic model nested in a heteroskedastic model suggested by Poi and Wiggins (2001). The financial variables are essentially predetermined and reflect the inherent dynamic nature of the data. This narrows the possible methodological approach almost certainly to system GMM. Theoretical justifications for system GMM estimators are reviewed by (2009) and several assumptions stand out with relevance to this specific panel. First, it is assumed that individuals are close to the steady state such that changes in the variables are not related to inherent fixed effects. Second, the estimators best suit “small T, large N” panels yet this identification may be arbitrary. If the panel exhibits small individual counts this may cause the Arellano-Bond autocorrelation tests to be unreliable. The concluding recommendations proposed for the use of these estimators result in the following model specification: an annual identifier, a collapsed instrument matrix, a robust and two-step variance corrected standard error, and ideally an instrument count not exceeding the number of individuals. The fact that the panel consists of 50 states over 23 years, an annual identification will absorb much of the prescriptive power of the model but its exclusion will not control for higher orders of auto-correlation. At this point, we understand that the data set is on the fine line of being justified by system GMM estimators or the more standard heteroskedastic and autocorrelation corrected (HAC) Fixed-Effects (FE) estimators. Prudence suggests that both models be tested and presented. System GMM models will consequently be constrained in terms of lag limits to limit variable propagation while still dealing with predetermined variables.

The table in appendix D summarizes the steps of restricting the system GMM models from the full recommendation (model 1) to the removal of time dummies (model 2), and finally models 3, 4, and 5 have the instrument lags constrained as such to maintain an instrument count around N with and without variable controls. The models used for analysis in the next section are 3 and 5. Model 5 using median income as the dependent for income inequality is well suited as it does not exhibit second order auto-correlation, nor does it reject the null hypothesis of valid instruments in the Hansen test. Model 3 does pass the Hansen test but not second-order auto-correlation. Using further lags than 2 does not appear to resolve the issue as did the use of time dummies. This is the only weakness I note in the model but compromise with the juxtaposition of HAC-FE models that provide consistency with the results.

HAC-FE models
System GMM has been used in the context of growth and inequality as far back as Deininger and Olinto (2000) and as recently as Ostry, Berg, and Tsangarides (2014). The latter highlights an important nuance in using system GMM versus Fixed Effects: that of time. FE estimators pick up mean deviations, and in turn, reflect shorter term forces than its counterparts like Random effects, and system GMM. Therefore it isn’t only prudent to test both models, it is also informational as they both evoke different information from the data.

The specification of choice is a Driscoll-Kraay standard error using “xtsce” stata command argued to be as a superior estimator to “xtgls” and “xtpcse” (Hoechle, 2007). Respectively, “xtgls” requires N<T and produces optimistic standard errors, and “xtpcse” is less time efficient as the panel grows.
Interpreting simultaneously the results of the Gini coefficient and Median Income Models

Table 3 Demographic Changes implied by the Gini Coefficient and Median Income

<table>
<thead>
<tr>
<th>▲ abs(ln(GINI))</th>
<th>▼ MedInc</th>
<th>▼ MedInc</th>
<th>▲ abs(ln(GINI))</th>
</tr>
</thead>
<tbody>
<tr>
<td>A reduction of inequality by bringing up the bottom 50%</td>
<td>Reduction of general income levels disproportionately hurting top 50%</td>
<td>Reduction of inequality by addressing both or either extreme of the distribution</td>
<td></td>
</tr>
<tr>
<td>▼ abs(ln(GINI))</td>
<td>General increase of income but proportionately pro-rich</td>
<td>Reduction of general income levels disproportionately hurting bottom 50%</td>
<td>Degeneration of poverty or increase of extreme wealth without any movement in the middle</td>
</tr>
<tr>
<td>≈ abs(ln(GINI))</td>
<td>Positive income increases to bottom 50% are offset by changes in the top end of distribution</td>
<td>Reduction of income levels in top 50% offset by equivalent growth in income gap most likely in top end of distribution</td>
<td>The variable has little impact on income distribution in both cases of economic and statistical significance</td>
</tr>
</tbody>
</table>

Assuming that the model is well specified

RESULTS

Table 4 System GMM and HAC-FE Regression Results

<table>
<thead>
<tr>
<th></th>
<th>sysGMM._gini</th>
<th>HAC-FE._gini</th>
<th>sysGMM.medinc</th>
<th>HAC-FE.medinc</th>
</tr>
</thead>
<tbody>
<tr>
<td>L.abs(ln(gini))</td>
<td>0.6172***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bank credit</td>
<td>0.0009**</td>
<td>0.0004**</td>
<td>0.0002</td>
<td>0.0009</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.05)</td>
<td>(0.35)</td>
<td>(0.13)</td>
</tr>
<tr>
<td>manufacturing</td>
<td>0.4062***</td>
<td>0.2484***</td>
<td>0.0930</td>
<td>-0.6438***</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.40)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>unemployment rate</td>
<td>0.3582***</td>
<td>0.3886***</td>
<td>-0.4395***</td>
<td>-1.1065***</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>black</td>
<td>-0.2027***</td>
<td>-1.1767***</td>
<td>0.0043</td>
<td>1.6450***</td>
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<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.78)</td>
<td>(0.00)</td>
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<td>state intrest rate</td>
<td>-0.0184</td>
<td>0.7239**</td>
<td>0.0845</td>
<td>-3.7612***</td>
</tr>
<tr>
<td></td>
<td>(0.87)</td>
<td>(0.03)</td>
<td>(0.60)</td>
<td>(0.00)</td>
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<tr>
<td>long assets</td>
<td>-0.0637**</td>
<td>-0.0924***</td>
<td>-0.0247</td>
<td>0.0745</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.01)</td>
<td>(0.15)</td>
<td>(0.18)</td>
</tr>
<tr>
<td>ginsource</td>
<td>-0.0321***</td>
<td>-0.0723***</td>
<td></td>
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<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
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<tr>
<td>recession</td>
<td>-0.0007</td>
<td>-0.0151**</td>
<td>-0.0060*</td>
<td>0.0484**</td>
</tr>
<tr>
<td></td>
<td>(0.77)</td>
<td>(0.01)</td>
<td>(0.07)</td>
<td>(0.01)</td>
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<tr>
<td>L.ln(median income)</td>
<td></td>
<td></td>
<td>1.0415***</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>(0.00)</td>
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<tr>
<td>Constant</td>
<td>0.2920***</td>
<td>0.9190***</td>
<td>-0.1692</td>
<td>4.8248***</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.41)</td>
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</tr>
<tr>
<td>Observations</td>
<td>950</td>
<td>1050</td>
<td>1050</td>
<td>1100</td>
</tr>
<tr>
<td>Within $R^2$</td>
<td>0.8439</td>
<td>0.8439</td>
<td>0.76</td>
<td>0.76</td>
</tr>
</tbody>
</table>

p-values in parentheses
* p < 0.10, ** p < 0.05, *** p < 0.01
Socio-Economic Controls
Table 4 juxtaposes both model estimators and model dependents to facilitate the comparison in terms of shorter (HAC-FE models) and longer (sysGMM) forces of variables on inequality measures, and to clarify the distributional changes of the inequality measures (table 3). Let us take for example the intuition suggested to understand the results of manufacturing. The first element is to note that the results under sysGMM_Gini are almost twice as high as in HAC-FE_Gini suggesting that the effects of manufacturing growth are greater in the long-run and in both time horizons economically significant. The opening of the Lorenz curve (Figure 3) and the simultaneous reduction of median income (Figure 4) suggest that the changes disproportionately hurt the top half of the distribution. A similar story helps understand the results of the unemployment rates with the exception that the effects fade away with time instead of to grow.

Fundamental racial inequalities are picked up by the model and demonstrate a high level of persistence and effect. The insignificance of the “black” variable in the median income models suggest that changes in black demographics are in the bottom half of the distribution (Bloome, 2014). Both persistence and inaccessibility to financial services are consistent with the literature supporting the importance of this control in financial inequality models.

Financial Variables
Nominal changes in the availability of credit are intended to control price levels and economic liquidity in support of productivity. Monetary policy targets credit availability principally via interest rate controls and maturity structure of banking assets. When controlling for the latter variables the effect of banking credit should be largely suppressed, as is the case in the models presented in this paper. This is also meant to highlight the narrow view taken in this field of study where principal financial controls in growth and inequality models do not include maturity and interest rates with banking credit. The importance of inclusion is justified with respect to monetary and fiscal policy and the direct and indirect effects exercised on society. Referring to the regression results of both inequality (table 4) and growth (appendix E) models, one can note that the predictive power of the banking credit variable is absorbed by the more relevant interest rate and maturity variables. This disentanglement is essential in an objective assessment of policy. In both cases of credit easing, lowering of interest rates and of increasing maturity, negative effects on inequality measures are exhibited. This is first and foremost symptomatic of credit-constrained borrowers who remain credit constrained after financial easing; as such, incumbents only experience easing. Interest rate effects are ephemeral whereas maturity changes are transitory, and in both cases very significant. A 1% decrease in interest rates is associated with a 0.75% reduction in the Gini coefficient and as much as a 3.76% reduction in median income. The effect of maturity although smaller in the case of the Gini models, 0.09% decrease in the Gini associated to a 1% increase in maturity, is more persistent so the total effect is ambiguous relative to interest rate changes. Interpreting the results of both the Gini models and the median income models, interest rates and maturity structure illustrate a stark picture for monetary policy. Interest hikes directly hurt debtors and indirectly the economy through productivity attrition. But as suggested by the model, the greatest burden when controlling for unemployment rates is actually on the debtors fallen in the top half of the distribution, which would explain why the Gini improves at the expense of the median income. Maturity structure of the banking system appears to improve credit conditions for the top half of the distribution at the expense of the lower half; this is demonstrated by a degeneration of the Gini index and no change in median income.

The inclusion of “share of loans by first-lien secured capital” sacrificed 5 years observations and returned statistically insignificant estimates. In the future, as this data set ages or if alternate variable definitions could capture the level of risk of loan structure, it is likely to see that highly collateralized banking systems trade-off efficiency for equity. This issue must be analyzed within the context of growth to gauge a steady state where efficiency is not compromised while still promoting equalization of financial access.
POLICY IMPLICATIONS

Finance and growth models that do consider interest rates and maturity as endogenous do not consider monetary policy as the exogenous determinant of interest rate (Tasic & Valev, 2010). It would be naïve to exclude economic conditions, political environment, and micro-data as determinants of both interest rates and maturity, but by that same token, excluding monetary policy from the model is narrow. This recommendation is also suggested by Demirgüç-Kunt and Levine’s economic review on the subject of finance and inequality (2009).

This view is not shared with the U.S. Federal Reserve Bank that sees itself separate from social values such as inequality and as such the government and its institutions should make decisions regarding the issue. To ignore how monetary policy is inextricably linked to socio-economic dynamics is incomplete and not objective. The results of this study demonstrated that the principal tools of monetary policy have fundamental effects on the distribution of wealth in our economies. Interest rate targeting is achieved by addressing respective maturities of the yield curve and risk matching and must therefore be considered with respect to the understanding provided in this analysis. Many decades ago the decision of the central bank to target inflation and unemployment was justified as it fostered growth; the economic literature at its current state is arguing the same for socio-economic health. Equality of opportunity and equalization of wealth are both fundamental determinants of economic growth and by that token is an issue to be addressed by monetary policy.

Many solutions can be put into play if we begin to think along these lines. In this paper, I suggest focusing on an already successful market equalizing mechanism, that of community banks. Countless studies encouraged the support of community banks for they are capable of alleviating of credit constraints specifically with respect to interest rates and maturity agreements because of a competitive advantage identified as “relationship lending” that allows them to capitalize on “soft” information and provide preferential loans to those who would otherwise be credit constrained. Yet the operations of the FED through Federal Open Market Committee (FOMC) and other programs (Term Securities Lending Facility, Commercial Paper Funding Facility, and Term Asset-Backed Securities Loan Facility) help disproportionately bigger banks which hold a large part of financial assets involved in the transactions targeted by the FED. New policies to aid financial liquidity and credit availability have extended beyond the traditional banking sector reducing the competitive advantage and equalizing role of community banks even further. If we do not include inequality in the dialogue then support for fading community banks is less justified.

The FEDs balance sheet operations must also be considered with respect to asset risk substitution. When commercial banks sell assets to the FED in periods of QE they are most likely to replace the assets with others of equal or lesser risk (assuming that it is a period of distress for QE to be in effect). This risk substitution is coupled with the fact that asset concentration is at the top of income distribution such that stimulus must necessarily increase that value of those assets. Credit expansion will therefore reinforce safe borrowers at the top of the distribution while hurting the middle class and closing the Gini index (refer to table 4). The proxy of loan risk in this analysis did not yield any conclusive results but the intuition remains important for future investigations into the matter.

A final point to be made with respect to the implications of this paper is that the addition of the socio-economic layer to policy analysis is made within a context of efficiency-equity trade-off. Although semantically misleading for there is an implication that one is achieved at the expense of the other whereas we know this to be an incomplete reality, the promotion of equity must be done within the framework of growth as growth must be done within the framework of equity. Table 6 in appendix D presents a growth model of a similar specification as the models presented earlier in this paper in order to
contextualize the financial forces that act on both inequality and growth, and only with context can policy be driven objectively to address growth and inequality in such a manner that growth promotes equality and that equality fosters growth.

**CONCLUSION**

The finance and inequality models advanced in this paper have emphasized the importance of including in the monetary policy dialogue the socio-economic impacts of proposed operations. Inequality is not a social issue left to be quarreled between democrats and republicans; it is a fundamental economic engine for long-term growth and economic health and resilience. As it is administered now, monetary policy influences interest rates, maturity, and balance sheet risk without the understanding of the implications of socio-economic demographics. This incomplete paradigm held by the central bank must be supplemented by inequality dynamics contingent on the debt market’s trends or general monetary policy in regular and expansionary periods. The promotion of the inequality inclusive paradigm can also be achieved without compromising the primary objectives of the financial system and the Central Bank, as a matter of fact, the literature promotes the equalization of wealth and opportunity as being a driving force of economic growth and resilience.

**REFERENCES**


For a complete copy of this paper with omitted footnotes see author(s).
The Impact of Host Country Conditions on Market Entry Mode: A Case Study on the Lebanese Oil and Gas Industry

Keywords: Multinational Corporations (MNC), Market Entry Strategy, Oil and Gas Industry, Lebanon

INTRODUCTION

The purpose of this study is to gain a deeper knowledge of how unfavorable host country conditions can impact the market entry strategy chosen by Multinational Corporations (MNC). We use the case of Lebanon conditions and their impact on the MNC type and entry decisions into the prospective Oil and Gas Industry.

MARKET ENTRY STRATEGIES

Many MNEs are struggling to develop successful strategies in emerging markets. This is because most companies have stuck to the strategies they’ve traditionally deployed, which emphasize standardized approaches to new markets while sometimes experimenting with a few local twists. According to Khanna et al. (2005), part of the problem is that emerging markets have “institutional voids”: they lack specialized intermediaries, regulatory systems, and contract-enforcing methods. These gaps have made it difficult for multinationals to succeed in developing nations; thus, many companies have resisted investing there, which according to Khanna et al. (2005) is a mistake since it will make it unlikely for them to remain competitive.

Adding to that, these institutional voids vary across different countries and in order to understand institutional variations between countries, the best approach is to use the five contexts framework (Khanna et al., 2005). The five contexts are a country’s political and social systems, its degree of openness, its product markets, its labor markets, and its capital markets. It involves asking a series of questions related to each of the five areas which allows executives to map the institutional contexts of the country of interest. When companies tailor their entry strategies to each country’s contexts, they can capitalize on that country’s strengths. However, they must take into consideration the additional coordination costs they’ll incur. Once this is done, companies will have three distinct choices: “they can adapt their business model to countries while keeping their core value propositions constant, they can try to change the contexts in which they operate if the products or services they offer can force dramatic changes in the local market, or they can stay out of countries where adapting strategies may be uneconomical or impractical.”

In an article on the strategic alternatives which are considered by MNEs, Serban (2012) states that for companies to benefit from the opportunities provided by emerging markets, MNEs need business strategies to penetrate a certain market. The strategy must create value for local consumers and profit for the multinationals. “It should embed the needs and resources of the multinational companies with the opportunities and constraints of the local environment.”
Serban (2012) mentions several alternatives; one of which is entering the market through an alliance or with a local partner. “The enterprises usually prefer to own the control regarding their operations,” but despite the attraction for total control, many foreign investors prefer the joint venture. A joint venture consists of a new entity formed by two or more partner companies; both companies contribute their own resources and share control. Another alternative is acquiring a local company which offers local resources such as human capital and local authorities’ relationship. Thus, acquisitions are being preferred by companies that need local complementary resources or wish to settle on a strong market position, based on the market share of the local company, on its brands and distribution networks. A third alternative is creating a Greenfield entity which allows investors to create a new operation starting from zero, based to their own requirements, thus reproducing the procedures and practices used in another location. This option is preferred by companies that base their competitive advantage on the company’s organizational structure and culture and do not wish to change them through adapting at a local existent company (Serban, 2012).

The results of her study on Romania, which fits the criteria of an emerging market, found that the multinationals are usually developed by acquiring and developing local companies and brands. This was observed within the most powerful sectors in the Romanian economy, which include, among several other examples, the oil and gas industry where by OMV, an Austrian company, entered the market by acquiring the Romanian Petrom SA.

HOST COUNTRY CONDITIONS

Corruption
Through laws, regulations, and institutions, governments influence and sometimes dominate transactions within an economy and play a huge role in determining the nature of commercial activity within that economy. However, governments rarely operate solely for the benefit of the general public and often pursue legitimate objectives through the presence of corruption. Corruption can be defined as the abuse of public power for private benefit; it can be found everywhere, but it varies across countries as much as labor costs or corporate tax rates (Smarzynska & Wei, 2000).

When firms plan on entering foreign countries, they face several challenges largely due to their efforts to understand and adapt to local corruption. For that reason, understanding the nature of corruption in a given country and differentiating it from corruption in other countries are central to the decisions multinational enterprises (MNEs) must make in order to enter and expand in the market.

The mode of entry decision is critical to MNE performance and survival. In order to determine the optimal mode of entry to be used when facing corruption, many scholars have attempted to characterize corruption in a way that distinguishes it from one environment to the other. Rodriguez et al. (2005) proposed two key dimensions that together differentiate corruption across countries; arbitrariness and pervasiveness. They defined pervasiveness as the average firm’s likelihood of encountering corruption in its normal interactions with state officials. It captures the degree to which a firm is obliged to address corrupt behavior. Arbitrariness, on the other hand, is the inherent degree of ambiguity associated with corrupt transactions in a given state or nation. Where corruption is arbitrary, laws and informal policies may be subject to unpredictable and varied interpretation (Ahlstrom & Bruton, 2001), or overlapping and tenuous jurisdictions may lead to ineffectual bribes (Oldenburg, 1987). It may also result from the ability and willingness of corrupt officials to vary the set of necessary approvals to extract maximal bribes (Banerjee, 1997; Levy, 1989) or from the entry of bureaucrats into the market for extortion (Shleifer & Vishny, 1993).

Their results show that an MNE subsidiary is more likely to engage in corruption where pervasiveness is high, although that may threaten internal legitimacy if the firm has established strong ethical or
anticorruption norms. When corruption is highly arbitrary, it increases the possibility of an MNE, entering via foreign direct investment (FDI), choosing a local partner, because local partners increase external legitimacy. Pervasiveness, on the other hand, creates opposite incentives for partnering that increase the likelihood of entry via a wholly owned subsidiary.

Owing to their size and the diversity of their experiences, it has been suggested that MNEs can acquire a competitive advantage through involvement with local corruption. Rodriguez et al. (2005) add to this work and suggest that when corruption is highly arbitrary, neither firm size nor previous experience with corruption is advantageous. However, where corruption is highly pervasive but not arbitrary, some firms may successfully enter via FDI and engage in corrupt transactions. Through the development of these relationships, they characterize corruption as a meaningful institution and demonstrate the importance of legitimacy concerns to entry mode decisions.

The majority of the literature on FDI holds that corruption impedes FDI since it raises transaction costs for foreign investors. On the other hand, an alternative view is that corruption extends a helping hand to FDI by “greasing the wheels of commerce” when a country has a weak regulatory and legal framework. This is what Quazi (2014) found in a study on 53 African countries; concluding that corruption actually facilitates FDI inflows to Africa.

In their paper, Melo and Quinn (2015), address how the presence of oil changes the corruption-foreign direct investment relationship, which they found varies significantly on whether or not the receiving country has oil. Their results show that high rates of corruption make it difficult for a country to attract FDI, unless this country produces oil. The more oil a country produces, the less the impact of corruption has on FDI flowing into that country, so much so that if a country is a major oil producer then corruption becomes insignificant. Adding to that, if a country is successful in attracting FDI, it seems to help reduce corruption. However, that’s not always the case. It appears that FDI attracted by either seeking access to large oil deposits does not reduce corruption.

**Underdeveloped Infrastructure**

According to Dr. Jeffrey Delmon, senior infrastructure specialist of *The World Bank*, states that “poor infrastructure impedes a nation’s economic growth and international competitiveness” (The WorldBank, 2006). Adding to that, the Global Competitiveness Report 2010-2011 of the 2010 World Economic Forum emphasizes that "extensive and efficient infrastructure is critical for ensuring the effective functioning of the economy, as it is an important factor determining the location of economic activity and the kinds of activities or sectors that can develop in a particular economy."

Companies in developed countries often take for granted the critical role that “soft” infrastructure plays in the execution of their business models in their home markets (Khanna et al., 2005). Unfortunately, that infrastructure is usually underdeveloped or absent in emerging markets. For example, companies can’t find skilled market research firms to provide them with reliable information about customer preferences which they need in order to tailor products to specific needs and increase people’s willingness to pay. Another example is that there are few end-to-end logistics providers, which allow manufacturers to reduce costs, available to transport raw materials and finished products.

The quality of the market infrastructure varies widely from country to country. In general, advanced economies have large pools of seasoned market intermediaries and effective contract-enforcing mechanisms, whereas less-developed economies have unskilled intermediaries and less-effective legal systems. Because the services provided by intermediaries either aren’t available in emerging markets or aren’t very sophisticated, corporations can’t smoothly transfer the strategies they employ in their home countries to those emerging markets (Khanna et al., 2005).
In an article on Bangladesh’s mobile telecommunications market, Barua and Chowdhury (2014) studied critical factors in selecting an optimal international market entry mode strategy to enter into an emerging market. Bangladesh is considered a country with poor infrastructure, corruption, political instability, slow implementation of economic reforms, and insufficient power supplies. Previous research shows that a joint venture entry mode is effective because it allows the foreign company to use the local partner’s resources, access knowledge about the needs of the local customers, share the risks with the local partner, and break regulatory and cultural barriers. A wholly owned subsidiary entry mode, on the other hand, helps in achieving long-term profitability and having competitive advantages. Considering the advantages and disadvantages of these two entry modes and in light of empirical analysis, Barua and Chowdhury (2014) suggested that a joint venture is the optimal entry mode for the foreign companies in entering an emerging market with weak infrastructure such as Bangladesh.

**Lack of Specializes Labor**

When foreign multinational companies enter a new market, they face several challenges, one of which is human resource management (Wu, 2008). According to Noe et al. (2006), human resource management is a branch of an organization which recruits and develops personnel to promote the organization’s objectives. It involves interviewing applicants, training staff, and employee retention. Human resources are a crucial factor which could be a competitive advantage for company’s long term development and reputation (Decenzo & Robbins 1999). The diversity and complexity of cross-nation and cross-culture may result in strategy conflicts for multinational companies when they implement international standardized human resource management (Daft, 2007). In order to overcome such difficulties and reduce cost, more multinational companies began localizing employment in host countries (Wu, 2008).

In China, there are four main problems MNEs face when attracting and retaining qualified managerial staff, one of them is the shortage of talent (Wu, 2008). According to an article in McKinsey Quarterly (2012), there is intensifying competition for talent in emerging markets. Talent in emerging economies is scarce, expensive, and hard to retain. In China, for example, barely two million local managers have the managerial and English-language skills multinationals need (Dewhurst et al., 2012). One leading bank reports paying top people in Brazil, China, and India almost double what it pays their peers in the United Kingdom. And a recent McKinsey survey in China found that senior managers in global organizations switch companies at a rate of 30 to 40 percent a year—five times the global average.

In order to address these challenges, Dewhurst et al. (2012) suggest companies should start by getting their business and talent strategies better aligned as they rebalance toward emerging markets. IBM for example, began sending executives in 2010 to emerging markets as consultants.

In the U.S., McDonald’s outsources supply chain operations. But when it tried to enter Russia, it couldn’t find local suppliers. So, with help from its joint venture partner, it identified farmers it could work with and advanced them money so they could invest in seeds and equipment. And it sent Russian managers to Canada for training. By establishing its own supply chain and management systems, it now controls 80% of the Russian fast-food market (Khanna et al., 2005).

Research has shown that the mobility of employees from MNCs contribute to spillovers of both technical and management skills. Gerschenberg (1987) examines MNCs and the training and spread of managerial skills in Kenya. The results of his study conclude that MNCs offer more training to their managers than private local firms do, although not more than joint ventures or public firms. Managers also move from MNCs to other firms and contribute to the diffusion of know-how. Adding to that, the common finding is that MNCs pay more for their labor than what local firms do, even taking skill levels into account. Therefore, it is not unreasonable to hypothesize that the fear of a “brain-drain” to local firms is one of the reasons behind the higher wages in MNCs (Blomstrom & Kokko, 1996). Katz (1987) points out that
managers of locally owned firms in Latin America often started their careers and were trained in MNC affiliates.

Chen (1983), in a study of technology transfer to Hong Kong found that the MNCs' frequency of undertaking training and their training expenses were significantly higher than those for local firms. Therefore, he concludes that “the major contribution of foreign firms in Hong Kong manufacturing is not so much the production of new techniques and products, but the training of workers at various levels.” A study by Simonet (2012) on the entry modes of European firms in Vietnam found that MNEs do not require specific assets (asset specificity is low), such as unskilled labor which is widely available, a low equity mode of entry will be preferred – contractual agreements such as licensing/franchising. On the other hand, when MNEs require specific assets that are rare or more expensive, such as specialized labor, companies will prefer high equity mode of entry – either set up a subsidiary or acquire a firm in the host country.

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Technology Penetration and its Impact on Information Access by Customers: An Exploratory Study

Keywords: Buying Behavior, Search for Information, Technological Change, Retailing, Case Study, U.S.A., China

INTRODUCTION AND LITERATURE REVIEW

There has been an increasing penetration of technology in the world, as well as in India. With this increase, the consumers have more and more access to the Internet, mobile communication and online cashless transaction methods (Use of credit cards, Internet banking, etc.) The ease of this access and also its financial benefits (to both the consumers and the retail businesses) has led to the new world of E-tailing. But the Internet consumption by the buyers has evolved considerably since the dynamic Amazon founder Jeff Bezostook the bookstore online and sold the first books in 1994. This first version of Internet Retailing 1.0, boomed at its infancy, reached exceptional highs, and then got busted in the early 2000s. Now it is back with its second coming.

The impact that e-commerce has had on the business in phenomenal. The e-commerce sales have consistently been above the retail sales. A large body of research emerged, initially, to understand the key reasons for firm and consumer utilization of online and offline channels and the rationale for why one channel might be preferred to the other. Online retailers can potentially offer consumers more convenience (e.g., Balasubramanian et al. 2003) and access to increased product variety (e.g., Brynjolfsson et al. 2010; Ghose et al. 2006). Many early studies (e.g., Bakos 1997; Brynjolfsson and Smith 2000; Iyer and Pazgal 2003) focused on price as a key product attribute and the ability of online retailers to reduce search frictions and deliver lower prices to end consumers. In the operations management literature, Netessine and Rudi (2006) derive conditions under which retailers prefer drop-shipping to holding inventory; similarly, Randall et al. (2006) also look at fulfillment choices by online retailers and find that firms carrying high margin products and less variety are more likely to invest in holding inventory.

Furthermore, key institutional differences in online and offline channels, such as the ability to engage in directed search and access review information from other consumers affects overall metrics such as sales concentration. Brynjolfsson et al. (2011), for example, show that the online channel, relative to a catalog channel with identical products and prices has a more diffuse sales distribution, and attribute this to the ability of consumers to more readily access products in the tail of the so-called Long Tail (Anderson 2006). Other recent work has looked at structural aspects of markets that shape online-offline competition such as distance to physical stores (e.g., Forman et al. 2009), and the extent to which target customers in local markets have minority preferences and are underserved by offline providers (Choi and Bell 2011). Brown (1991) has suggested that the costs of a retail format refer to consumers’ costs. Consumers incur non-monetary costs - time, effort and psychological costs - as well as monetary costs. Savings in non-monetary costs are especially emphasized by non-store formats. Their appeal to consumers has been the ease and convenience of shopping, freed from location and other constraints. According to Rao (1999), E-commerce offers increased market activity for retailers in the form of growing market access and information and decreased operating and procurement costs. The consumers can gain better prices due to

AGBA 12th World Congress
Page 361 of 1173
the competition and also can enrich their knowledge on goods and services.

Ratchford et al. (2001) have told that through Internet, consumers can gather information about merchandise and they compare a product across suppliers at a low cost. They also can effectively analyze the offerings and easily locate a low price for a specified product. Eroglu et al. (2001) have advocated that the most important thing in the traditional retailing is physical store setting. According to them, it is largely determined by the cost of real estate and the various physical objects required creating different sounds, aromas, colours and lighting.

Doolin (2004) has specifically pointed out that e-tailing is the sale of products and services to individual customers. According to him, the definition of e-tailing encompasses the sales of products or services online. Rabinovich (2007) and Cao and Zhao (2004) have identified the challenges of e-tailing industry. This challenge begins with the response time of the web-server; moves to the amount of time the customer must wait until the order ships, and also includes the time the shipping process takes.

Delone and Reif (2004) have found that at present customers are more likely to continue shopping online when they have a greater experience of online shopping. It is also found that young adults have a more positive attitude towards online buying. Lavie and Tractinsky (2004) have expressed the expressive aesthetics of web-sites that convey a sense of creativity and uniqueness. This type of aesthetics is likely to serve an important role when shopping for specialty goods. The expressive design is relevant to specialty goods because of their unique characteristics that emphasised the shopping experience.

Bauer et al., (2006) have compared the services of online retail service vs. traditional retail services. They have identified that the online retail services are broken into two rather distinct phases: the client interaction phase taking place online and the fulfilment phase taking place offline. They also have suggested that web-site quality is a matter of delivering both hedonic and utilitarian elements.

E-COMMERCE IN INDIA

In India, it started a little late since the infrastructure and technology penetration was low. And now, Gartner rates it as the fastest growing ecommerce market in Asia-Pacific. In India, the shift from physical stores to e-store takes place due to the in-adequacy of time of consumers and the relatively high disposable incomes as well as due to a high need for labor-saving goods and services (Gehrt, Yale and Lawson 1996).

Companies such as Flipkart, Amazon, Snapdeal, etc. have developed a market place model on the Internet for their e-tailing businesses. And at these marketplaces, the consumers are now able to access multiple brands under a single platform. The expanding role of the Internet in consumer and business procurement activity has created unprecedented opportunities for companies to have easy and vast access to customers. And also the other way around: consumers now get to pick and choose from a wide variety of products and make the buying decision only after taking into consideration multiple factors. It has truly brought into reality the idea of “Customer is the King.” The penetration and usage of technology has been increasing at a fast pace in the modern world. By technology, we mean mobile telephony, Internet, the various cashless payment systems, and the connected devices. A brief snapshot of the world that we are living in today. This penetration has given rise to new platforms of interaction between a consumer and the seller. E-commerce and E-tailing have now become new channels to sell goods and services. Along with this, people are also using the online medium to search for information, make payments and also expressing their opinions regarding different brands. As a result it becomes important to understand this dynamic relationship between the consumer and the buyer across all the platforms.

Even though E-commerce is still in nascent stages in India, but they are already playing a significant role
in the business world. The E-tailing consumers in India are expected to grow to 40 Million users by 2016 (Figure 1). The market size itself is growing at a very high rate and is expected to continue to grow.

With this background in mind, it was necessary to understand how this explosion of technology affects the relationship between a consumer and a seller. Does it change the purchase decision making of the customer? And how can the seller actively participate in such a dynamic environment? There has not been a significant amount of research in this field, since it is still growing and at its early days. This paper thus tries to understand this interaction between a consumer and the business world and how it affects the whole transaction of a customer becoming aware of the product and then finally purchasing it.

Figure 1: Changing Shopping Trends in India.

Modern Purchase Journey of the Consumer
A typical cycle of a consumer making a purchase (as an example consider a fashion apparel) is given above in Figure 2. As we can see, the purchase of a product has developed from being an event to more of a journey.

Lal and Sarvary (1999) gave the differentiation between online and non-digital product attributes and the way the information about each is communicated in online and offline channels. The former, e.g., the price of a product or length of a book, suffer no loss of information when communicated online, whereas the latter, e.g., the feel of a shirt or look of a pair of glasses, may introduce significant uncertainty for some consumers when presented or characterized online.
Engaging with consumers is more complex today than ever before. As a business man, it seems that the gap between the consumer and the seller has decreased. But it is a paradoxical situation. Even if the customer’s ability to access the information about every retailer has increased, this has led to an elongated buying decision. The Fig. 5 puts forward this idea. More and more information is now being consumed before making a purchase. Thus, the distance between a retailer and the buyer may have decreased, but the time taken to traverse the path towards making a purchase has been elongated. Moreover, the customer views this information across multiple channels. Today many consumers are actively seeking out online ratings, social media-based peer reviews, videos and in-depth product details as we move down the path to purchase. 70% of consumers look at product reviews before making a purchase. 79% of consumers use a smartphone to help with shopping. 83% of moms do online research after seeing TV commercials for products that interest them. Virtually every aspect of our lives—the way we work, shop, communicate, seek information, spend our free time, and so on—is becoming digitized and that means data is being produced at a tremendous rate.

A retailer can reach out to its customers and engage them in more than one way—For example, anybody seeking healthy products can go to the retailer’s website to check out the nutritional content of its variety of products. Retailers can also give interactive ways of mixing and matching a variety of products to reach the right product mix. Thus everything can be customized and this can attract consumers on a much higher level. Apart from this, mobile apps can be introduced to give information on the go. The apps can also be used to give deals and discounts; track customer’s purchases and then give recommendations.
based on their history of purchases. One specialty retailer found that customers using the Web and mobile devices to pre-show and prepare lists purchased three times as much merchandise as single-channel, in-store shoppers. The company was able to quadruple online sales as a percentage of total sales, and traffic to stores increased as well.

In a research done by Boston Consulting group and published in the report “The Omni channel Opportunity for Retailers” in Oct 2013, 66% of the consumers look for information on the retailer, its history, the type of products its offers, etc. 80% of the consumers checked to locate the store and compare between different stores. 88% people browsed the online space for reviews on the product, comparing their prices across various platforms and stores, checking if there were any deals or discounts on offer, and finally to book appointments with the seller. This is a huge chunk of information being accessed at different points in the purchase cycle. Further, 61% consumers needed information on customer support, help for payment for the product and also to give the feedback of the experience on the Social Media. An important facet of this data is to understand that information is getting proliferated even from a small number of users. And these small numbers finally give information to other consumers on whether to buy a product or choose the other.

RESEARCH FRAMEWORK

The framework (Figure 3 and Table 1) represented here shows a typical interaction between a consumer and a seller. With the increasing penetration and advancements in technology, the dynamics between these two entities has forever changed. Technology here acts as an enabler and a communication interface for the business owner and the customer. This interface can be the Internet, mobile, retail shops or other direct sales locations. At this communication interface, the buyer and the seller now have access to a variety of information before they conclude on a decision. As a result, the “distance” between a buyer and a seller has decreased significantly. Business owners have access to Inventory data, customer behavior data that can be used for customized analysis and so on. The customers on the other hand have access to product information, other customers’ reviews, the advantage of mobility, etc. Once all this information is taken into consideration, the business owners can choose on the platform/channel on which to offer their products. It can be retail or e-tail. At the same time, the consumer also gets an option of buying the same product from different platforms. The important point to understand here is that the customer can have access to both the platforms simultaneously and then make a buying decision.

A buyer can choose form either retail or e-tail if the business owner is present on both of these platforms. A combination of retail and e-tail gives rise to a multi-channel or Omni-Channel form of selling.
<table>
<thead>
<tr>
<th>Technology</th>
<th>Communication Technology. Can be the Internet, Mobile, Intranet for business purposes, online payment systems, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seller. (Business Owners)</td>
<td>Gets inputs from the technology devices and can be used for adding revenues to the business, gain more customers, improve efficiency, etc.</td>
</tr>
<tr>
<td>Buyer. (Customer)</td>
<td>Also gets inputs from technology devices. Has access via laptops, mobile, PC, watches, etc. Thus there is now a 24x7 access to any requirement.</td>
</tr>
<tr>
<td>Communication Interface</td>
<td>Where the buyers and sellers interact. The interface provides lots of information to the consumer before he/she can make a final buying decision. The consumer can read reviews from other customers, detailed product information, do price comparisons across different selling points. This gives the consumer the empowerment to take an informed decision.</td>
</tr>
<tr>
<td>Retail</td>
<td>This is the traditional channel of selling to the customer. These are the physical store outlets. The consumer walks in and makes the purchase.</td>
</tr>
<tr>
<td>E-tail</td>
<td>A modern channel of selling to the customer. It comprises of selling goods and services on the online, mobile space.</td>
</tr>
</tbody>
</table>

**Table 1: Research Framework**
The hypotheses mainly deal with the changing interactions between the buyer and the seller because of technology. As can be seen from the framework, a buyer can now choose from multiple channels. At the same time, the retailer can also provide goods and services at different purchase points. Considering this, the hypotheses are as given below.

**Hypothesis 1**: With increasing penetration of technology, retailers will use the advancements for managing the inventory across channels.

**Hypothesis 2**: With increasing penetration of technology, consumers will access increased customer reviews before purchasing decisions are made.
Hypothesis 3: With increasing penetration of technology, there will be an increasing need of omni-channel retail presence due to presence of mobility.

Hypothesis 4: With increasing penetration of technology, consumers will access increased more product information before coming to a buying decision.

METHODOLOGY

For this paper, I have tried to use the Case Study approach as proposed by Kathleen Eisenhardt, 1989 and also by Yin, 1981. Eisenhardt gave a path or a road map for building such case studies. Her literature in itself was an extension of the work that was done by Yin in 1981. Yin gave the basic design to be considered when using a case study approach. Case study approach helps in qualitative researches where empirical data is not available. It also helps to use this method when the scope of work is too large and case studies can be used to as a sample set resembling the larger industry. Another advantage of this method is that a multi-level analysis can be done using a single or a couple of case studies. A case study will generally put together results that have been obtained from secondary research, primary research such as interviews and interviews, and observations. As a result, it is useful to use the case approach to test the hypotheses posted here and generate inferences.

Another aspect for choosing the case study is the fact that there have not been many papers or studies produced on omni-channel retailing, or the acceptance of modern technology for making purchase decisions. As a result, for an emerging and novel issue such as this, it is best possible to analyse the situation and the market dynamics by considering specific cases, which can be used to prove or refute the hypotheses. Case study approach will be used to provide data in accordance with the framework provided and analyse its relation with all the variables and entities involved in the framework.

Case Studies

![Figure 4: The Omni-Channel Availability]
Before we go into the case details, let us again have a look at how the consumer and the seller interact.

### Table 2: The Omni-Channel Advantages

<table>
<thead>
<tr>
<th>1, 2, 5, 9, 11, 12, 13, 14</th>
<th>Available to both Omni-Channel and e-tailers</th>
</tr>
</thead>
<tbody>
<tr>
<td>3, 4, 6, 7</td>
<td>Available only to omni channel retailers</td>
</tr>
<tr>
<td>8, 10</td>
<td>Available to both Omni Channel and e-</td>
</tr>
<tr>
<td></td>
<td>tailers, but omni channel has an advantage</td>
</tr>
</tbody>
</table>

The above Figure 3 and Table 2 clearly show the advantages of the omni-channel retailing from the business perspective.

The modern customers don't just want multi-channel experience with products being available on different platforms. Consumers desire to have a boundary-less and singular experience that feels the same for all the accessible channels. The consumer shares a lot of information and data with the seller and on the Internet. As a result, a customized experience, individual to each consumer is expected from the seller. He should put together, integrates and manage all the information. These results in an engaging experience, irrespective of the channel where the consumer wants to make a buying decision. This is the essence of omnichannel marketing approach. Omnichannel marketing differs from multichannel in that its goal is not solely to optimize the broadcast of content across customer touchpoints, but rather to create a media-agnostic infrastructure that links products, consumers, and communications channels together. This creates an ecosystem that is constantly evolving and getting smarter as new data is received.

An example of successful Omni Channel Marketing is the movie Toy Story 3. Toy Story 3 is a 2010 film, which turned out to be one of the biggest hits ever. It left no stone unturned during its elaborate marketing campaign. It was seen on TV commercials, it utilized the then-upcoming medium of YouTube and its content went viral. They used Social Media like Facebook to promote discounts and deals and even allowed the ticket sales via FB Groups. Mobile applications were launched to give customized experiences to the consumer. All this data was tightly integrated and the marketing team knew what each consumer liked, or wanted to do. Disney’s great history with merchandise sales, the theme parks, and in-store advertising made way for a huge success.

Toy Story finally raked in more than $1 Billion in sales including tickets, merchandise, royalty, etc. It forms a great example of giving a complete, omnichannel experience to the customer.

**Case 1: Macy’s**

For the first case study, we consider the case of Macy’s Store. Macy’s is one of the largest stores in USA with over 850 departmental outlets. Rowland Hussey Macy found it in the year 1858. Macy’s pioneered such revolutionary business practices as the one-price system, in which the same item was sold to every customer at one price, and quoting specific prices for goods in newspaper advertising. Known for its creative merchandising, Macy’s was the first to introduce such products as the tea bag, the Idaho baked potato and colored bath towels. Macy’s also was the first retailer to hold a New York City liquor license. In 1924, Macy’s Herald Square was opened as the world’s biggest store with more than a million square feet in size. Even though Macy’s has a rich history and such successes, it also had many failures and financial issues.. It has been through many ups and downs throughout its 157-year-old history, but has always been able to reinvent itself. With its long history, its transition from being a huge retailer of physical stores to a e-tail + retail giant, Macy’s forms a very interesting case study for the framework and hypotheses in question.

Now, consider the third hypothesis that has been put forth regarding mobility and omni-channel retailing. Macy’s recently built a strategy called as MOM strategy. MOM stands for “My Macy’s, Omni-Channel
"We talk a lot at Macy’s about omnichannel retailing. Our customer is multi-dimensional. She is busy at work and out with friends. She always has her mobile device in her hand. She’s active on Facebook and Twitter and YouTube and a dozen other social media sites... We want that customer to be able to interact with Macy’s no matter where she is or how she shops. It makes no difference to us whether she buys something in our store or online... or whether she is shopping from her desktop computer or her Droid or her iPad. Macy’s best customers are those who shop us in-stores and online. We have a whole series of strategies in place to drive our store customers to the Web, and our online customer to the stores...Today’s customer is not monolithic. And that’s the way we are approaching our customer.”

Consider this: The Macy’s CEO is clearly stating that the place at which a customer buys a product is no longer relevant. It can be from an iPad or from the offline store. And for this, Macy’s has built a strategy to connect the consumer data across different channels of web, stores, mobile applications and other channels. With increasing competition, it becomes important that a customer is always in touch with the brand. As a result, it becomes critical that Macy’s is present at social media sites; it should be present at the Out of Home hoarding when consumers are travelling. Macy’s has to be there when a customer is utilizing a mobile app to search for products, and it also has to have a presence when the customer wants to have a touch-and-feel of the product at its offline stores. But the important thing about the strategy that Macy’s CEO has put forth is that all these channels are not independent of each other. The data at all these channels is tightly integrated. So, a consumer can simply scan a barcode/q-code on a magazine advertisement and it can result in the consumer buying a product on his/her mobile. Thus an offline magazine ad leads to a sell on the online mobile device. And this is what Macy’s had done incredibly well.

The result of this can be seen in the incremental sales of Macy’s. The world was in recession and the there was no growth post 2008. But Macy’s sales grew from $23 Billion in 2009 to $28 Billion in 2014. When many companies were actually in a state of being shut down, it is incredible that Macy’s has not only been able to stay afloat, but also increase its revenue by more than 20%.

Next we consider the hypotheses four relating the technology and increased product information. Consumers have been using a lot of information and making informed decisions before buying any product at Macy’s. And this data analysis has led Macy’s to change its strategy too.

In order to understand about this customer ideology of information gathering, there is visible data on the online space.

As of March 2015, there have been 34 Million monthly website visits for Macy’s. The amount of daily visitors is thus more than 1 Million! This means that a huge number of its customers are actually logging in on its web portal to first do a primary research of their own. The consumers check out any of the latest deal offering that Macy’s has put forward, or it gathers more information related to the product. Since there is a wide range of products available at Macy’s, consumers need to check all these products, the positives, negatives and how a particular product suits their current need. A snapshot of Macy’s homepage is given below. There are so many product types like Men, Women, Kids, Jewelry, Watches, etc. And different products are customized for different set of consumers. A million consumers thus visit this site daily in order to consider these products and make an informed decision before making a purchase. Along with hypothesis four, we also have the second hypothesis, which talks about customer reviews
being part of the buying decision. A combination of the second and fourth hypothesis can be seen here: Macy’s has a huge social media presence, with up to nine million shopping-related social media posts being published about Macy’s. (Taken from a report published by the company Infegy, which is a leading Social Media monitoring entity.) This is huge number of reviews being made by the consumers and other comparison sites. Consumers are thus searching for these reviews and are also contributing by posting their own reviews. This leads to a lot of word-of-mouth publicity for Macy’s and it also shows the dependency of the consumers on the reviews posted by fellow-consumers. On the basis of the assets owned by Macy’s, The total Facebook followers for Macy’s are 13 Million and Twitter followers being 0.8 Million. (Dated 20th April 2015). These are huge numbers for a retail shop that exists only in USA and has an Internet penetration of approximately 300 Million consumers. Customers can post their reviews, post their grievances, basically any sort of communication can be made between the customer and the company on these platforms.

With these numbers, the changes in the core strategy of Macy’s and also the results that Macy’s has achieved in terms of Sales/Revenue growth clearly shows that the three hypotheses explained with the help of this case study hold true.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Consideration/Non-Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis One</td>
<td>Not considered for Macy’s Case Study</td>
</tr>
<tr>
<td>Hypothesis Two</td>
<td>Accepted</td>
</tr>
<tr>
<td>Hypothesis Three</td>
<td>Accepted</td>
</tr>
<tr>
<td>Hypothesis four</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

**Case 2: Suning Appliance**

Suning Appliance Co. is a Chinese private retailer. Found in 1990, it is one of the largest private retailers of the country. The company has both offline and online channels, with its e-commerce platform being ranked as the 3rd highest in China. Suning sells home appliances, cosmetics, books, household commodities, service merchandise, etc. China being a developing country and Suning being one of the largest retailers, it forms an interesting case study to look into.

Earlier, Suning started off with physical stores. But with the changing technology and consumer buying patterns, Suning decided to change its strategy to an omni-channel company. The company undertook this change in strategy since January 2012. The first step towards this change was creating a unifying brand name across its online, offline and mobile platform. And then Suning gradually undertook other important activities such as aligning the prices, vertically integrating with the suppliers, etc.

Suning responded to the evolving consumer trends and technology by delivering three main changes: Changes in target customer’s choice, changes in shopping value proposition and changes in retail value chain.

a. Changes in Target Customer’s Choice: This change highlights the hypothesis three of mobility and Omni-Channel retailing. Customers of Suning Appliance often liked to feel the product in the physical stores and then buy it online. This idea was grasped by Suning and it created strategies to make use of this. Initially, Suning kept its online prices lower than the offline prices, and thus retaining its customers. In most of the other companies, the customers shifted loyalty and bought products from competitors. But since the customer information was tracked from offline to online, Suning was able to retain its customers. Thus it was able to create a perfect synchronization between different customer channels. It is important to note that different customer channels were utilized differently and served a different purpose.

b. Changes in shopping value proposition: This change in strategy also considers the hypothesis
three. Instead of operating the platforms individually, Suning created a seamless experience between all the channels. For clients who purchase online, Suning offers greater convenience value than the pure e-commerce player; for example, the clients can purchase online but pick up in-store if they do not want to wait for delivery, or can easily return the merchandise and access the after-sales service in-store. As a result of this, customers wanted to stay with Suning as a brand instead of crossing over to its competitors. Suning was hence able to utilize its marketing budgets for gaining new customers. The job of retaining the customers was taken care of by the strategic change that they undertook.

c. Changes in retail value: This aspect deals with the first hypothesis: the relation between the inventory management by the business owners and the effect of technology on this process. Suning undertook the task of integrating different aspects of the supply chain and services post 2004. The complete vertical chain was integrated in order to have the same product information and experience at all stages. This can be seen in the fig. which chronologically describes the inclusion of different suppliers onto a common technology platform in order to manage its inventory in the best possible way. As we can see, Suning started off with pilot tie-ups with key suppliers in 2005 and then gradually migrated towards developing their own private label.

Thus, with the help of Suning Appliance case, we are considering two hypotheses:

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Consideration/Non Consideration</th>
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<tbody>
<tr>
<td>Hypothesis One</td>
<td>Accepted</td>
</tr>
<tr>
<td>Hypothesis Two</td>
<td>Not Considered</td>
</tr>
<tr>
<td>Hypothesis Three</td>
<td>Accepted</td>
</tr>
<tr>
<td>Hypothesis four</td>
<td>Not Considered</td>
</tr>
</tbody>
</table>

CONCLUSION

The rise in technology provides for a very exciting and dynamic relation between the buyer and the seller. The numbers show that this trend of technology penetration is going to keep on increasing. This has resulted in a very paradoxical situation between the buyer and the seller: they are much closer to each other in terms of access of information and knowing each other, but they are also getting away from each other because the purchasing path has widened and decision making now involves many steps before reaching its goal.

The paper tried to understand this trending and changing relationship and puts forth two hypotheses for the same. In the first hypothesis, it is postulated that there is a positive relation between technology penetration and inventory management. The case study of Suning Appliance Co. was considered for this purpose. The second hypothesis talked about the relation between Customer reviews and technology penetration for making buying decisions. The third hypothesis connected mobility, omni-channel and technology penetration. Both the cases of Macy’s and Suning Appliances were useful when understanding this hypothesis. The final hypothesis talked about product information incrementation due to technology. Significant follow up data was provided relating to the access of product information and buying decisions.

The table gives the conclusion that was found from the analysis of the two case studies. Each case study provided information on different hypotheses. A combination of the two case studies gives a fair picture of the task undertaken.
Hypothesis | Case Study
--- | ---
Hypothesis One | Suning Case Study: Accepted
Hypothesis Two | Macy’s Case Study: Accepted
Hypothesis Three | Macy’s and Suning Case Study: Accepted
Hypothesis four | Macy’s Case Study: Accepted

LIMITATIONS AND FUTURE RESEARCH

Even though the two case studies taken in this paper are from both developed and developing countries, but it would have been more beneficial if more companies would be considered for understanding the research objectives. Also, since the time frame for building up such cases is small, the case objectives would be better met with a larger time frame and hence cancelling any aberrations in the data, if any. These limitations serve as the base for future research. A large number of upcoming companies are having their business models based on information gathering and information sharing with the customers. It will be interesting to see how the increasing consumption of product information affects these companies. A larger pool of companies will give firmer evidence for the hypotheses. With the technology penetration and the technology itself changing rapidly, these studies also need to evolve and need to be updated regularly. Will the future of retailing see all the sellers adopt an omnichannel, or will we see the domination of mobile channels is yet to be seen.

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Antecedents and Outcomes of Export Market Orientation: An Entrepreneurial Capability Perspective with Evidence from an Emerging Economy

Key words: Export Market Orientation, Entrepreneurial Capability, Export Performance, Emerging Economy, International New Ventures

INTRODUCTION

“A powerful global conversation has begun. Through the Internet, people are discovering and inventing new ways to share relevant knowledge with blinding speed. As a direct result, markets are getting smarter—and getting smarter faster than most companies.”

-Levine, Locke, Searls and Weinberger in *The Cluetrain Manifesto*

Customers have become the most important factor of successful businesses today. The time is gone when it was so easy to fool customers and sell anything manufacturers produced. In this era of digital communication customers can voice their love, joy, anger and hatred on a personal level through ‘Facebook’, ‘Twitter’, ‘You Tube’ and so on which can easily reach and be heard by other customers and wider community on a global scale in real time. This has empowered customers and threatened companies that do not conform to the law or fail to deliver values to customers in exchange of price. This has rejuvenated the importance of customers and given birth to many concepts and practices like ‘value co-creation’ (Zwass, 2010), ‘user-generated contents’, ‘working consumers’ (Cova & Dalli, 2009), ‘prosumption’ (Humphreys & Grayson, 2008; Ritzer & Jurgenson, 2010). Customers are no longer customers only; they are now ‘prosumers’ who simultaneously play the role of both producers and consumers. These changes and developments bring market orientation to the fore of the attention of companies and academia.

The globalized world has changed the realities of how businesses are operated today. The pace of globalization, aided by advanced transportation system, internet and communication technologies, and falling trade barriers between and among countries, has paved the way for foreign market entry for many small companies from the day one. Exporting has become the most common way to join this universe of business. There are numerous factors that are associated with successful exporting. One stream of export marketing literature attributes export success to internal (e.g. export marketing strategy, management attitude and perception, firm and management characteristics and competencies) as well as external factors (e.g. industry characteristics, foreign and domestic market characteristics) (Sousa, Martínez-López, & Coelho, 2008; Zou & Stan, 1998). Another stream of research is emphatic on different strategic orientations as determinants of export performance (Cadogan, 2012). Considering the role and importance of customers in successful venturing, market orientation has attracted much research attention in the mainstream marketing (Kirca, Jayachandran, & Bearden, 2005), little attention in international marketing, and scarce attention in international entrepreneurship (IE) literature. Marker orientation is much more important than any other strategic orientations (e.g. learning orientation, innovation orientation, technology orientation, etc.) in the sense that all other orientations may be driven by or spring up from market orientation as a result of customers’ changing needs, demands, preferences, and priorities. Market orientation may also have spill over effect on all the processes of the organization.
The first study on the operationalization of market orientation and its impact on business profitability dates back to 1990 (Narver & Slater, 1990) and since then a large body of research on the performance implication of market orientation has developed (Kirca, et al., 2005). Research suggests that firms with higher market orientation perform better (Kirca, et al., 2005). Academic enquiries relating to market orientation-performance relationship in international business context started in the late 1990s (Cadogan, Diamantopoulos, & De Mortanges, 1999) and only few issues related to this have been answered till date. Most studies concern the performance outcome of market orientation in international business, keeping aside the antecedents to or contextual variables for market oriented behaviour (Chi & Sun, 2013). Studies investigating the role of market orientation in international new ventures (INVs) are also a few (e.g., Kocak & Abimbola, 2009; Kropp, Lindsay, & Shoham, 2006; Ruokonen, 2008).

International business activity, even its easiest and simplest form—exporting—is an entrepreneurial act (Ibeh, 2003) which is initiated by an entrepreneur and hinges upon her entrepreneurial capabilities in the case of SMEs. Especially INVs, which are small in size and young in age, are mainly underpinned by a single entrepreneur or a small team of entrepreneurs. Entrepreneurial capabilities of entrepreneurs largely define the start-up, survival, and success of such firms. By contrast, large MNE activities are performed in a very organized and structured manner, where large departments and teams are involved in entrepreneurial activities which is known as intrapreneurship. MNE-oriented models and research therefore mainly focus on organizational capabilities rather than those of any individual. MNE-based capability theory cannot explain and define the capabilities inherent in the emergence and prevalence of INVs where entrepreneur is the main actor.

There are several conceptualizations and operationalizations of general market and export market orientation construct; however, there is no study that investigates the properties of different scales developed for the same construct and their differential impact on performance. This study will investigate two scales of export market orientation and their sustenance and differential impact. Furthermore, despite a greater call for emerging country studies in entrepreneurship and IE literature, the progress towards integrating knowledge from these economies is very minimal, mostly dominated by research in Chinese contexts. There is also research blankness and knowledge blindness in literature pertaining to low-tech firms venturing in global marketplace. This study aims to contribute to literature by investigating the role of entrepreneur’s two sets of entrepreneurial capabilities in developing market-oriented behaviour of firms towards achieving greater international performance. We have drawn data from 647 INVVs in a Southeast Asian emerging economy’s low-tech apparel export industry which is considered as the ‘next China’. The rest of the paper is organized as follows: the next section briefly describes the background literature, and then hypotheses are derived. Then we present research methodologies. Finally we present data analysis and discussion. The paper is then concluded with research implications, limitations, and future research avenues.

**BACKGROUND LITERATURE**

**Export market orientation**
Marketing concept is one of the building blocks of marketing discipline. While marketing concept refers to a business philosophy, the implementation of this philosophy reflected in the activities and behaviour of an organization is termed as market orientation (Kohli & Jaworski, 1990). Based on the literature review and their own research findings Kohli and Jaworski (1990) offer a formal definition of market orientation: the organization wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organization wide responsiveness to it (p. 6). Traditionally consumers have been the main focus of a market orientation which has been extended to market forces like competition, technology, and regulation. This gives a broader perspective to market orientation conceptualization (Jaworski & Kohli, 1993). In line with this conceptualization, market intelligence is not merely gathering information on customers and competitors,
but also pertains to a host of other factors such as technology, government regulation and other environmental factors. While Kohli and Jaworski (1990) defined market orientation as behavioural, the definition of Narver and Slater (1990) reflects both philosophical and behavioural aspects but their operationalization is characterized by only behavioural facets (Cadogan & Diamantopoulos, 1995): the behavioural aspect is defined as ‘the organizational culture that most effectively and efficiently creates the necessary behaviours for the creation of superior value for buyers’ (Narver & Slater, 1990, p. 21). According to them, market orientation consists of three behavioural components: customer orientation, competitor orientation, and interfunctional coordination. These two perspectives are not mutually exclusive; rather, they are complementary.

The operationalization of market orientation construct and most research concerning this was initially done based on firms’ domestic operations. Increasing importance of international operations for firms’ survival and the changing global business reality has compelled researchers to operationalize the concept and investigate its impact on organizational performance from an international business perspective. This export market orientation is defined by Cadogan and Diamantopoulos (1995) based on the two dominant views of market orientation offered by Narver and Slater (1990) and Kohli and Jaworski (1990) on the ground that ‘the basic nature of the construct should not be affected as a result of merely modifying the setting in which it is applied’ (Cadogan & Diamantopoulos, 1995, p. 50). Additionally, they offer some contextual variables to be included to best reflect the challenges faced in international business setting.

Kirca and Hult (2009) identified three research streams in market orientation literature and we observed similar pattern in relation to export market orientation. The first stream conceptualizes and measures a firm’s market orientation (Kohli & Jaworski, 1990; Narver & Slater, 1990) and export market orientation (Cadogan & Diamantopoulos, 1995; Cadogan, et al., 1999). The second stream identifies the antecedents and consequences of market orientation in domestic markets (Gebhardt, Carpenter, & Sherry Jr, 2006; Matsuno, Mentzer, & Özsomer, 2002) and those of market orientation in international business setting (Cadogan, Diamantopoulos, & Siguaw, 2002; Chi & Sun, 2013; Rose & Shoham, 2002). Finally, the third stream investigates the contextual variables in market orientation-performance relationship in domestic markets (Slater & Narver, 1994) as well as in international markets (Murray, Gao, & Kotabe, 2011; Rose & Shoham, 2002).

**Entrepreneurial capabilities**

Previous research has identified several categories of capital, e.g., human, social, physical, financial, organizational, etc. All these dimensions have limitations in reflecting the entrepreneurial capabilities of entrepreneurs who first develop the possibilities of new venture. Intellectual capital has joined the shore later but failed again to explain entrepreneurial capabilities. Erikson (2002) perceived entrepreneurial capabilities as entrepreneurial capital, a set of complementary human capacities, treated as heterogeneous resource. This has derived from resource based view which suggests that capabilities which are valuable, rare, difficult to imitate, and have few substitues can be the basis for sustained competitive advantage (Barney, 1991). Erikson (2002) extended Ulrich (1998) definition of intellectual capital as a multiplicative function of competence and commitment to entrepreneurial competence and entrepreneurial commitment. Entrepreneurial competence is the ability to perform some specific tasks that include the capability to identify opportunities and acquire requisite resources to create ventures. On the other hand, entrepreneurial commitment reflects the emotional, intellectual, and physical energy employed to achieve implicit or explicit entrepreneurial goal or strategy.

Day (1994) distinguishes capabilities from assets. Organizational capabilities are classified in three categories: inside-out, outside-in and spanning capabilities. As we have noted earlier, capabilities perspective devoted to explain MNE cases cannot reflect entrepreneurial capabilities in small firms, especially in INVs. However, we can adopt this classification of capabilities in relation to entrepreneur. Consequently, inside-out capabilities include entrepreneur’s previous work, industry, and technical
experience as well as previous entrepreneurial and international experience. These inside-out capabilities help entrepreneurs to perform necessary activities of the firm, including product delivery, cost control, integrated logistics and human resource management. Entrepreneur’s outside-in capabilities include networking capabilities to build relationships with customers, suppliers, and other network partners, her proactive attitude, and global vision. These capabilities connect entrepreneur’s inside-out capabilities to the firm’s external environment and allow her to anticipate changes in the environment in relation to customer, competition, channel bonding, and technology monitoring. This is ‘market sensing’ (Day, 1994) capability which is embedded in entrepreneur’s network relationships. Finally, spanning capabilities integrate inside-out and outside-in capabilities. Product innovation and new product development is an example of such capabilities.

Research and operationalization of entrepreneurial capabilities rest on parochial view of capabilities. Most inquiries in IE encircled prior experience of entrepreneurs in establishing a new venture. Other human and social capital has largely been overlooked. We have suggested and distinguished two sets of entrepreneurial capabilities. One is general and the other is international. General entrepreneurial capabilities consist of prior entrepreneurial, managerial, and technical experience (Ucbasaran, Westhead, & Wright, 2008). On the other hand, international entrepreneurial capabilities include international business experience, networking, proactive, risk taking, and innovative capabilities of the entrepreneur (Dimitratos & Plakoyiannaki, 2003; Karra, Phillips, & Tracey, 2008; Madsen & Servais, 1997). In addition, Gabrielson, et al. (2008) and Karra, et al. (2008) found that global vision is at the core of international entrepreneurial capabilities.

**HYPOTHESES**

**Export market orientation and performance**
Empirical body of literature on the positive relationship between market orientation and performance is substantial (Deshpande & Farley, 1999; Kohli & Jaworski, 1990; Morris & Paul, 1987; Narver & Slater, 1990). Through a meta-analysis Kirca, et al. (2005) found that existing literature provides a strong positive association between market orientation and performance ($r=.32$, $p < 0.05$). In addition, they found that market orientation positively affects various measures of performance, for example, overall business performance, profits, sales, and market share. Research related to market orientation in international business also confirmed this positive link. Akyol and Akehurst (2003) found that there exists a positive relationship between export market orientation and export performance in the Turkish clothing industry. They also reported that the dimensions of export market orientation have strong relationship with each dimension of export performance. Other studies confirmed this in different country and multiple industry setting (He & Wei, 2011; Murray, et al., 2011; Rose & Shoham, 2002). Research on INVs also confirmed that there exists positive relationship between market oriented behaviour and performance of these firms (Kocak & Abimbola, 2009; Kropp, et al., 2006; Ruokonen, 2008). Therefore, we have hypothesized that:

**Hypothesis 1.** Export market orientation is positively related to export performance.

**Entrepreneurial capabilities and export performance**
The background and characteristics of the entrepreneur has a great influence on the speed of learning, internationalization and development of INVs (Madsen & Servais, 1997; Oviatt & McDougall, 1997). INV approach virtually requires entrepreneurs to have developed distinctive entrepreneurial capabilities and prudence to recognize opportunity in international markets (Knight & Cavusgil, 1996; Madsen & Servais, 1997; P. McDougall, Shane, & Oviatt, 1994).

McDougall, Oviatt, and Shrader (2003) argued that entrepreneur’s international experience plays an important role in INV internationalization. Many founders and managers of INVs have gained
international experience and competence during previous work experiences (Madsen & Servais, 1997; Oviatt & McDougall, 1997) which help the firm to enter foreign markets successfully (Jones, 2001; Reuber & Fischer, 1997).

Andersson (2000) found that an international proactive entrepreneur was the most important factor explaining why new firms expanded internationally. Furthermore, INVs, which are essentially young and most frequently small, require entrepreneurs and top managers to meet with their overseas customers. It is the individuals, not the organizational routines, that play most significant role in decision making in INVs (Oviatt & McDougall, 1997). This emphasizes the entrepreneurial capability of INV entrepreneur in market entry and success. Based on the discussion above, we have hypothesized that:

**Hypothesis 2a.** General entrepreneurial capabilities are positively related to export performance.

**Hypothesis 2b.** International entrepreneurial capabilities are positively related to export performance.

**Entrepreneurial capabilities and export market orientation**
The role of top management in organization wide market orientation is emphasized in the literature. Top management shapes the values and orientation of an organization (Webster, 1988). Organizational outcomes, both strategies and performance outcomes, are viewed as reflections of the background characteristics of powerful actors in the organization (Hambrick & Mason, 1984). Consequently, top management values and cognitive bases have a positive association with market orientation of a firm (Day, 1994; Narver & Slater, 1990). Kwon & Hu (2000) used Day’s (1994) framework linking capabilities with market orientation and eventually with organizational performance. Day (1994) proposed a model of the capabilities of market-driven organizations and link capabilities with better performance. Level of market orientation is derived from the organizational capabilities (Kwon & Hu, 2000) and eventually leads to greater performance outcomes.

The emergence and development of SMEs largely depends on entrepreneurs. The role of entrepreneur’s human and social capital is investigated and partly confirmed by Davidsson and Honig (2003). This role of entrepreneur is even intensified when she decides to enter a foreign market, especially when the firm is younger. Unlike traditional incremental internationalizing firms, INVs start with a proactive international strategy, even though it starts with only one or a few entrepreneurs and employees (Madsen & Servais, 1997). INVs are found to be highly customer oriented, flexible, and able to adapt its products to quickly changing needs and demands (Rennie, 1993).

We propose that entrepreneurs’ general and international entrepreneurial capabilities may have influence on the development of market oriented behaviours of the firms in international markets. General entrepreneurial capabilities represented by prior entrepreneurial, managerial, industry, and technical expertise essentially influence, develop, and assist market oriented behaviour of managers and other employees. Entrepreneurs’ previous experiences and obtained relevant capabilities define, structure, encourage, and enhance organization wide market intelligence generation, dissemination, and responsiveness. In addition, international entrepreneurial capabilities manifested by entrepreneur’s prior international business experience, networking capability, proactive opportunity seeking capability, risk taking and commitment, innovativeness, and entrepreneur’s global vision also influence and enhance organization wide market orientation. Thus:

**Hypothesis 3a.** General entrepreneurial capabilities are positively related to export market orientation.

**Hypothesis 3b.** International entrepreneurial capabilities are positively related to export market orientation.
The conceptual framework of this study is presented in Figure 1. This model draws on the capability approach to market orientation (Day, 1994; Kwon & Hu, 2000) and market oriented approach to organizational performance (Kohli & Jaworski, 1990; Narver & Slater, 1990; Cadogan et al., 1999). We have used two different scales of market orientation (Deshpande & Farley, 1999; Morris & Paul, 1987) and their antecedents and differential outcomes will be investigated by two different models. The conceptual model indicates that entrepreneur’s general and international entrepreneurial capabilities source organization wide market oriented behaviour, and in turn, export market oriented behaviour leads to higher export performance. This model also assumes that there is a direct positive association between entrepreneur’s capabilities and export performance.

METHODS

Research context
The compelling globalization forces have required firms to be more market oriented. In particular, for exporting firms from emerging economies, market orientation is increasingly playing a pivotal role in firm’s market entry, survival, and success (Chi & Sun, 2013). Export market orientation construct was developed and most research on the topic was undertaken in Western counties. Therefore this construct and research findings should have cross-cultural validation and thus need to be replicated in Asian business context (Cadogan, Cui, Morgan, & Story, 2006).

Most INV research rests on small samples and firms in technology and knowledge-intensive industries from developed countries. INVs mostly exist in these industries partly because product standards are internationalized and these products are less constrained by national boundaries (Spence, Orser, & Riding, 2011). While from research findings it seems that most INVs exist in high-tech industries, this is not the representation of the reality. Many low-tech firms, especially from developing countries, join global marketplace just after inception or soon thereafter. There are even some particular low-tech industries in these countries where most firms are INVs. Apparel export industry of Bangladesh, a Southeast Asian emerging country, is such a unique case but not very uncommon among developing countries.

China as an emerging economy and its apparel industry as the world’s largest apparel exporting industry has received much research interest from scholars (Chi & Sun, 2013). In comparison to that, Bangladesh’s apparel industry, considered as the ‘next China’ (McKinsey & Co., 2011), has not given enough research attention, especially from an international marketing perspective. Bangladesh has become an export powerhouse, second only to China in global apparel exports (Yardley, 2012). Cheap labour and capacity has helped Bangladesh become a hot spot for global apparel brands seeking the cheapest labour, especially in the face of rising wages in China. McKinsey & Co (2011), a global management consulting firm, has predicted that Bangladeshi apparel exports, now about $18 billion a year, could triple by 2020. The industry has emerged as very critical to the country’s economy, accounting for 80 percent of national exports, 13 percent of gross national product and more than three million jobs. It has given birth to several thousands of INVs in the industry.

The phenomenal growth of apparel exports from Bangladesh has generally been attributed to favourable external conditions by researchers, most notably the Multi-Fibre Arrangement (MFA -the bilateral quota system imposed by developed countries, supportive government policy, and low wages in the country (Rashid, 2006). However, the role of apparel entrepreneurs, their entrepreneurial capabilities and market oriented activities in the dynamic growth of this industry has always been overlooked. Thus the industry offers a very lucrative setting of research to investigate the role of entrepreneurial capability and market orientation in INVs’ performance outcomes.
Data collection
We conducted face-to-face survey using structured questionnaire between January and May 2012. A sample of 800 exporters was randomly generated from exporters’ directories. We collected 718 questionnaires, a response rate of about 90%. After going through a rigorous normality test in SPSS 18, we finally got 647 usable cases.

The structured questionnaire used for the survey was developed through a comprehensive literature review and was written originally in English and translated into Bengali. Four academic experts familiar with the topic assessed the content validity of the items. The questionnaire was then pretested with 15 managers. Subsequently, we revised the questionnaire based on their feedback. We then back translated the questionnaire into English and checked for consistency with the original version to prove 'translation equivalence' (Van de Vijver & Leung, 1997).

We have taken several steps to minimize common method bias, including the protection of respondent and firm; reducing item ambiguity by pre-testing the survey on entrepreneurs; ensuring items relating to the dependent variables were not located close to the independent variables on the questionnaire. The Harman’s one-factor test (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) was conducted. All the statements relating to the endogenous and exogenous variables were entered in a single Principal Component Analysis (PCA) in SPSS 18 to check whether one component accounted for most of the variance. For the model with Deshpande and Farley (1999) scale, six components with eigenvalues greater than 1.00 were identified. These components accounted for 61.60% of the variance, with the largest component accounting for only 13.07%. For the model with Morris and Paul (1987) scale, five components were identified that accounted for 59.54% of the variance, with the largest component accounting for only 15.70%. Therefore, no evidence of common method bias was detected in either model.

13 percent of the respondents are entrepreneurs, 10 percent CEOs, about 20 percent managing directors, and the remaining respondents occupy managerial or senior executive positions with sufficient knowledge over exporting activities. 21 percent of the respondents have up to five years of industry experience, 34 percent have six to ten and the remaining 45 percent have more than ten years of industry experience. In addition, of the respondents about 60 percent have up to five years of experience in the firm, about 30 percent have six to ten and the remaining 10 percent have more than ten years of experience in the firm. This ensures that the respondents have sufficient experience in the organization to act as the firm’s key informant. Most of the respondents are educated having either graduate (35.40%) or post graduate (48.40%) degrees. 72 percent of the respondents reported very close relationship with the entrepreneur(s) which indicates that they are capable of commenting on entrepreneurs’ capabilities.

Development of measures
Export market orientation. There are several market orientation measures used frequently by researchers worldwide (Deshpande & Farley, 1999; Kohli & Jaworski, 1990; Narver & Slater, 1990). From the original market orientation scales researchers developed export market orientation scale (Cadogan, et al., 1999). There are many studies that applied the original market orientation scales without consideration to cross cultural differences and complexities in international business setting. We used two most simple scales: Deshpande & Farley (1999) and Morris & Paul (1987). Compared to other established scales, these two have relatively fewer items that make the scale easy to understand for the respondents and require less time on their part. These scales have gained some sort of universal characteristic in different research settings (Frishhammar & Andersson, 2009).

General entrepreneurial capability. This construct included prior entrepreneurial, managerial, technical, and prior industry experience of entrepreneur before starting her own business (Ucbasaran, et al., 2008).
International entrepreneurial capability. This construct was developed based on the items used by Zhang, Tansuhaj, and McCullough (2009) and the findings of Karra, et al. (2008). While Zhang et al. (2009) developed multidimensional measures of capability, we considered this as unidimensional. This construct included six specific capabilities of entrepreneurs: prior international business experience, global vision, networking, innovative, proactive and risk taking capabilities.

Export performance. Export performance was measured by export sales volume, export sales growth, and export profitability that are the most used indicators of export performance in international marketing literature (Katsikeas, Leonidou, & Morgan, 2000).

Control variables. We have included following control variables to allow for a better delineation of the relationships proposed in this study: firm age (operationalized as number of years since the establishment), firm size (number of employees), and foreign market coverage (number of markets exporting to).

DATA ANALYSIS AND RESULTS

Measurement model test results
Structural equation modeling (SEM) was used in this study because through this technique a series of regressions can be performed and the dependent variable for one regression analysis is also the independent variable for another (Hair, 1998). Measures were refined and the reliability and validity of constructs were assessed by following a three-step approach recommended by Gerbing and Hamilton (1996). First we ran exploratory factor analysis (EFA), followed by confirmatory factor analysis (CFA) to verify the construct structures. Some of the items were eventually deleted from the constructs due to cross factor loadings, low factor loadings, or low item-to-total correlations. During EFA, Deshpande and Farley (1999) scale of market orientation produced two factors, contrary to our expectation of unidimensionality. Factor one had five items and factor two four items. Two items were deleted from factor two. We named factor one as ‘customer orientation and intelligence generation’ and factor two as ‘intelligence dissemination and responsiveness’. Morris and Paul (1987) scale originally contained seven items and three items were deleted in purification process. We have modified the market orientation items to suit international business setting with minimal changes. Two CFA measurement models with two different market orientation scales were run and overall fit indices provide good model fit. The descriptive statistics of and correlations between constructs are reported in Table 1a and Table 1b. Table 2 provides comparative properties of two market orientation scales which are identical to some extent and show satisfactory results.

Table 1a omitted but would have been here

Table 1b omitted but would have been here

Table 2 omitted but would have been here

Reliability of the constructs was assessed by Cronbach’s alpha, composite reliability (CR) and average variance extracted (AVE). Alpha and CR values far exceeded the recommended threshold of 0.70. The values of AVE also met the minimum of 0.50 or closer. The factor loading for each individual item on its respective construct is statistically significant ($p < .001$). All unidimensional factors and no further case of cross loading suggest the convergent validity of the constructs. Discriminant validity of the constructs was assessed in two ways. First, the correlation of two constructs is less than the square root of the AVE estimates of the two constructs (Fornell & Larcker, 1981). Second, each possible pair of constructs was collapsed into a single construct and its fit was compared with that of the original model (Anderson &
Gerbing, 1988). Chi-square difference tests in all cases support two factor unconstrained model and provide adequate proof of discriminant validity. Overall, the results suggest that the measurement model fits the data well and the constructs show adequate validity and reliability. Table 3 reports measurement scales and properties along with factor loadings, alpha, CR, and AVE of the constructs.

Table 3 omitted but would have been here

**Structural model test results**

To analyze the hypothesized relationships between and among constructs, models were estimated using AMOS 18 and the maximum likelihood (ML) estimation method. We ran two different models with two different market orientation scales. Table 4 provides fit indices for the models using two different scales of market orientation. It shows that both measurement and structural models exhibit good model fit for our models using two scales. Results of structural model estimation are presented in Table 5a (model 1) and 5b (model 2) for Deshpande and Farley (1999) and Morris and Paul (1987) scales respectively. In addition to direct effects (hypothesized relationships), we estimated indirect (mediated) and total effects of the exogenous variables on relevant endogenous variables with 90% confidence level. Figures 2a and 2b provide graphical representation of the results for two models.

Table 4 omitted but would have been here

Table 5a omitted but would have been here

Table 5b omitted but would have been here

H1a postulated a significant, positive relationship between export market orientation and export performance. In model 2 export market orientation and export performance was positively related ($\chi^2 = .561, p < .01$). In model 1 ‘customer orientation and intelligence generation’ was positively related ($\chi^2 = .037, p < .723$) while there was no significant relationship between ‘intelligence dissemination and responsiveness’ and export performance. Therefore, H1 is partially supported for model 1 and fully supported for model 2. Hypothesis 2a predicted a significant positive relationship between general entrepreneurial capabilities and export performance. This hypothesis is rejected for both model 1 and 2. Hypothesis 2b predicted a significant positive relationship between international entrepreneurial capabilities and export performance. This hypothesis is also rejected for both models. Hypothesis 3a postulated a significant positive relationship between general entrepreneurial capability and export market orientation. The results confirmed a significantly positive and strong relationship for model 2 ($\chi^2 = .523, p < .01$). For model 1 the hypothesis is partially supported because only Factor 2 (intelligence dissemination and responsiveness) is positively related to general entrepreneurial capability ($\chi^2 = .241, p < .01$) and Factor 1 (customer orientation and intelligence generation) failed to show this association. This is in line with the findings of Murray, Gao, Kotabe, and Zhou (2007). They also reported that export intelligence dissemination is not as critical as export intelligence generation. Hypothesis 3b proposed a significant positive relationship between international entrepreneurial capability and export market orientation. The results confirmed this relationship for both model 1 ($\chi^2 = .335, p < .01$ for factor 1; ($\chi^2 = .248, p < .01$) and model 2 ($\chi^2 = .190, p < .01$).

Figure 2a omitted but would have been here

Figure 2b omitted but would have been here

In addition to hypothesized direct relationships, we also estimated indirect relationships between entrepreneurial capabilities and export performance. In model 1 general entrepreneurial capability has no indirect as well as total effects on export performance through export market orientation. By contrast, in
model 2 general entrepreneurial capabilities showed significant indirect and total effects through export market orientation. In other words, in the absence of direct relationship, this result confirmed that positive relationship between general entrepreneurial capability and export performance is fully mediated by export market orientation. The failure of entrepreneurial capability to link export performance can be attributed to the performance measures used in this study. Performance is a multidimensional construct and constitutes financial, non-financial, strategic, and network performance measures (Katsikeas, et al., 2000; Lages, Silva, Styles, & Pereira, 2009). To achieve financial performance capabilities need to be utilized with resources which in our study is export market oriented behaviour and resources. Entrepreneurs’ general and international capabilities might have direct influence on performance measures other than financial.

Concerning control variables, in model 1 environmental dynamism ($\beta=0.101, p < 0.05$) and export market coverage ($\beta=0.180, p < 0.01$) exhibited significant positive relationship with export performance. While price competitiveness showed a negative association, it was not significant ($\beta=-0.076, p < 0.124$). In model 2 export market coverage showed positive significant relationship ($\beta=0.181, p < 0.01$) and price competitiveness showed negative significant association ($\beta=-0.097, p < .10$) with export performance.

In summary, all hypotheses, except H2a and H2b, were confirmed. As expected, export market orientation appears to influence export performance. The effects of general and international entrepreneurial capability appeared to be complementary in two models. In model 1 general entrepreneurial capability has no direct, indirect, or total effects; however, in model 2, it has significant indirect and total effects on export performance. In addition, in model 1 international entrepreneurial capability has significant indirect and total effect but in model 2 it has only significant total effects. The standardized regression coefficients suggest that direct effect of general entrepreneurial capability on export market orientation is much stronger in model 2 than in model 1. By contrast, the direct effect of international entrepreneurial capability on export market orientation is much stronger in model 1 than in model 2.

**DISCUSSION AND CONCLUSION**

**Discussion**

Our results confirm the existing export market orientation-performance relationship in international marketing literature and in particular, studies on apparel exporters (Akyol & Akehurst, 2003; Chi & Sun, 2013) as well as developing country exporters (He & Wei, 2011; Kwon & Hu, 2000; Murray, et al., 2011). This suggests that entrepreneurs and managers of INV's in Bangladesh apparel industry give emphasis on greater market orientation because in the long run their survival depends on their ability to be market oriented and that they have the resources to do so (Diamantopoulos & Cadogan, 1996).

Both general and international entrepreneurial capabilities are found to be insignificant in both models. Much to our surprise we found general entrepreneurial capability in Model 2 is negatively related to export performance, though not significant. Due to negative direct effect, total effect, which is statistically significant, is lessened. It suggests that entrepreneurs should not try to impact INV export performance achievement through their general entrepreneurial capabilities; rather they can encourage managers’ greater market orientation towards more customer satisfaction, which in turn will bring greater performance outcomes. Same can be said in relation to international entrepreneurial capabilities. Our results can be explained by the problems associated with adaptation logic to new capability creation in entrepreneurial firms.

Endogenous strategic and structural adaptation by developing and deploying capabilities has been widely used in organization and entrepreneurship literature (Levinthal, 2000; McMullen & Shepherd, 2006). Capabilities refer to a firm’s capacity to deploy a set of resources and processes to achieve a desired goal (Amit & Schoemaker, 1993). According to resource based view (RBV) such capabilities are sources of
sustainable competitive advantage (Prahalad & Hamel, 1990). However, Collis (2006) argue that they are not always sources of the ‘holy grail’ (p. 144) because RBV holds on the assumption that others cannot imitate such capabilities (Barney, 1991). Moreover, organizational capabilities are embedded in firm routines and these routines are a product of the organization as an entire system (Nelson & Winter, 1982). Organizational capabilities reside in the corporate culture and network of employee relations (Collis, 2006), not vested in or articulated by a single individual, whether an entrepreneur or a manager (Teece, 1982). This suggests that entrepreneur’s entrepreneurial capability is not alone enough in achieving superior organizational performance and our results also support this view. Capabilities reside in the entire organization and to have influence on performance outcomes entrepreneur’s capabilities need to be channelled through this novel organizational process, which in this study, has been achieved through market oriented capability of the whole organization.

Entrepreneurship literature focuses on prior experiences of the entrepreneur as the sources and foundations of firm’s capabilities (Helfat & Lieberman, 2002). Entrepreneurs import routines they know from their previous professional and entrepreneurial roles, and these routines are reused, modified or recombined through behavioural adaptation (Helfat & Peteraf, 2003). This approach fails to explain the process of development and deployment of new capabilities that go beyond imported routines. Autio, George, and Alexy (2011) offer two explanations for this failure. First, the direct reuse of routines emerging from the entrepreneur’s professional or entrepreneurial past will often have limited application in actions because these routines have been developed in a particular environment. Second, behavioural adaptation of de novo routines may appear to be insufficient to form new capabilities in unknown and radically changing environment. Such unknown and changing environmental conditions are best captured by dynamic capabilities (Teece, Pisano, & Shuen, 1997) which involve adaptation and change over time. Our non-supported hypothesis of the relationship between entrepreneur’s general capabilities and export performance can be explained by the above discussion. In addition, entrepreneur’s international entrepreneurial capabilities capture dynamic nature of capabilities such as proactive, networking, innovative capabilities; however, they are more focused on recognizing and exploiting international business opportunities. Therefore, these capabilities failed to show a direct link with performance outcomes.

Differential impact by two different market orientation scales suggests us to go back to the measurement items used for them. An investigation into the items reveal that Deshpande and Farley (1999) scale purely reflects market oriented behaviour and Morris and Pual (1987) rather represents marketing orientation. Although market and marketing orientation have been used interchangeably in literature, they do not represent the same concept. According to Kohli and Jawarski (1990), there are three main differences between these two concepts. First, the term ‘market orientation’ clarifies that this is not exclusively a concern of the marketing department (Shapiro, 1988). Second, this label is less politically charged in that this does not escalate the marketing function of the department. Third, ‘market orientation’ label focuses attention on markets that include customers and the forces influencing them, and is consistent with broader management of markets orientation (Park & Zaltman, 1987).

On the same ground we can argue that market and marketing orientation are different and therefore this is reasonable to expect differential impact of these two constructs on export performance and their antecedents. However, the complementary effects of them suggest that both are important from different perspectives and can complement each other. While export market orientation does not mediate general entrepreneurial capability-export performance relationship, export marketing orientation does that. In addition, market orientation mediates international entrepreneurial capability-export performance relationship while export marketing orientation fails to do so. Thus their complementarities are established and their differential role signified.
We have contributed to the literature in the following ways. First, we attempted to bridge entrepreneurs’ capabilities and firm’s market and marketing oriented philosophy and activities. More specifically, we have established and indicated the sources of market and marketing oriented behaviour, i.e., where this behaviour is rooted. Entrepreneurs who are rich in general and international entrepreneurial capabilities can impinge upon organization wide market and marketing orientation and thus indirectly help achieve financial returns in export markets. Second, unlike other studies that showed direct link between export market orientation and performance, building on capability-resources-performance perspective we showed that the relationship between entrepreneur’s capability and performance is fully mediated by export market oriented behaviour and resources. Finally, two different scales of export market and marketing orientation reveal that they are complementary, not contradictory. Two dimensions of Deshpande and Farley (1999) scale lend support to other multidimensional constructs used in export market orientation research (Cadogan & Diamantopoulos, 1995; Cadogan, et al., 1999).

Managerial relevance
Market and marketing orientation are different. Our results suggest that marketing orientation brings much larger impact than market orientation. INV managers in apparel industry of Bangladesh, therefore, need not neglect marketing functions or activities giving only stress on customer orientation. Cadogan, et al. (1999) suggested the determinants (i.e., antecedents) of export market orientation be investigated because it will help entrepreneurs and managers to know how they can be instrumental in shaping market oriented behaviour of their firms. This study provides guidelines to entrepreneurs and managers in this respect. Our results suggest that entrepreneurs are the decisive factors in shaping export market and marketing oriented behaviours of INVs. Managers of INVs should capitalize on entrepreneur’s general and international entrepreneurial capabilities to strengthen organization wide market and marketing oriented behaviour which would, in turn, facilitate greater performance achievement in export markets. Our insignificant findings in relation to entrepreneur’s capabilities and export performance also indicate that to achieve greater financial performance entrepreneurs need to delegate more autonomy to INV managers and play a very instrumental role to build a strong market and marketing focused and oriented culture. It is the managers that are the main actors in exercising market and marketing oriented behaviours through which they can realize greater performance in export markets. Public policy makers should target INV managers, rather than entrepreneurs, to influence market and marketing oriented behaviour and finally greater performance.

Limitations and directions for future research
Like any other research this study has some potential limitations. First, it employs a cross-sectional research design which cannot capture change in market orientation and capabilities, let alone their impact on the change in business performance (Kwon & Hu, 2000). A longitudinal research will provide a better understanding of the constructs and their relationships. Second, we have only used financial performance measures which failed to show significant relationship with capabilities. Future research could utilize some non-financial and strategic measures. Third, due to their simplicity and less items in the constructs, we used Deshpande & Farley (1999) and Morris & Paul (1987) scales. Other established scales could be used to show link with capabilities and confirm the results of this study. Finally, this research was undertaken in an emerging country’s particular industry and therefore the generalizability of the findings to other countries and industries might be limited.
REFERENCES


All of the figures and tables cited in this paper are omitted due to space considerations. Interested parties are invited to contact the author for a complete copy of the paper.
The Malaysian Experience in Science and Technology: From Tin to High-Tech

Keywords: Malaysia, Innovation, Science and Technology, R&D, Economic Growth

INTRODUCTION

Malaysia is an upper-middle income country that has achieved admirable records of social and economic development since it gained its independence from the British in 1957. One of the country’s objectives is to become a high-income economy by 2020, according the New Economic Model (NEM) adopted in 2010.

Since science and technology policy has played a pivotal role in the advances Malaysia has been able to boast, this paper outlines the main steps taken by Malaysia in advancing science and technology (S&T) activities in the country, takes stock of the S&T infrastructure and reviews S&T related initiatives that would propel Malaysia into a higher stage of economic and social development.

The science and technology policy in Malaysia was initially state-led and was first articulated in 1986 as an integral part of the national economic policy formulated in the Fifth Malaysia Plan (Shah, 2004, p.1). Over the years, the country developed its approach and the science and technology regulatory environment and institutional framework in response to modern advances in information and communication technology (ICT). According to Azizan (2013) Malaysia has shifted towards becoming a knowledge-based economy on the back of adopting the Vision 2020 plan in 1991, which emphasizes building technological capability.

The World Economic Forum Competitiveness Report (WEF, 2015) ranks Malaysia as the 18th most competitive economy among the 140 economies included in the report, holding that Malaysia remains the highest ranked among the developing Asian economies. With regard to technology readiness, the country improved 13 places to rank as the 47th country in the groupings, compared with the 2014 rankings, a development that reflects the country’s approaching its targets.

The paper uses simple statistical techniques to shed light on the relationship between S&T indicators and the economic development record in Malaysia and the extent to which S&T efforts have been associated with economic growth. In particular, the S&T variables include gross expenditures on research and development (GERD), researchers in research and development, technicians in research and development, high-tech exports, and patent applications.

The first section of the paper provides a comparative overview of Malaysia’s stock of R&D infrastructure as compared with some upper-middle income countries, followed by a section that examines the association between the country’s S&T indicators and the rise in per capita income, a main indicator of changes in standards of living. The paper ends with a conclusion and suggestions for further in depth research on this topic.
A COMPARATIVE OVERVIEW OF MALAYSIA’S STOCK OF R&D INFRASTRUCTURE

As shown in Figure 1, Malaysia has outperformed many upper-middle income economies with regard to real GDP growth rate despite the decline in the aftermath of the 1997-1998 Asian financial crisis, and the downturns in 2001 and 2009, which have impacted nearly all economies. Nevertheless, despite that labor productivity is growing but far too slowly (NEAC, 2009, p.5), the country is still witnessing relatively high economic growth.

Prepared by author using the World Bank’s World Development Indicators (WDI) online database.

This favorable economic performance can be shown also when looking at the GDP per capita growth rates in the past two decades which have maintained a favorable level of change that is higher than that of the global average and that of many other upper-level income countries as depicted in Figure 2. China and Turkey has also performed well and outmatched the levels achieved by Malaysia.

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Recognizing the role science and technology activities play in economic progress, Malaysia has embarked on upgrading its technology capabilities and promoting R&D activities and higher value-added sectors. The Ninth Malaysia Plan (2006-2010) calls for generating new sources of wealth in technology and knowledge-intensive sectors such as information and communication technology (ICT), biotechnology and upgrading employment opportunities, particularly in high-technology and knowledge-intensive activities. Subsequent plans re-emphasized the role of innovation, science and technology, R&D and improving productivity and a greater role for the private sector in this regard.

Malaysia also has improved the institutional framework to promote technological activities. For instance, intellectual property (IP) is recognized under the Economic Transformation Programme (ETP) of 2010, as a pillar for transforming the economy (OECD, 2013).

In accordance with the government's policy to capitalize on the use of advanced technology and promote its development and innovation, a drastic increase has been achieved in the past two decades in R&D expenditures, along with boosting human capital in R&D activities.

For instance, R&D expenditures as percent of GDP have increased markedly in the past two decades at much higher rates than those of other countries in the grouping. As shown in Figure 3, Malaysia has surpassed the other countries to reach R&D expenditures of 1.13 percent of GDP in 2012, compared with a mere 0.2 percent in 1996, thereby closing the gap with the other countries, in particular Brazil and South Africa.

Prepared by author using the World Bank’s World Development Indicators (WDI) online database.

In addition, Figure 4 shows that the number of researchers in R&D per million people has increased from 89 researchers in 1996 to 1643 researchers in 2011. As the Figure illustrates, in 1996 Malaysia had the lowest number of Researchers in R&D, and the significant increase occurred starting in year 2008. A similar pattern was detected with the number of technicians in research and development activities.
Patent applications have also witnessed noticeable increase since the mid 1980s from less than 100 per million people to 242 in year 2013. Patents indicate the strengths of the innovation process in the economy. As Figure 5 illustrates, Malaysia leads the country groupings in this regard.

As for high-tech exports’ share of manufactured exports, Malaysia has by far been the leader among the other countries. Figure 6 shows the lead enjoyed by the country in the magnitude of its high-tech exports, a measure of technological intensity, despite the decline starting in year 2004. It is noteworthy that exports of manufactured goods amount to about 57 percent of the country’s total exports.
S&T INDICATORS AND ECONOMIC GROWTH IN MALAYSIA: STYLIZED FACTS

Science and Technology Efforts to Promote Growth

The study of science and technology and their impact on the economy is not new with abundant academic research confirming the positive impact science and technology activities have on the economic development process (see Bassanini, 2001; Bhalla, 1985; Soete, 1981; Teitel, 1987). MOSTI (2014, p:1) reports that both economic theory and empirical evidence suggest that R&D creates technological innovation, improves existing stock of knowledge, increases the quality of human capital, and leads to higher productivity and sustainable economic growth in the long-run. In Malaysia the role played by science and technology in the country’s modernization has been substantial (Shah, 2004).

METHODOLOGY

This study uses basic statistical techniques to detect the presumed association between real GDP per capital in Malaysia and S&T variables, namely gross expenditures on research and development (GERD) as percent of GDP, researchers in R&D per million people, technicians in R&D per million people, high-tech exports as percent of total manufactured exports, and patent applications per million people.

Illustrative Figures are prepared by the author using the World Bank’s World Development Indicators (WDI) online database. Some missing data was estimated based on respective trends of each country and variable.

Science and Technology Indicators and Growth in Malaysia

As shown in Figure 7, a scatterplot of the GDP per capita in constant 2005 $US and the gross expenditures on research and development as percentage of GDP (GERD), reveals that higher spending on R&D seems to be associated with an increase in per capita income in Malaysia. This is in accordance with the general theoretical and empirical arguments that R&D activities constitute a primary contributing factor in economic growth.
Further research might look in depth into the relationship between economic growth and the components of R&D expenditure, namely public and private expenditures on research and development in Malaysia. This would indicate the magnitude of public sector involvement in setting the agenda to promote transformation into a more technology-based economy.

As for the human capital input into research and development activities, Figure 8 shows that there is generally a positive trend between the increase in the stock of researchers in R&D and the level of real GDP per capita. A similar pattern is detected with regard to the stock of technicians in R&D. Patent applications per million people, in turn, shows close association with the increase in GDP per capita as illustrated by Figure 9.
However, the presumed increase in national income in response to the level of high-tech exports is not as clear as is the case with the other S&T indicators (Figure 10). More in depth sector-specific studies may be needed to explore the causal relationship and the dynamics of the high-tech industry in Malaysia.

**CONCLUSION AND POLICY RECOMMENDATIONS**

Malaysia, an agricultural economy in the 1950s, is now pushing out its technology frontier and shaping the regional dialogue on numerous policy fronts, including science and technology (Gurría, 2013). As the economy moved beyond low labor costs, other drivers of growth like technology, research and development and innovation became increasingly staples of the development process (ETP, 2012, p:70).

Under the new Economic Transformation Programme (ETP), investment promotion is being geared towards capital and knowledge-intensive projects, offering high value-added and high technology (OECD, 2013, p:20). As illustrated in this study, these efforts has led to the increase in the level of R&D expenditures, patent applications, and the utilization of researchers and technicians in R&D, which in turn has been associated with higher levels of growth.
Nonetheless, more needs to be done in this regard as the most effective model would require not only establishing a science-literate society that uses advanced technologies but creating a culture of science and technology across the country. Aman (2008) stipulates that Malaysia must strive to achieve a society that not only creates scientific knowledge, but also converts it into practical technologies and innovations for socio-economic development of the nation.

Further, according to the rankings of WEF (2015), Malaysia has improved by 13 places in technological readiness (47th), which nonetheless remains its weakest feature, and the country is exhorted to further raise productivity and nurture innovation. Yet, MOSTI (2014, p:5) laments the cumbersome and lengthy bureaucratic procedures that have affected both the cost of investing, and the potential returns on investment.

Contending that science and technology indicators have been associated with economic development indicators, the study proposes that further research and robust quantitative techniques be conducted to assess the causal relationship between development indicators and S&T indicators in Malaysia in view of the body of research that proffers arguments of mutual causality in this regard.

Further, and in order to accurately gauge the explanatory power of the S&T exploratory variables, it is suggested that future research includes other drivers and determinants of economic growth, namely policy and institutional frameworks as ingredients of the Malaysia growth model. For the institutional and policy variables, which are of a macroeconomic nature, the future research shall take into account in its model macroeconomic policy variables including financial development, international trade, inflation, fiscal policy, monetary policy. In addition, in order to get a better idea on the impact of public sector intervention in promoting research and development in the development process, further research would also consider public sector and business sector R&D expenditure separately, and preferably at the sectoral level.

REFERENCES


An Exploratory Study of the Pygmalion Effect in an HBCU: Reflections of an Online Graduate Service-Learning Experience

Keywords: Consumer Behavior, Pygmalion Effect, Teaching Style, Communication Effectiveness, Business Education, Minority Institutions, HBCU

INTRODUCTION AND LITERATURE REVIEW

Service-Learning finds roots in the 1968 Critical Pedagogy thesis (Freire, 2006, English translation), which calls for the liberation of students from oppression, and recognizes their role in the creation of knowledge. Moreover, Service-Learning represents an implementation of the Social Constructivist Perspective (SCP) (e.g. Palincsar, 1998) via reciprocity, collaboration, and reflection. Further, Service Learning is defined as experiential learning that speaks to human and community needs through a structure created to enhance learning and development through reciprocity and reflection (Jacoby and Associates, 1996).

The Pygmalion Effect concept is rooted in Thomas' (1928, p. 572) theorem, which states that "If men define situations as real, they are real in their consequences". Pygmalion Effect has found considerable attention in recent literature (e.g. Inamori and Analoui, 2010, Kierein and Gold, 2000, Kopelman, Prottas and Davis, 2008, Paglis 2010, Walumbwa, Avolio and Zhu, 2010). Effective teachers may communicate performance expectations to students, increasing students’ individual and team efficacy and course performance.


An example of an educational setting was Farias, Farias and Fairfield (2010). The expression "self-fulfilling prophecy" is not wholly accurate (Eden and Shani, 1982, Eden, 1990, Eden, 1992), since it is not the prophecy that fulfills itself, but the “prophet” as catalyst that initiates a chain reaction with predicted impact. Hence the theory and empirical research results are convincing. It appears that the effect on learning and student engagement, merit a greater scrutiny (e.g., Stoicescu and Ghinea, 2014).

Despite the spread of research on the subject, there is scant research attention on the Pygmalion Effect in minority and HBCU educational institutions. This gap will potentially be filled with the present study.

In general during any course work, students complete various activities for assessment of learning such as testing, writing assignments, and presentations. Rarely are students asked to stand back and reflect on the purpose of such activities, and how they relate to predefined goals. Further, instructors shy away from setting a high bar for students, particularly in minority institutions serving predominantly underprivileged students, and achieving student learning through extensive team-based written and experiential assignments. Reasons commonly cited are time, cost, and apathy and indolence among students. Further, the use of Service-Learning is less common at the graduate level, due to greater work and family
priorities. Moreover, the richness of student interface in face-to-face teams is generally perceived as more appropriate for Service-Learning, compared with online interface.

Research questions were:
1. In an HBCU graduate online Service-Learning assignment, does the Pygmalion Effect occur, and to what extent?
2. In an HBCU graduate online Service-Learning assignment, is there any congruence between goals achievement as perceived by the instructor and by students?

METHODOLOGY

The sample comprised 32 incoming graduate students enrolled in a leveling Marketing course at an HBCU business school in southern US. Students were primarily from a racial minority, and aged 26-35 years. Students were placed in four teams, and each team evaluated an undergraduate student team’s research completed in the previous semester, and titled “A Literature Review of Current Issues in Consumer Behavior in Emerging Economies”, and covered four countries- Brazil, India, China and South Africa. The evaluation was performed in partial completion of the course requirements, and as a service to the Business School (which was the customer or community partner), to help in establishing assurance of learning with AACSB, an accrediting body. Team interaction was facilitated by team Discussion Forums on Moodle supported eCourses. The instructor provided structured discussion threads on the Discussion Forum to facilitate the team effort. A clear set of criteria were provided for evaluation, and frequent feedback was given as the assignment progressed. The evaluation was graded for about 10% of course points. After the evaluation, graduate students were asked to individually provide their reflections. They were provided with a student interest inventory comprising an open-ended questionnaire covering the achievement of four major goals- those of the College and University, as well as students’ professional and personal goals. In addition, for reference, students were provided with a link to the goals and objectives of the University and the business school. Also, students were requested to refer to their own personal and professional goals that were submitted as part of a separate assignment early in the semester. The Discussion Forum for reflections was set up in open format with all responses being visible to all the graduate students and was available for posting for about three weeks. For submitting their reflections, regardless of length or quality of content, students were given a nominal 5% of the total assignment points, or .5% of total course points.

A descriptive analysis of reflections was then undertaken. To answer Research Question 1, items reflecting goals achievement were ranked based on clusters of responses (i.e. frequency of mentions for a given goal achieved). To answer Research Question 2, a comparison was made between the classification of goals achieved, as reflected by students’ responses, and the framework provided by the instructor.

SUMMARY OF FINDINGS

Does the Pygmalion Effect occur, and to what extent?
Goals reportedly achieved by students were classified as High (over 40% of respondents), Medium (12-39% of respondents), and Low (below 12% of respondents).

High level of goal achievement. Almost four-fifths of respondents believed that Service-Learning provided them with a “Global perspective”. Over three-fifths felt they had achieved “being able to work within a team”. “Effectiveness in communication” was reported by over half the respondents. “Realization of their full potential by individuals of diverse backgrounds” was cited by half of the respondents. In addition, over two-thirds of respondents felt they had accomplished “good grades”, and were “closer to program completion”.

AGBA 12th World Congress
Page 401 of 1173
Medium level of goal achievement. A fourth of the respondents believed they achieved “being able to collaborate and share work within the team”. Over a fifth of respondents stated that “research and ethical goals” were achieved. Reaching the goals of “critical thinking”, and of “problem-solving”, was reported by 18.78% of the respondents. Several students felt that the Service-Learning experience was “relevant to their present jobs”, and “helped understand the value of time, keeping deadlines, and taking their responsibility seriously”, and “problem-solving skills” (15.63% of respondents for each goal). Further, an eighth of respondents reported achieving each of the following goals: “leadership”, “being a better team player”, and “being qualified for professional advancement”.

Low level of goal achievement. Some goals with a low level of perceived achievement were the “use of technology”, and “conducting research” (almost 10% of respondents). In addition, “integration of knowledge”, and “quantitative skills” were mentioned by 6.25 of the respondents, followed by “becoming a better consumer”, “understanding the business environment”, and “development of the community” (3.13% of respondents).

From the above, we find an answer to our first research question- there is a Pygmalion Effect in operation. The instructor provided a well-defined course assignment, along with a vision of success, and continuous real-time feedback. These actions empowered students to believe in their own ability, cooperating with peers, to shape up to achieve goals. Finally, students were conscious of their goals achievement, and could verbalize their reflections.

Is there congruence between goals classification by the instructor and by students?

As discussed earlier, students were asked to reflect on the achievement of specific goals at the end of the team Service-Learning assignment. A distinction was made by the instructor, between objective or institutional goals (university, business school, and program), and students’ subjective or individual goals (professional and personal). However, results indicate that students perceive institutional goals as being professional or personal in nature, and vice versa. Thus there seems to be a hazy distinction, if any, as to the nature of goals. As an example, some students specified “Problem-solving skills” as a personal goal. Another example is that numerous students stated “Global perspective, “Problem-solving skills”, and “Research skills” as satisfying professional goals, rather than institutional goals. As an example, a student reflection stated, “… A part of any business is to have the ability to demonstrate a set of skills such as a code of ethics, teamwork, and effective communication all which aligns with both University and Business School goals expected from this program. Having established these goals, the critical appreciation research assignment allotted the opportunity to build and enhance this skill set by creating a collaborative working structure that required effective communication amongst members and distributing work formed through our own words and opinions.

Although the University goals and the Business School goals are relatable in some sense, the distinguished items are being able to integrate learned knowledge and being able to critically solve for problems. While both are relatively important, even if one applied the learned knowledge, to not be able to solve for a solution defeats the purpose. In both my personal and professional life it is important that I am able to demonstrate the two, allowing me to be a well-diversified asset and candidate for an open position as well as a well-rounded figure in society. This assignment for example will now help me to better understand consumer complaints on a developed spectrum, and applying that knowledge I too can implement a solution when presented with a similar scenario within my company.”

Another student wrote, “I believe I was able to use this assignment towards my personal goals by gaining more exposure to the world of Marketing Management. The assignment helped me gain more in depth information regarding surveys and questionnaires about the areas of study in the country. Working with athletes overseas and marketing their brands is truly a personal goal of mine and this assignment helped
me gain more exposure to not only the country itself but also how to effectively gain ground in other countries to make an individual’s brand gain more attention in the particular country that they represent.”

In general, it may be said that the congruence in goals classification is lacking across the board. A reason might be that the sample comprises graduate students; their understanding of goals is application-oriented, leading them to take ownership in terms of professional goals. To conclude, there was lack of congruence in the classification of goals between instructor and students.

**DISCUSSION**

As discussed earlier, several inherent values were built into the Service-Learning assignment framework by the instructor. As an example, all undergraduate research papers being evaluated were based on consumer behavior in emerging economies, and many papers included cross-cultural comparison between these emerging economies, and other countries, including the West, thus providing a “Global perspective”. Further, the Service-Learning assignment was based on teams comprising about 10 members each, thus speaking to the goal of “Team work”. Moodle-based eCourse Forum Discussion provided a platform for the team to develop their assignment, which spoke to the goal of “Effectiveness in Communication”. As an extension of this goal, a “Collaboration” was called for, and a reasonable level of was achieved. The same may be said for goals such as “Critical thinking” and “Problem-solving”.

Results show that the instructor was successful in inspiring students experience and become conscious of their achievement of these goals. However, even if the instructor was successful in inspiring students to achieve other goals, it appears that students either did not adequately pick up on these cues, or did not report achieving them for other reasons. Moreover, as discussed above, there was not a complete congruence of goals as conceived of by the instructor, and as understood and interpreted by students. In future, it might help to avoid open-ended essay type reflections, but instead to provide a student interest inventory comprising a list of goals, classified into Institutional, Professional, and Personal goals, with a Likert-type rating scale for each item.

**LIMITATIONS**

This study is not free of issues. As an example it was for the first time that a Service-Learning assignment was completed by graduate students at the business school. In the absence of institutional memory, the concept of Service-Learning, reviewing undergraduate student research papers, and writing reflections may have been a novel activity for most students. In addition, the sample comprised only 32 students from a graduate class in a single institution. A larger sample size might have generated a greater diversity of responses. Using a frame of two or more HBCU institutions would also allow for identifying organizational factors in the Pygmalion Effect. In addition, students were provided with a link to the University as well as College of Business goals and objectives. Also, students were requested to refer to their own personal and professional goals that were submitted as part of an assignment early in the semester. Unaided recall might have yielded different results. Further, the Discussion Forum for student reflections, set up in open format (i.e., responses were visible to all students in class) was available for posting for about two weeks. Typically, students complete online assignment posting very near Discussion Forum’s closing time; however, there is a possibility that later responses were affected by team and class posts that were completed at an earlier time. In addition, all goals in the student interest inventory were presented with the same order, without rotation. This fact, along with the fatigue experienced by students as they progressed through the inventory, might also have biased the results. Finally, reflection on goals achievement comprised a very small part of the Service-Learning assignment, and results might have been different if it were framed as a separate assignment. Future research might be formulated to overcome some of these limitations. Given the above limitations, it may be concluded that
the Pygmalion Effect on learning and student engagement, merit a greater scrutiny (e.g., Stoicescu and Ghinea, 2014).

STUDY CONTRIBUTIONS AND CONCLUSION

This exploratory study confirms and extends current research on the Pygmalion Effect, and some mechanics through which it can be achieved. Further this study evidences the existence and extent of the Pygmalion Effect in an HBCU, a research area that has received scant research attention. Also, it shows how the Pygmalion Effect works within an online and graduate-level context. Moreover, this study highlights the lack of congruence in the nature of goals- objective versus subjective- as perceived by instructor and students.

The managerial value of this exploratory study to the University lies in benefits, including those beyond classroom learning, such as funding and training purposes. The importance of the study for administrators lies in its potential in “closing the loop”, in establishing assurance of learning for accreditation agencies, and to make a case before State and other funding agencies. Faculty will benefit from the study, in the evidence that students can indeed be motivated and inspired toward academic and personal goals achievement. Students themselves will stand to benefit from the study, in understanding how, the instructor as “prophet” is instrumental in students’ achievement of their own professional and personal goals, while at the same time feeding into institutional goals. In sum, this study supports the use of Service-Learning as a tested pedagogical tool for the benefit of academia and its stakeholders.

REFERENCES


Identifying the Factors for Reducing Turnover Rate in Aviation Business: Bangladesh Context

**Keywords:** Aviation Business, Employee Turnover, Job Facilities, Employee Satisfaction.

**INTRODUCTION**

Employee turnover is a serious issue for organizations given the competitive business arena these days. Employee turnover is defined as the degree of employee movement that occurs within and outside an organization (Reiß, 2008). Employees these days look for diversity and challenge in their daily tasks, and require an invigorating working atmosphere. It is essential that organizations reduce the negative and unacceptable effects of turnover, which usually places a heavy burden on the organization in terms of financial distribution and human resource management including looking for a new replacement, recruitment, advertising, interviewing, training, supervising, assessment, socialization, coaching, and mentoring (Reiß, 2008; Armstrong, 2009; Bowes, 2010). All these tasks are time consuming and it is difficult to deliver these in a cost effective manner. Nevertheless, not having these fundamental provisions could cause a barrier to retaining qualified and skilled workers. All organizations aim to achieve high productivity with low turnovers and a strong bottom-line. It is therefore critical to manage turnovers, if these aims are to be met.

This situation is no different in Bangladesh, where it is essential for the government and non-government sectors to manage turnovers diligently. Even though employees in the government sector are regularly given special fringe benefits, but those still fall short to their expectations. Although salaries and benefits are higher in the private sector, job security is lesser and this causes a higher turnover compared to the public sector (Shamsuzzoha and Shumon, 2007). Turnover rates also differ based on sectors ranging from manufacturing to services.

To date, there has not been a research on turnover rates in the aviation sector in Bangladesh. The business operators do not focus on this critical issue mainly due to the lack of awareness of the significance of this matter. They do not realize the magnitude of the impact of turnover to the productivity of the organizations involved. Therefore, this study aims to identify the critical factors that assist in lowering the turnover rate in Bangladeshi airlines. In addition, the study will explain and discuss the troubling situation with the human resource management of organizations as well as suggest practices that would assist in lowering the negatives effects of turnover of employees.

This study initially states the problem and objectives of the study. A brief review of literature has also been provided. This will be followed by the research methodology and analyses. After that, the results of the descriptive analysis is demonstrated. Subsequently, the results of the regression analysis that emphasize the factors that assist in the reduction of turnover rates is presented. Finally, the concluding section summarizes the major findings and provides recommendations for future undertakings.

**STATEMENT OF THE PROBLEM**
All the existing public and private airlines in the aviation sector of Bangladesh are relatively new, with very limited resources and a limited number of aircrafts, inadequate infrastructure, limited access to advanced technology, and the lack of qualified personnel. They have been successfully competing in this market and have gained a respectable amount of market share. However, despite a steady average growth of about 8% annually over the last decade, the airline industry of Bangladesh has miserably failed to exploit the opportunities of this growth (The airline industry, 2004).

Over the last decade, the Bangladesh aviation industry has been facing a number of problems. Information on mismanagement and corruption in the organizations has trickled out in recent years. Among such incidents, the increasing state of employee turnover rate is significant. This research would like to focus on employee turnover in the aviation industry of Bangladesh, especially the airlines so that the companies can improve in order to gain a competitive advantage to sustain in the market. Thus, this research tries to investigate (i) the current status of airlines in Bangladesh in terms of employee turnover rates, and (ii) the ways to reduce employee turnover rates effectively to be sustainable in the market.

**LITERATURE REVIEW**

There are many reasons why turnovers occur. Employee turnover usually happens because of factors related to jobs and the organization (Ongori, 2007). The sources of job-related turnover include job-related stress, job dissatisfaction, lack of commitment on the part of the organization, feelings of being powerless, and loss of control (Firth et al., 2004). Meanwhile, the sources of turnover due to organizational reasons include organizational instability (Zuber, 2001), high levels of inefficiency (Alexander et al., 1994), poor communication (Labov, 1997), poor recruitment practices, managerial styles, lack of recognition, and the lack of competitive compensation (Abassi et al., 2000). The acceptable rate for turnover per annum is at 25% and it would be disastrous if there was a turnover rate of 100% (Cole, 2002); high employee turnover is a clear indication of internal issues within the organization (Armstrong, 2001).

The management can consider various preventive measures to minimize the turnover rates. It could include training the line managers to be better supervisors prior to appointment or promotion and by offering job security within proper work premises (Shamsuzzoha and Shumon, 2007). Other methods of reducing turnover could include maximizing opportunities for individuals with special preferences such as having flexible working hours, routine performance appraisals, along with a higher level of job security (Hutchinson and Purcell, 2003). Turnovers are reduced when there is a better opportunity for promotion and career growth. If a particular position is a dead-end position, the situation should be pointed out prior to recruiting so that the employee is aware of this fact. The job function should be clearly explained so that the employee is not disheartened when there is no opportunity for promotion and growth.

An unsuitable salary structure relates to inequality in the salary scheme or a low salary and this could cause job dissatisfaction among the employees that can drive them to resigning from the organization. A new recruit might question the reason why another worker who is doing a similar job is getting a higher salary (Shamsuzzoha and Shumon, 2007).

Most workers intend to carry out their jobs well, thus when they are not appreciated or their work is not recognized, feelings of being unappreciated will start to emerge. Even employees who have been at a job for a very long time need to be told now and then if their work is being done correctly (Shamsuzzoha and Shumon, 2007). If this type of communication does not take place in the organization, the employee might consider changing jobs.
An effective approach to reducing employee turnover includes providing proper supervision and training opportunities. Shamsuzzoha and Shumon (2007) pointed out that workers should be given proper direction and guidance. New recruits would require additional assistance in becoming familiar with the job. Likewise, not having a proper training program could result in the employees lagging in their performance level and feeling incapacitated. The study by Firth et al. (2004) suggested that supervisors who provide proper supervision and support could motivate workers to work and thus lower the turnover rates. In addition, providing beneficial training programs could also assist in the reduction of turnovers (Fitz-enz, 1990).

One of the pioneering studies that focused on the net effect of promotions was carried out by Trevor et al. (1997). The researchers pointed out the negative link between turnover and promotion. In fact, Trevor et al. (1997) discovered that promotions could positively predict turnover, suggesting a strong influence especially with the turnover of a poor performer. A study was carried out by Saporta and Farjoun (2003) which examined whether promotions, which are a critical component of the rewards allocated by an organization, could impact the resigning behavior of the employees. The findings of the study revealed that employees who were promoted more frequently in the past had a lesser tendency to resign voluntarily.

Cohen and Levesque (1991) defined teamwork as the combined action of a team, which is more than just the combination of individual actions occurring simultaneously. This study prefers the operational definition of teamwork as a group of workers who carry out tasks together and develop a high sense of cooperation among the members while carrying out the functions. Having good teamwork could lead to having a higher level of job satisfaction (Thomas, Sexton, and Helmreich, 2003), which in turn could reduce the rate of employee turnover.

Service rules that are not applied properly could also lead to employee turnover. Inadequate service rules are linked to the organization’s environment leading to employee turnover. Moreover, performance rewards could also have an effect on employee turnover. Inadequate reward systems could cause disappointment among the employees thus causing them to not work wholeheartedly. The study by Abassi et al. (2000) also find out that lack of proper recognition of employees and being in a toxic work environment can lead to employee turnover. Moreover, Griffeth et al. (2000) pointed out that when high performers are not rewarded accordingly, they often leave voluntarily.

METHODS

Besides the factors mentioned above, a high turnover rate could be the result of poor professional maintenance, extensive corruption among the employees, intensified government interference, and overruling by the workers. These factors have an effect on the attitude of the employees resulting in frustration, causing them to change jobs for a better environment, and increasing turnover rates particularly in the aviation sector. Employee turnover issues could be reduced if these factors are paid due attention and managed properly.

Sample Design

Three airlines companies from Bangladesh were chosen and used in the pilot study. The purpose of the pilot study was to determine the reliability of the scale used in this study. According to Cavana et al. (2001), the questionnaire should be pilot-tested among a few respondents from the targeted population. This will help to ensure the reliability of the whole scale as well as the items in addition to ensuring the consistency of the measurement instruments. Moreover, it will also assist in knowing whether the respondents clearly understand the questions.
The revised questionnaire was communicated to 100 respondents from the three airlines companies. Eighty one (81) completed questionnaires were collected in total for data analysis. Due to the nature of the survey, the target population for this survey was the executives, supervisors, and managers. All respondents were a combination of male and female.

Data Collection Technique and Validation
The current study used primary data gathered through a structured questionnaire that was developed from past literatures. The questionnaires were distributed to the respondents within a pre-set timeframe. The questionnaire included two sections: Sections A and B. Section A asked for the demographic information of the respondents such as the organization’s name, the respondent’s position, age, experience, and gender. Section B included questions associated with both the independent and dependent variables. A number of statements in this section were related to employee turnover, and the participants were asked to record their answers using a 5-point Likert scale. The scale ranged from 1 (strongly agree) to 5 (strongly disagree). This particular scale was chosen due to its suitability in measuring attitudes as designed by Rensis Likert in 1932.

Fifty one (51) (63%) completed questionnaires were collected from Bangladesh Biman which is a state-owned company and the remaining 30 (37%) were from two private airlines companies. From these private companies, 13 (16%) were from United Airways and 17 (21%) were from Regent Airways. The sample consisted of 52 male and 29 female employees selected randomly. Among them, 48 are supervisors, 21 managers, and 12 were executives.

All the respondents in the study ranged between the ages of 21 years to more than 50 years. Among them, 2.5% of the respondents were between the ranges of 21 to 30 years, 19.8% of the respondents were between the ranges of 31 to 40 years, 58% of the respondents were between the ranges of 41 to 50 years and 19.8% of the respondents’ age was more than 50 years. On the other hand, 18.5% of the respondents in the study had 0 to 5 years job experience in the aviation sector compared to 22.2% of the respondents who had 6 to 10 years of experience. Moreover, the highest at 35.8% were respondents with 11 to 15 years of experience and in the second rank, 23.5% of the respondents had 16 to 20 years job experience. Significantly, none of the respondents in this study had an experience of more than 20 years in this sector.

The reliability test was performed to affirm the stability and consistency of the data using the Cronbach’s Alpha. The alpha value for measuring the items’ reliability in the questionnaires was found to be 0.780, which is above the acceptable level of 0.7 as proposed by Nunnally (1978). Data entry and analysis was carried out using SPSS version 17.0. Descriptive statistics were used to analyze the demographic characteristics of the participants. Independent samples t test was carried out to see the differences in the turnover rates between public and private organizations and finally, multiple regression was conducted to identify any possible relationships between the independent and dependent variables (defined later).

RESULTS AND DISCUSSION

$t$ Test Analysis
An independent sample t test was conducted to determine that employee turnover rate has difference between of public and private companies and results show that the positive $t$ value indicates the difference exists between public and private aviation companies. From this independent sample $t$ test table (Table 1), it shows that, the test was significant, $t(79)=4.509$, $p=.000$ which is less than .05. Public company (M=4.10, SD=.575) has high turnover rate than private company (M=3.00, SD=1.58).
Table 1: t Test Results for Types of Company on Employee Turnover Rate

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Types of organization</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>Significance</th>
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<tbody>
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<td>Employee Turnover</td>
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<td>4.10</td>
<td>0.575</td>
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<tr>
<td></td>
<td>Private</td>
<td>30</td>
<td>3.00</td>
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<td>79</td>
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<td>81</td>
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*p<0.05

Regression Analysis

Multiple regression analysis was conducted among factors as the independent variables (IVs) and the employee turnover as the dependent variable (DV).

Therefore, the basic model for this study is:

\[ ET = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \beta_8 x_8 + \beta_9 x_9 + \beta_{10} x_{10} + \beta_{11} x_{11} + \beta_{12} x_{12} + e \]

where, \( ET \) = Employee Turnover
\( x_1 = \) Applications of service rules and organization policy
\( x_2 = \) Government Interference
\( x_3 = \) Reducing corruption
\( x_4 = \) Over ruling
\( x_5 = \) Improvement in salary structure
\( x_6 = \) Developing Teamwork
\( x_7 = \) Maintaining Professionalism
\( x_8 = \) Proper Supervision and training
\( x_9 = \) Promotion
\( x_{10} = \) Improper salary structure
\( x_{11} = \) Job opportunity for advancement or growth
\( x_{12} = \) Proper Application service rule and organization policy
\( \alpha \) is constant, \( \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9, \beta_{10}, \beta_{11}, \beta_{12} \) are regression coefficients, and \( e \) is the error term.

A correlation analysis was carried out to measure if any correlations exist between the selected variables. A high value indicates the presence of a strong correlation among the predictors. We observed that there are moderately strong correlation exists among the selected variables.

Table 2: Model Summary

<table>
<thead>
<tr>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>.851(a)</td>
<td>.725</td>
<td>.676</td>
<td>.671</td>
</tr>
</tbody>
</table>

Table 2 shows the model summary results including R² and Adjusted R² values. Here, the adjusted R² is 0.676 which means about 67.6 % variation in dependent variable is explained by the independent variables included in the model.
Table 3: ANOVA Output Table

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>80.632</td>
<td>12</td>
<td>6.719</td>
<td>23.756</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>30.652</td>
<td>68</td>
<td>0.451</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>111.284</td>
<td>80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ANOVA tests significance of relationships between the DV and IVs, particularly whether the DV actually depends on any of the IVs. The test revealed a statistically significant relationship between the dependent and independent variables (Table 3). Thus, in general, the ET of Airways in Bangladesh are dependent on all or any part of the set of independent variables, namely: Job opportunities for advancement or growth, Applications of service rules and organization policy, Government interference, Reducing corruption, Overruling, Developing teamwork, Maintaining professionalism, Proper supervision and training, Promotion, Improper salary structure, Reward for performance.

Regression model with enter method was carried out to identify the combination of predictors of Employee Turnover (ET) among the twelve independent variables. Improper salary structure (t = 3.028, p = 0.003) accompanied by Proper Application service rule and organization policy (t = 10.114, p < 0.002), Professionalism maintenance (t = 3.111, p < 0.003), Feelings of not being appreciated (t = -5.334, p < 0.000), Proper Supervision and training (t = -4.231, p < 0.000) and Reward for performance (t = 2.384, p < 0.000) has been concluded as having significant relationship with ET. Others factors does not seem to be of significance in deciding the Factors reducing ET in Aviation business in Bangladesh. In addition, one unit of increase in Improper salary structure will increase the possibility of reducing ET by .338, like the same one unit of Proper Application service rule and organization policy, Professionalism maintenance, Feelings of not being appreciated, Proper Supervision and training as well as Reward for performance will increase the possibility to reduce ET respectively by 1.265, .247, .548, .332 and .874 provided in Table 4.

Therefore, the regression model is:

ET= 5.782+0.338* Improvement salary structure - 1.265* Proper Application service rule and organization policy+.247* Professionalism maintenance-.548* Feelings of not being appreciated -.332 * Proper Supervision and training+.874* Reward for performance +ε.
Table 4: Output of Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>95.0% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>(Constant)</td>
<td>5.782</td>
<td>.572</td>
<td></td>
</tr>
<tr>
<td>Job opportunity for advancement or growth</td>
<td>-.071</td>
<td>.141</td>
<td>-.076</td>
</tr>
<tr>
<td>Promotion</td>
<td>-.040</td>
<td>.084</td>
<td>-.052</td>
</tr>
<tr>
<td>Improper salary structure</td>
<td>.338</td>
<td>.112</td>
<td>.438</td>
</tr>
<tr>
<td>Developing team Work</td>
<td>.092</td>
<td>.084</td>
<td>.093</td>
</tr>
<tr>
<td>Applications of service rules and organization policy</td>
<td>-.1265</td>
<td>.401</td>
<td>-.1253</td>
</tr>
<tr>
<td>Maintaining Professionalism</td>
<td>.247</td>
<td>.079</td>
<td>.317</td>
</tr>
<tr>
<td>Reducing corruption</td>
<td>-.152</td>
<td>.094</td>
<td>-.145</td>
</tr>
<tr>
<td>Overruling</td>
<td>-.096</td>
<td>.068</td>
<td>-.130</td>
</tr>
<tr>
<td>Government interference</td>
<td>.043</td>
<td>.061</td>
<td>.057</td>
</tr>
<tr>
<td>Feelings of not being appreciated</td>
<td>-.548</td>
<td>.103</td>
<td>-.680</td>
</tr>
<tr>
<td>Proper supervision and training</td>
<td>-.332</td>
<td>.078</td>
<td>-.405</td>
</tr>
<tr>
<td>Reward for performance</td>
<td>.874</td>
<td>.367</td>
<td>.902</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Employee Turnover

DISCUSSION AND CONCLUSION

In order to relate with the findings, few demographic information need to be reproduced here. The respondents’ demographic profiling reveals that respondents between the ages of 41-50 years old were the majority, 58% of all the respondents. This rate of response is closely followed by the outcome of job experience, which has the highest number of respondents with 11-15 years of experience at 35.8%. These responses are validated based on the evidence that these relationships are supported through the analysis of designation which showed that 59.3% of the respondents work as supervisors. This reveals that most of the responses to the questionnaire came from mid-level supervisors who willingly participated while the top-level executives did not show sufficient eagerness to participate. In addition, the descriptive statistics show that the rate of employee turnover in the aviation sector in Bangladesh is not lessening with results showing 71% had either disagreement or strong disagreement. This synchronized consistency in the responses is an interesting observation for researchers that the employee turnover usually occurs in the mid-level jobs. The anticipated employee turnover occurs following a certain number of years working in
the airlines companies while employees get frustrated due to the operational environment of the organization and other associated factors.

The results of the multiple regressions helped to discover the root cause of the ET problem. The results showed that an improper salary structure, inadequate application of service rules and organizational policies, lack of professionalism in dealing with employees, feelings of not being appreciated even after working for a long duration at the current job, improper training and supervision by supervisors as well as poor reward system are the main factors that cause the rising turnover rates in the aviation industry in Bangladesh. The findings also reveal that the problem of employee turnover is higher in the public airlines sector compared to the private sector. The public airlines company shows that it has a higher rate of turnover and it can be assumed this is due to the lack of the abovementioned factors, which occur more in public airlines rather than the private airlines.

Therefore, the researchers conclude that proper management of the above-mentioned factors could result in an overall reduction in the turnover rates of employees in the entire industry.

**RECOMMENDATIONS**

The analysis of the findings of the study allows us to make a few necessary recommendations, which could be assessed and implemented by the airlines companies in Bangladesh to reduce the rate of employee turnover.

The public and private airlines should both consider restructuring their salary scales. Given the fact that salary is an intrinsic motivational factor, this could significantly enhance the employee turnover situation. Public airlines should be given particular attention as the restructuring process takes a longer duration in this sector given the high level of bureaucracy.

Service rules that are not applied properly could lead to unjustified actions towards employees and this could hinder the routine operations in the organization. The proper use of the service rules prevents the acts of being biased and this could lower the employee turnover rate among the more experienced workers.

Internationally, the airline industry is well known for its professionalism and the aviation industry is mostly dependent on this aspect; however, the airlines industry in Bangladesh has not yet reached this critical level. There should be professionalism in dealing with the employees if the employees’ frustrations are to be lowered leading to a reduction in the rate of employee turnover.

Apart from the financial motivation, being appreciated for a job well done at times creates a change in job satisfaction. Therefore, an appreciation system should be undertaken to maintain the level of satisfaction among the employees. The right salary structure and an appropriate appreciation system could boost the morale of the employees thus reducing turnover rate. The correct amount of supervision and training is related to performance rewards. The lack of both of these factors can result in a negative job behavior and hinder the smooth operations of an organization. Both the public and private airlines should develop proper supervision and provide sufficient training to the employees. They must also make sure that there is a proper reward system for performance at the same time. This would ensure that there are sufficient opportunities for the employees, which in turn would reduce employee turnover.
REFERENCES


Impact of Personality on Workplace Spirituality

Keywords: Spirituality, Workplace Spirituality, Personality, Big-Five, Five factor model, India

INTRODUCTION

Spirituality is the development of our inner wellbeing for achieving happiness, peace and fulfillment. In the modern world, workplace spirituality has become a basic necessity for every organization and it is considered as a boosting element for employee performance. Spirituality helps to find meaning in work, a meaning that extends beyond economic gain. Some of the key spiritual values embraced in a work place context include compassion, connection, mindfulness, integrity, honesty, accountability, gratitude, trust, openness, authenticity, inner life, work life balance, meaningful work, sense of community and sense of alignment of values.

Personality is the noticeable psychological differences between individuals. Personality traits refers to long term consistency in personal characteristics that are revealed in a particular pattern of behaviour in a variety of situations. Personality traits is the general predictability in individuals’ thought patterns, behaviour patterns and emotional patterns. Personality is generally split into components called the Big Five, which are openness to experience, conscientiousness, extroversion, agreeableness, and neuroticism (or emotionality). These components are found to be mostly consistent over time, and about half of the variance could be attributable to a person’s genetics rather than the effects of one’s environment.

Spirituality supporting organizations and caring workplace environments benefit from employees who are strong in personality traits, committed, productive, and also willing to engage in spirituality in the workplace. Since workplace spirituality construct covers beyond individual perspective and thinking, it is justifiable to expect personality traits to result in greater degree of workplace spirituality which reflect spiritual culture and positive environment that benefit everyone in the organization and over time contribute to organizational effectiveness. Despite these positive outcomes, research relating to personality traits and workplace spirituality is still limited especially in the Indian context. The present study, therefore, attempts to develop a conceptual framework on the subject among the banking sector personnel in India. The key question addressed in this study: “Is there a significant positive relationship between personality and workplace spirituality?”

WORKPLACE SPIRITUALITY

There is increasing evidence concerning interests in workplace spirituality which has captured the attention of academicians and practitioners. In the past, spirituality and management were considered as incompatible, but now they are integrated together in the organization. Apart from improving performance, spirituality can lead to productivity improvement and better contribution to the organization. However, review of literature reveal that only very few studies have focused on personality of employees as a key factor which would influence the workplace spirituality in an organization.
Ashmos and Duchon (2000) asserted that spirituality at work, despite religious imagery, is not about religion or conversion, or about getting people to accept a specific belief system. Instead, spirituality at work is about employees who understand themselves as spiritual beings whose souls need nourishment at work. Spirituality in the workplace is a spiritual culture recognizing that employees have both mind and spirit, seek to find meaning and purpose in their work, and desire to connect with other employees and be part of a community (Subramaniam and Panchanatham, 2013). The most prominent feature of spirituality is oneness with all beings in the universe, and therefore, Krishnan (2008) conceptualized spirituality as oneness with all other beings. Spirituality is a psychological power which creates positive energy and positive attitude towards others and self (Sengupta, 2010). When an individual feels connected with self, others, and the organization, optimal performance is achieved, thus rendering the organization a success (Subramaniam and Panchanatham, 2013). It helps to create a unique working environment that assists employees to foster their capacities (Daniel, 2010).

Workplace spirituality being subjective in nature, there exists several definitions. However, according to Mitroff and Denton (1999), three dimensions such as meaningful work at the individual level, a sense of community at the group level, and alignment with organization’s values at the organizational level were considered as important. Despite the lack of clarity and agreement on an appropriate definition of workplace spirituality, Duchon and Plowman (2005) concluded that most definitions of workplace spirituality incorporate the notions of meaning, purpose, and being connected to others. Adding two more dimensions namely compassion and mindfulness at the individual level, this study deals with five dimensions of workplace spirituality namely Compassion, Mindfulness, Meaningful work, Sense of community, and Alignment of organizational values. Compassion is a deep awareness and sympathy for others and a wish to relieve their suffering (Twigg and Parayitam, 2006). A spiritual person develops an awareness of others’ needs and expresses a desire to help others. Mindfulness means being aware of what you are doing while you are doing it. Mindfulness involves the effort to attend, nonjudgmentally, to present-moment experience and sustain this attention over time, with the aim of cultivating stable, non-reactive, present-moment awareness (Jon Kabat-Zinn, 2003). Meaningful Work is the degree to which people experience a deep sense of meaning and purpose at work. It represents how one interacts with his or her daily work at the individual level (Milliman et al., 2003). Indeed, one feels that work has meaning for him/her beyond the material rewards and also creates a sense of joy and energy at work (Duchon and Plowman 2005). In another sense, meaningful work answers the question of why one is in the workplace by acknowledging that his/her work helps him/her to express his/her inner self (Krishnakumar and Neck, 2002). Sense of community represents that people feel connected to each other and that there is some type of relationship between one’s inner self with other’s inner self and relates to the interaction among employees. It involves having a deep connection to, or relationships with others (Ashmos and Duchon, 2000). Alignment of organizational values is when employees experience a strong sense of alignment between their personal values and their organization’s mission and purpose (Milliman et al., 2003). Alignment of organizational values measures whether or not individuals experience a sense of alignment between their personal values and the larger organizational mission and purpose.

It is anticipated that a work environment which recognizes that people have both mind and soul, seek to find meaning and purpose in their work, and desire to connect with other human beings and be part of a community, would result in beneficial consequences to the individual and ultimately the organization. This phenomenon relates to workplace spirituality. According to Krishnakumar and Neck (2002), the encouragement of workplace spirituality can be advantageous to individuals and ultimately the organization. Milliman et al. (2003) provided empirical evidence on the relationships between the three dimensions of workplace spirituality and selected attitudinal variables (organizational commitment, intrinsic work satisfaction, job involvement, organization-based self-esteem, and intention to quit). Spirituality describes the experience of employees who are passionate about and energized by
their work, find meaning and purpose in their work, feel that they can express their complete selves at work, and feel connected to those with whom they work (Kinjerski and Skrypnek, 2004).

PERSONALITY

The five-factor model of personality is intended to provide a systematic framework for personality measures in broad terms. The model enhances the “ability to compare and contrast different constructs and promises to bring clarity and order to an enterprise that was once described as a disconcerting sprawl” (McAdams, 1992). The five most important dimensions of personality should be incorporated into the assessment of spirituality in the workplace. These dimensions are conscientiousness, emotional stability, agreeableness, extraversion, and openness to experience (Mount, Barrick, and Stewart, 1998). Each of these dimensions represents a facet of an individual’s personality.

Each of the components of big five holds a set of traits that tend to occur together. Openness to experience is defined as the variety of interests to which a person is attracted and the depth to which those interests are pursued. The behavioral tendencies typically associated with Openness to Experience include being imaginative, cultured, curious, original, broad minded, intelligent (Digman, 1990), and having a need for variety, aesthetic sensitivity, and unconventional values (McCrae & John, 1992). Conscientiousness is defined as the number of goals on which a person is focused. It is related to dependability and volition and the typical behaviors associated with it include being hard working, achievement oriented, persevering, careful, and responsible (Barrick & Mount, 1991). Conscientious individuals can perform their part of the work with a minimum of oversight (Morgeson, Reider & Campion, 2005). They are predisposed to take initiative in solving problems and are more methodical and thorough in their work (Witt, Burke, Barrick & Mount, 2002). Extraversion is defined as the level of sensory stimulation with which one is comfortable. The behavioral tendencies used to measure this factor include being sociable, gregarious, assertive, talkative, and active (Barrick & Mount, 1991).

Agreeableness is defined as the number of sources from which one takes one’s norms for right behavior. The behavioral tendencies typically associated with this factor include being courteous, flexible, trusting, good-natured, cooperative, forgiving, soft-hearted, and tolerant (Barrick & Mount, 1991). Neuroticism is defined as the number and strength of stimuli required to elicit negative emotions in a person. Typical behaviors associated with this factor include being anxious, depressed, angry, embarrassed, emotional, worried, and insecure (Barrick & Mount, 1991).

Mount et al. (1991) define each of the factors and listed certain qualities associated with the factors as,
1. Openness to Experience (intellectual, curious, imaginative, cultured, and broad-minded)
2. Conscientiousness (responsible, careful, persevering, orderly, hardworking, playful)
3. Extraversion (talkative, assertive, adventurous, energetic)
4. Agreeableness (good-natured, flexible, cooperative, caring, trusting, tolerant)

Recognizing the need for personality among employees could be one method to improve spirituality in the workplace as personality has the potential to perform personal control which helps employees assess their behavior in the workplace (James et al., 2011). Therefore, it can be concluded that a satisfied employee who exhibits personality traits develops spirituality in the workplace and would eventually perform better in an organization.

RESEARCH OBJECTIVES

The main objective of this study is to explore the relationship, if any, between personality traits and workplace spirituality. Accordingly, the following hypothesis has been developed:

AGBA 12th World Congress
Page 417 of 1173
Impact of Personality on Workplace Spirituality

H1: Personality (openness to experience, conscientiousness, extraversion, agreeableness and neuroticism) has a positive significant relationship with workplace spirituality (compassion, mindfulness, meaningful work, sense of community, and alignment of organizational values).

RESEARCH FRAMEWORK

<table>
<thead>
<tr>
<th>Personality</th>
<th>Workplace Spirituality</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Openness to experience</td>
<td>- Compassion</td>
</tr>
<tr>
<td>- Conscientiousness</td>
<td>- Mindfulness</td>
</tr>
<tr>
<td>- Extraversion</td>
<td>- Meaningful work</td>
</tr>
<tr>
<td>- Agreeableness</td>
<td>- Sense of community</td>
</tr>
<tr>
<td>- Neuroticism</td>
<td>- Alignment of values</td>
</tr>
</tbody>
</table>

Figure 1: Conceptual framework of the study

RESEARCH METHODOLOGY

The methodology adopted for the research was descriptive study based on survey. This study is mainly depended on the primary data collected through the research instrument which was well-designed and structured questionnaire to get the knowledgeable opinions and responses of the participants. The study was confined to the participants chosen randomly from all the senior, middle and junior level managerial staffs of the branches of five different public and private sector banks situated in the city of Coimbatore, South India. Questionnaires were distributed and a total of sixty fully completed responses were obtained after adopting a rational procedure. The demographic profile of the respondents to questionnaires are shown in Table-1. Briefly, male respondents represented 75% of the participants, and 73% of the respondents are married. The mean age for the sample is 43 years. Among the respondents, 92% are graduates and above and 60% of the respondents are occupying senior level position in the organizations.

Table 1: Demographic Profile of Respondents

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>45</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>Marriage</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>44</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>16</td>
<td>27</td>
</tr>
<tr>
<td>3</td>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21-30</td>
<td>16</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>19</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>41-70</td>
<td>25</td>
<td>41</td>
</tr>
<tr>
<td>4</td>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High School</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Post Graduate</td>
<td>43</td>
<td>72</td>
</tr>
<tr>
<td>5</td>
<td>Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Senior level</td>
<td>36</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Middle level</td>
<td>14</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Junior level</td>
<td>10</td>
<td>17</td>
</tr>
</tbody>
</table>
MEASUREMENT

Workplace spirituality measures consisted of 15 items adopted from standard measurement scale, based on five dimensions: compassion, mindfulness, meaningful work, sense of community, alignment with organizational values. Personality was measured using Big Five Personality test and the scale consisted of 44 items relating to five dimensions (Openness to experience, Conscientiousness, Extraversion, Agreeableness, Neuroticism). Measurement was made using 5 point Likert scale which ranges from Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree. Results are shown in Table 2. Cronbach’s alpha coefficient of questionnaires on workplace spirituality and Personality were reported as 77% and 61%, respectively, indicating above average degree of reliability.

RESULTS AND DISCUSSIONS

Analysis of the collected data was carried out using statistical techniques (SPSS). It is noticed that the distribution is normal. Also, there is no gender differences in results and so combined responses for males and females is used in the data analysis. Pearson Correlation Coefficient at 0.01 level of significance is the statistical tool employed in the study to examine the contents of personality (independent variables) and workplace spirituality (dependent variable). Theoretical range, mean, standard deviation (SD) and Pearson’s correlation coefficients (r) are calculated and presented in Table 2. The mean values of the variables ranges from 3.26 to 3.81. Standard deviations ranges from 0.23 to 0.54. Standard Error Mean value range from 0.037 to 0.085. It is observed that four of the five dimensions of personality have significant positive correlation with the five dimensions of workplace spirituality (p≤0.01).

Table 2: Relationship between personality and workplace spirituality – Correlation Matrix

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Variable</th>
<th>Extraversion</th>
<th>Agreeableness</th>
<th>Conscientiousness</th>
<th>Neuroticism</th>
<th>Openness to experience</th>
<th>Workplace Spirituality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Extraversion</td>
<td>1</td>
<td>.032</td>
<td>.623**</td>
<td>-.288</td>
<td>.215</td>
<td>.683**</td>
</tr>
<tr>
<td>2</td>
<td>Agreeableness</td>
<td>.032</td>
<td>1</td>
<td>.298</td>
<td>-.417**</td>
<td>.359*</td>
<td>.481**</td>
</tr>
<tr>
<td>3</td>
<td>Conscientiousness</td>
<td>.623**</td>
<td>.298</td>
<td>1</td>
<td>-.291</td>
<td>.173</td>
<td>.752**</td>
</tr>
<tr>
<td>4</td>
<td>Neuroticism</td>
<td>-.288</td>
<td>-.417**</td>
<td>-.291</td>
<td>1</td>
<td>.029</td>
<td>-.023</td>
</tr>
<tr>
<td>5</td>
<td>Openness to Experience</td>
<td>.215</td>
<td>.359*</td>
<td>.173</td>
<td>.029</td>
<td>1</td>
<td>.639**</td>
</tr>
<tr>
<td>6</td>
<td>Workplace Spirituality</td>
<td>.683**</td>
<td>.481**</td>
<td>.752**</td>
<td>-.023</td>
<td>.639**</td>
<td>1</td>
</tr>
</tbody>
</table>

* Correlation significant at 0.05 level (2 tailed), ** correlation significant at 0.01 level (2 tailed)

The correlation matrix at Table 2 indicates that the correlation coefficients are less than 0.80. According to Billings and Wroten (1978) correlation coefficients that are lower than 0.8 do not pose a threat, any threats of multi-collinearity for the study. The correlation matrix as above indicates, four of the ‘big five’ factors (extraversion, agreeableness, conscientiousness, openness to experience) except neuroticism have positive relationship with workplace spirituality and its dimensions (compassion, mindfulness, meaningful work, sense of community, sense of alignment of organizational values). Such results are
comparable with the study results of Kuldeep et al. (2009) and Zafar and Lou (2014) in analyzing the
correlation between personality and organizational citizenship behavior. Also, it is observed that some of
the items are showing weak correlation. As such, the extent to which the scores of workplace spirituality
are influenced by personality factors cannot be interpreted directly based on the correlation analysis only.
Therefore, regression analysis was applied for the overall personality and workplace spirituality. Table 3
indicates that personality significantly predicts workplace spirituality with R value of 1.0 which explains
45.4% of variance in predicting workplace spirituality.

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>R</th>
<th>R²</th>
<th>SE</th>
<th>F-Value</th>
<th>d.f</th>
<th>Sig.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workplace spirituality</td>
<td>Personality</td>
<td>1.0</td>
<td>1.0</td>
<td>0.003</td>
<td>45412.048</td>
<td>5,34</td>
<td>0.000</td>
</tr>
</tbody>
</table>

*Significant at 0.01 level

SE= Standard Error, d.f =degree of freedom

The above results indicate that personality has a positive influence on workplace spirituality. This means,
higher level of personality traits will lead to better performance in workplace spirituality. In other words,
when employees possess a deep sense of extraversion, agreeableness, conscientiousness, neuroticism, and
openness to experience, they become more satisfied in their job, act in a more collaborative manner and
apply their full potential to work for their organization. Further, the employees indulge in spiritualism and
the organization eventually results in increased organizational performance.

CONCLUSION

Given the importance of work to most people and the amount of time they spend at work, this study
has provided some empirical evidence concerning individual personality and workplace spirituality.
Given the dearth of studies on workplace spirituality in non-western countries, the use of Indian
sample in this study has helped to address the gap in the literature by shedding some light on the
dimensionality of the personality construct, and the predictive ability of these dimensions on
workplace spirituality.

This study was aimed to find out the relationship, if any, between personality and workplace spirituality
among the staffs working in some branches of public sector banks in the city of Coimbatore in India. The
results reveal that personality has a significant positive influence on and the hypothesis is consistent with
the study. Confirmation of this hypothesis implies that managers of organizations should prepare an
appropriate atmosphere in workplace and increase the personality traits to develop workplace spirituality.
When employees see that appropriate situations are provided in workplace, they work harder than before
to reach organizational objectives. The findings of the study provide further insight to leaders and
managers on the importance of personality towards increasing the workplace spirituality which results in
many positive benefits to organizations including the attitude, job satisfaction, organizational
commitment, customer satisfaction and performance enrichment.

It is suggested that organizational leaders should try to inject spirituality in organizational vision, mission
and policies in such a way that employees can realize true meaning in their jobs, experience community
feeling and align their personal values with organizational values, which in turn will lead to better
organizational performance. Given the potential positive effect of workplace spirituality on organizational
citizenship behavior, organizations may attempt to create a culture of spirituality in the workplace. In this
regard, effective change approaches are needed in the organizations to implement workplace spirituality
philosophies. Organization’s philosophy must be clearly communicated by the top management that
workplace spirituality represents truth and is the right thing to do and must be embraced at all
organizational levels. As stated by Milliman et al. (2003), the practice of workplace spirituality must
be genuine before it can have any fruitful consequences on employees or on the long-term organizational effectiveness. As the concept is highly abstract, employing institutions should clarify what spirituality in the workplace means and allow employees to participate in open discussions on how to go about creating a culture of spirituality. Besides, as workplace spirituality occurs within the context of organizational values and goals, support and feedback from the organization’s stakeholders are important.

Further, in spite of its positive findings, this study has certain limitations that must be acknowledged. Firstly, the sample selected for this study involves only the staffs working in some specified branches of commercial bank organizations in a small city of Coimbatore in India. Hence, generalizations of the findings may not be appropriate until the sample includes other branches of the banks in other regions as well. Secondly, the data have been collected from employees of public sector banking industry which restrict the generalization of the findings in private sector banks, other industries and institutions. Further, researchers are encouraged to drive the area of spirituality in the workplace by conceptualizing and measuring workplace spirituality in the Indian context through qualitative and quantitative approach.

REFERENCES


Conflict Management and Evaluation in Organizational Change – A Critical Systems Thinking Perspective

Keywords: Systemic Model, Conflict, Critical Systems Thinking, Organizational Change

INTRODUCTION

Organizational change is a complex phenomenon that involves a collective effort of multiple actors (Bower, 1997). Change implementation always creates some resistance (O'Connor, 1993) and conflicts (Montana & Charnov, 2000). Resistance can be anticipated if proposed changes or innovations alter values and visions as stakeholders often perceive that these actions cause disenfranchisement and redistribute benefits (Trader-Leigh, 2001).

Despite the wealth of literature available to dealing with this challenge, many problems still occur within organizations from a stakeholder’s view point. Cooper and Markus (1995) indicate that organizations often fail to realize that the resistance offered by people is not to the change per se, but the way they are treated and the roles they play in the change process. The authors emphasize that the identification of stakeholders, their roles and the resistance factors must be an essential part of conflict management in organizational change. The paper proposes a conflict management model based on a systemic perspective, focusing on multiple stakeholders, to help in successfully providing a smoother pace for organizational learning and change. The model has its theoretical foundations on the concepts of Critical Systems Heuristics (CSH), change theory, stakeholder theory and conflict management.

LITERATURE ANALYSIS

A management perspective of stakeholder theory
Stakeholders are a consistent dimension in any organizational life cycle (Rowley 1997). It was Freeman (1984) who brought stakeholder theory into the mainstream of management literature (Frooman 1999), defining a stakeholder as, ‘any group or individual who can affect or is affected by the achievement of the firm’s objectives’ (1984: 25). He conceptualized the firm or the focal organization (F.O.) as the hub of a wheel and stakeholders as the ends of spokes around it (Frooman 1999). This was extended by Freeman and Evan (1990) as a series of multilateral contracts among stakeholders, giving birth to a network of influences, as shown in figure 1. Thus, explaining an organization’s response to its stakeholders requires an analysis of a complex array of multiple and interdependent relationships among stakeholders rather than just their individual relationships with the organization. For conflict evaluation and management, the extended view of stakeholders by Freeman and Evan (1990) would be considered to analyse multiple stakeholder perspectives for the proposed model.
Figure 1: Network of stakeholders

Systems Thinking and Critical Systems Heuristics (CSH)
Systems or Holistic Thinking views a system as a whole considering how its parts affect the ‘whole’ through their interactions (Ackoff 1995), and studying their multiple cross level interactions over time (Waldman 2007). According to Jackson (1995), the most interesting and important problems for managers surface when the parts interact and produce emergent properties which are not directly related to those of individual parts.

The methodology of Critical Systems Heuristics, proposed by Ulrich (1983) is a systems thinking-based framework for a reflective practice using ‘boundary critique’ (Midgley 2007). It considers a social system design by defining its boundary which comprises of those who are involved in and affected by it. From a change perspective, those involved can have an influence on a change effort where as those affected do not have. Boundary critique coherently defines what issues are to be included or excluded and who is to be involved (stakeholders) with these issues (Midgley 2003). Achterkamp and Vos (2007) have proposed a method for stakeholder identification using boundary critique. The way this method underpins the proposed model is discussed later in the paper.

Organizational complexity and conflicts
The participation of people in organizations is a complex phenomenon (Rashford & Coghlan 1994) with increasing levels of complexity from the relationship of an individual with the organization to the whole organization and its environment taken as a whole (McIllduff & Coghlan 2000), as shown in figure 2.
Jackson (1995) defined these relationships as unitary, pluralist and conflictual as possible ‘ideal-type’ problem contexts. He positioned these concepts in two dimensions, based on the divergence of values and interests of those involved in or affected by a problem as a horizontal axis and complexity as a vertical axis. Relationships are: unitary when people share values and interests; pluralist if their values and interests diverge but still share enough in common to form a worthwhile coalition; and conflictual or coercive if their interests diverge irreconcilably (Jackson & Keys 1984). The problem contexts become more cumbersome to manage with the increasing divergence of values and interests with an increase in complexity, as shown in figure 3. A brief description about the values and interests, in the context of the proposed model, is presented later.

**Figure 2: Levels of complexity of relationships and challenges**

Jackson (1995) defined these relationships as unitary, pluralist and conflictual as possible ‘ideal-type’ problem contexts. He positioned these concepts in two dimensions, based on the divergence of values and interests of those involved in or affected by a problem as a horizontal axis and complexity as a vertical axis. Relationships are: unitary when people share values and interests; pluralist if their values and interests diverge but still share enough in common to form a worthwhile coalition; and conflictual or coercive if their interests diverge irreconcilably (Jackson & Keys 1984). The problem contexts become more cumbersome to manage with the increasing divergence of values and interests with an increase in complexity, as shown in figure 3. A brief description about the values and interests, in the context of the proposed model, is presented later.
Resistance and conflicts in organizational change

The term resistance was introduced by Kurt Lewin in his field theory related to group dynamics (Lewin 1947). An organization is composed of diverse groups of people having different issues of concern and is seen as coalition of interest groups in tension (Cao et al. 2003). Organizational participants who are vaguely aware of the change process can cause rumours and anxiety resulting in attitudes different from those intended by management, which ultimately lead to resistance and conflicts (Jick 1993; Trader-Leigh 2001). A conflict is a state of disagreement perceived by two or more parties on issues such as interests, values, actions, objectives, positions, beliefs (Pinzón & Midgley 2000).

This paper treats conflict as a dynamic process in an organizational change scenario and is underpinned by its management rather than resolution as a conflict may or may not have a well-defined ending. The authors view change as a purposeful innovation diffusion project triggered to bring about improvement in a complex organizational setup. Innovation diffusion is described as ‘the process by which an innovation is communicated through certain channels over time among the members of a social system’ (Rogers 1995). It should be noted that the text in this paper uses change and innovation diffusion interchangeably. The authors suggest that the determination of resistance factors when woven together with social network stakeholder theory and Critical Systems Heuristics, could serve as a nucleus for innovation diffusion and conflict management in organizational change.

THE MODEL

An axiological subjectivism-based model that is most commonly used for conflict evaluation in alternative dispute resolution (ADR) literature, mentioned as F1 by Pinzón and Midgley (2000), considers only the interests of those directly involved or participating in the conflict. Thus it ignores the ‘affected’ category of people by putting them beyond the boundary of the model. Pinzón and Midgley (2000) evaluated F1 using ‘Colombian guerrilla conflict’, while proposing a systemic model (F2) for conflict evaluation in social contexts. F2, while providing a basis for the model proposed here, cannot be directly
applied in an organizational change scenario as it only provides a conflict evaluation scheme and not a mechanism for conflict management. The proposed model couples F2 with network stakeholder theory to establish a system of stakeholders (Figure 5). It highlights causes of possible resistance factors resulting in a system of conflicts (Figure 6) and recognises the applicability of network-based mechanisms for conflict management in the context of organizational change. The components of the proposed model, shown in figure 4 are explored below.

**Identification of stakeholders using boundary critique**

Identifying stakeholders means that a line is drawn between the parties to be involved and the parties not to be involved (Vos 2003). Freeman’s (1984) definition provides clues for deciding which parties to be included in, or excluded from a system of stakeholders (Achterkamp & Vos 2007). To practically conduct boundary critique, Ulrich (1983) offers a list of twelve questions which can be employed by those involved in and affected by planning to interrogate what the system currently is and what it ought to be.

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**Figure 4: The proposed model for conflict management in organizational change**

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**Figure 5: System of stakeholders**
More specifically, Achterkamp and Vos (2007), propose a four-step method for project-based stakeholder identification using boundary critique that focuses on two key points: roles of involvement and phasing this involvement. They define a project broadly as an innovation project especially set up for pursuing the development of new products, services or processes, or a project concerning a (temporary) task inside or outside an organization. The roles of involvement are underpinned by Ulrich’s notion of boundary critique (Ulrich 1983) while phasing of involvement relates these roles to the dynamic processes of a project encompassing its four phases of initiation, development, implementation, and maintenance. Table 1, maps the roles stakeholders play in the context of the proposed conflict management model to the categories mentioned by Achterkamp and Vos (2007), as the proposed model also views organizational change as an innovation project.

Table 1: Definitions of the roles of involvement – based on Achterkamp and Vos (2007)

<table>
<thead>
<tr>
<th>Role</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Party involved actively and passively (the two basic categories)</td>
<td>A party involved is any group or individual who can affect (1) the achievement of the change objectives (actively involved) or (2) who is affected by the achievement of these objectives (passively involved).</td>
</tr>
<tr>
<td>Client</td>
<td>A client is the party whose purposes are being served through the change process.</td>
</tr>
<tr>
<td>Decision maker</td>
<td>A decision maker sets requirements regarding the change process outcomes and evaluates strategic effectiveness whether these requirements are met.</td>
</tr>
<tr>
<td>Designer</td>
<td>A designer contributes expertise in the identification of stakeholders, determination of resistance factors, application of strategies and is responsible for the (interim) deliverables.</td>
</tr>
<tr>
<td>Passively Involved, representative</td>
<td>A passively involved party is affected by the project outcomes or project process without being able to influence the process or these outcomes. A representative is a person who has been chosen to act on behalf of that party.</td>
</tr>
</tbody>
</table>

While Achterkamp and Vos (2007) distinguish four phases of a project, the authors of this paper do not identify these as the required phases for change implementation as change strategies may differ among organizations based on the organization size and the nature or degree of change. The authors, however, emphasize on the ongoing requirement of the identification of stakeholders and its repetition as required with the progression of change, as shown in figure 4. This identification will generate the system of stakeholders (see figure 5) while its repetition will sweep-in more information based on the effectiveness of the conflict management strategies applied in the previous cycle. This will eventually result in the re-definition of the boundaries under consideration, establishing the system of stakeholders as a function of time.

The roles of stakeholders listed in table 1 fall into two main categories of involved or affected (named as actively and passively involved respectively), while the other roles may fall into either of these categories.
In figure 5, W, X, Y, and Z have been shown to exemplify stakeholders in the involved or affected category playing the roles neither of a client, nor a decision maker nor a designer. Client has been shown at the intersection of involved and affected as an example, as this may vary among different project scenarios.

**Determination of Resistance factors**

Resistance, on one hand, is a phenomenon which can undermine organizational change by delaying or slowing down its beginning, hindering its implementation, and increasing its costs (Ansoff 1990) but can also be an information source for developing a more successful change process (Beer & Eisenstat 1996; Goldstein 1988).

The authors suggest that factors causing resistance must be determined, assessed and managed as a part of the conflict management strategy. McIlduff and Coghlan (2000) point out that organizational change involves the responding behaviour from individuals, teams and groups in the light of their perception of the change process (see figure 2). They mention perception of change, assessment of the impact of change and response to be as three critical elements in the dynamics of change process for individuals, teams and interdepartmental groups.

The numerous causes of resistance mentioned in the literature can be broadly classified as individual and organizational factors. The former include selective perception and retention, self interest, frustration, fear of unknown, low motivation, feelings of failure, self distrust, conservatism, and loss of control (Coch & French 1948; Conner 1998). The latter can encompass conformity to norms and values (culture), past experiences and threats to power or influence (Mullins 1999).

Trader-Leigh (2001) conducted a study for identifying resistance factors for change management in US State Department using variables identified by O’Toole (1986). Trader-Leigh (2001) suggests that identification and understanding of the factors underlying resistance may improve outcomes of change implementation and proposes a model with an organizational analysis of resistance factors as its basic ingredient. Table 2 provides a summary of the resistance factors identified in her study.

<table>
<thead>
<tr>
<th>Resistance Factor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Interest</td>
<td>People offer resistance if they see ways they benefit from being eroded by change.</td>
</tr>
<tr>
<td>Psychological impact</td>
<td>Perceptions of threat in the form of job security, professional expertise and one’s social status</td>
</tr>
<tr>
<td>Tyranny of custom</td>
<td>Despotism of custom inhibits change</td>
</tr>
<tr>
<td>Redistributive factor</td>
<td>Changing policies, procedures, funding strategies</td>
</tr>
<tr>
<td>Destabilization effects</td>
<td>Change of assignments, posts or designations disrupting service levels</td>
</tr>
<tr>
<td>Cultural incompatibility</td>
<td>Conflicts with bureaucratic structures having traditional monopolies</td>
</tr>
<tr>
<td>Political effect</td>
<td>Upset in the balance of power and control</td>
</tr>
</tbody>
</table>
In the proposed model, the determination of resistance factors will bring about the system of conflicts (see figure 6), comprising of conflicts emerging both from individual and organizational resistance forces. Similar to the system of stakeholders, it is also dynamic i.e. a function of time. Each conflict is considered to have two sets of elements (Pinzón & Midgley 2000):

1. The subjects/actors who participate in the conflict; the substance or object seen as having characteristics of triggering specific actions/reactions in individuals (Maturana & Varela 1992) and the context pertaining to culture and politics.
2. Interests and values related to the conflict’s participants. Figure 6, instead of showing values and interests for each conflict, portrays them as a collective set of understandings for the whole system of conflicts.

![Figure 6: System of conflicts](image)

Now, the authors provide some discussion on the nature of values and its relation with interest from the positions of axiological objectivism and axiological subjectivism, by touching on a few representative ideas. The authors use the words objective and subjective for the two terminologies respectively. Values are said to be objective in nature if they are thought to exist independently of an individual having an evaluation consciousness, and considered subjective if they are said to owe their existence to the act of evaluation of one or more individuals (Pinzón & Midgley 2000). Scheler (1973) regards objective values as true objects free from the state of feelings and are immutable, absolute and unconditional. Frondizi (1966) describes that an object has a value or is valuable as long as it attracts interest.

While both of these concepts have been criticized (Pinzón & Midgley 2000), the authors consider them to be useful for the construction of the proposed model. The proposed model considers values as shared understandings of a community or a culture. This assertion relies on a subjectivist stance which is the basis for many modern writings on negotiation (see, for example, Lewicki and Litterer 1985; Ury 1991). Nevertheless, the authors also couple this understanding with the concept of judgement as it is crucial to acknowledge the multiple possibilities of viewpoints by sweeping-in a variety of judgements as part of boundary critique. The challenge lies in mollifying, if not completely satisfying the interests of various stakeholders by creating a culture that encourages expression and avoids suppression of viewpoints of the participants in the conflict. This stance brings with it some ethical responsibility and the need for a
people-centred approach aimed at changing not only individual behaviours but attitudes and motivations at collective level as well.

Let us now discuss about the anatomy of the *system of conflicts* exemplified in figure 6. It comprises of two conflicts involving W, X, Y, Z and the client (represented by C). Stakeholder X is involved in both of the conflicts. The client is a stakeholder whose purposes are being served by the change process (see table 1) and as such is involved in and affected by all of the conflicts hindering the change progress.

**Intervening with the conflict participants**

After discovering *who* is resisting and *why*, the next challenging issue is to use this information for conflict management. This section discusses how resistance can be managed in conflict situations during organizational change. According to Bate (2000), entering into non-emotional debate with resistors can reveal new ways to improve the change project and guide resistors in reframing their thoughts related to that process. For establishing communication channels regarding change, the authors emphasize on the establishment of a ‘networked organization or community’. This will bring about transformations in culture, relationships and skills to effectively deal with conflict situations. This configuration is characterised by a flat authority structure and multiple horizontal linkages between the inner core of a firm and its outside suppliers, contractors and customers. This framework of stakeholder relationships can be studied and analysed using social network analysis. This analysis has been used by researchers to refine and extend the human understanding of various behavioural and social phenomena, including community elite decision making, social influence, power and innovation diffusion (Rowley 1997; Cao et al. 2003).

In the context of our proposed model, ‘networked organization’ is about the establishment of a ‘framework of little niches’, based on interventions and polycentric decision-making processes. This sharing of power results in partnerships, which may not always lead to an end to a conflict but engages co-operation and negotiation between its participants (Bate, 2000). Network theorists argue that through relational, positional and spatial proximities, such networks influence perceptions and opinions and are capable of changing interpretations associated with and reducing uncertainty about an event, idea or phenomenon (Rogers & Kincaid 1981). A detailed description as to how these mechanisms operate in a network setting is restricted due to space limitation. Singh (2005) has empirically shown the effectiveness of collaborative networks in knowledge flow and its diffusion. The authors of this paper argue that this capability of networks can be used in managing conflicts by influencing perceptions of conflict participants about the change process.

Together with these network mechanisms, the authors suggest the use of interventions for information propagation about change process. In the context of change process, an intervention is an action or event that influences the individuals (positively or negatively) involved or expected to be involved in the process (Hall & Hord, 1987: 143). McIlduff and Coghan (2000: 724), view interventions as ‘...all conscious and deliberate actions and behaviours on the part of a manager, consultant or facilitator ...’. Focusing on various intervention types is not the subject of this writing. Hall and Hord (2006) provide a detailed discussion on various intervention sizes, functions, their levels and anatomy.

The authors of this paper recommend that the following observations should be made while conducting interventions for managing challenges pertaining to individuals or teams/inter-departmental groups (see figure 2) in the *system of conflicts*. The word participants in the following points, encompasses both involved and affected categories of stakeholders.

- Reaction and view of conflict participant(s) about the intervention.
- Perception of conflict participant(s) about the way change process is being carried out.
- Perceptions about the impact of change on values and interests of the participant(s) of the conflict.
• Any indication (positive or negative) from the conflict participant(s) about the change in attitude(s) about or level of involvement in the change effort, as compared to the one observed in previous cycle(s) (if applicable).
• Need for boundary refinement to redefine system of stakeholders and/or system of conflicts.
• Need for refining or changing currently or previously applied intervention strategy.

The authors emphasize that an intervention must be characterised by the philosophy underpinning a helping and supportive attitude for reducing learning anxiety and creating psychological safety for the conflict participants.

**DISCUSSION**

A systemic model, proposed earlier by Pinzón and Midgley (2000), for conflict evaluation in social contexts cannot be directly applied in organizational change scenario as it only provides a conflict evaluation scheme. It, thus, deprives of providing any mechanism for conflict management. The proposed model extends it for organizational change management by combining it with change and network stakeholder theories. This section highlights the impact of proposed model on the management of conflicts in organizational change. The main questions addressed in this section are: What are the guidelines offered by the model in the comprehension and management of organizational conflicts? What are the overall implications of these guidelines?

Certain clarifications are to be made before going into any further discussion. Firstly, the proposed model is not intended to provide a definite solution to conflict management, but it is rather an attempt to looking at conflicts in a more holistic way. This will definitely pave the way for the development of such models in the future. Secondly, like other models, it is a simplified version of the complex nature of conflicts involving multiple stakeholders and thus, has some limitations which are presented at the end of this paper.

Coming down to the above mentioned questions leads us to discuss about the two closely interrelated concepts of ‘systems’ and ‘complexity’. As a system, taken as a whole, can enable and/or disable the functioning capacity of its parts, so conversely the parts can also contribute to and/or challenge its functionality. Complexity is not only related to the number of parts and their interactions, but also to systems which are dynamic in nature and exhibit ‘emergent’ properties over time. Allen (1988) has discussed this phenomenon quite in detail. Social systems become complex by the introduction of different normative or subjective perspectives about a situation (e.g. a conflict) where people have to reconcile and shun their taken for granted perceptions (Midgley 1992). Analyzing these perceptions from a dynamic frame of reference makes it even more complex and thus limits our ability to understand the overall scenario and predict system’s behavior.

The proposed model presents some guidelines for conflicts and their management by considering both of them as dynamic processes. Emergence, in this context, sees today’s most relevant criteria to be ineffective, redundant or in need to be supplemented by others tomorrow. The implication of this guideline provided in the proposed model opens up a venue for decision makers, evaluators and change leaders to regularly rethink about the variables (e.g. resistance) as a system’s comprehensiveness cannot be grasped at only one point of time. It rather needs viewpoints to be revisited and boundaries redefined. A different system boundary may result in the problem analysis from a new and entirely different angle and, accordingly in different solutions or changes. Care, however must be taken that the redefinition of boundaries does not ever miss out on the ethical responsibility change proponents have on the rest of the stakeholder set. Their role must always be as change facilitators rather than change enforcers.
The other guideline is related to practicing boundary critique. The model applies it beyond the matter of just including or excluding stakeholders. Flood and Jackson (1991) mention that boundary critique may not produce effective social analyses until used in combination with other planning and evaluation methods. To generate an effective knowledge flow about change or innovation project, the proposed model couples boundary critique with the application of network mechanisms over the mesh of stakeholders to mitigate the effect of conflict generating causes. Singh (2005) has empirically shown the effectiveness of collaborative networks in knowledge flow and its diffusion. The implication of this guideline, at one hand, makes change initiators to not only define the relevant roles stakeholders play overtime inside the system of stakeholders (Figure 5) and the system of conflicts (Figure 6) but also to refine their knowledge about these two dynamic systems. This continuous learning will make change managers to be exactly aware of the concerns of the conflict participants and eventually help them to reevaluate their intervention strategies applied in the previous cycle(s) and to revamp the network structure for an improved knowledge flow.

LIMITATIONS AND CONCLUSION

The model presented in this paper provides guidelines for conflict management in an organizational change scenario, not something prescriptive to reach at the final destination. It includes analysis of resistance factors (both individual and organizational) as a component of the conflict management plan. It does not, however, provide a step-by-step method as to how these resistance forces could be determined. It suggests the use of interventions, but neither does it recommend any particular intervention plan to cope up with the emerging conflicts as change progresses nor any yard stick to measure the effectiveness of an intervention strategy. It also does not provide a mechanism to indicate when these interventions transform from change facilitation to change manipulation.

The model, however, provides an organized conflict management methodology based on a systemic or holistic perspective. The systems of stakeholders and the system of conflicts are the lenses which provide an insight to the different interests and perspectives to facilitate the development and implementation of collaborative strategies for change. It urges on the need of critical attitudes for carrying out the interpretation and evaluation of conflicts, recognition of marginalized perspectives and demonstrates the need to gain a deeper understanding of the complex character of organizational affairs.

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Influence of Personal Values on Generation Z’s Purchase Intention for Natural Beauty Products

Keywords: Generation Z, Natural Beauty Products, Environmental Consciousness, Health Consciousness, Appearance Consciousness, Need for Uniqueness

INTRODUCTION

The trend for health related products derived from natural ingredients is increasing in demand (Dimitrova, Kaneva, & Gallucci, 2009). Natural ingredients are being processed into a wide variety of products, such as herbal medicine, food supplements, additives for farm animals, personal care products and also cosmetics (Nagasawa & Kizu, 2013). Cosmetics is one of the products using natural ingredients, which are continually growing in the market. The main driver of growth in the natural cosmetics market has been the consumer trend towards healthier lifestyle (Girotto, 2013). In addition to ensure that one’s appearance, body shape and physical control have become central to an individual self-identity (Shilling, 2003, 2007). Shilling (2003) suggested that the body is often considered as a form of physical capital in modern society. Such concepts may help to explain the behavior like eating, dressing and wearing make-up. In addition, with the body is seen as a visual self, the concern on appearance has leads to an increase in consumption of beauty products (Gimlin, 2006). According to a survey by The Nielsen Company in 2007, 30% of consumers worldwide spend more on beauty products and treatments today than they used to. Many consumers believe that natural products have higher standard of quality (APCOWorldwide, 2013). They also contain less synthetic chemicals, compared with conventional products (Giritto, 2013, Organic Wellness, 2012). Besides the growing emphasis on external appearance and the consumption of beauty products, consumers’ concerned on health and the external physical environment has emerged as a recent consumer trend.

From a sociological point of view, researchers have suggested that consumers’ concern for environment has been a moral basis of some consumption practices (Shaw & Newholm, 2002). In earlier research on consumption, Baudrillard (1981) has proposed the theory of sign value, which he expressed that according to his sign theory, environmentally friendly consumption is a sign indicating morality and ethics in the social context.

Keeping pace with the trend of green living and sustainable consumption, Department of Statistics (2012) reported that imported cosmetics products accounted for approximately 20 percent of the total market, and these products are mostly imported from France, Germany, United Kingdom, and United States, the leader of imported cosmetics in Malaysia. With the growing demand, consumers have become more interested in beauty product ingredients, causing the natural beauty market to expand much faster than the beauty market as a whole (Organic Consumer Association, 2007). Many of the natural brands of cosmetics have been launched in the Malaysian market such as Origin, Yves, Rocher, Juice Beauty and L’Occitance, Garnier Bio Active, Yes to Carrots, Skin Food, Natural and many more.

In this current study, the main focus is on consumers of Gen Z. Despite the growing concerns for ‘green living’ and the demands for healthy and environmentally friendly beauty products, little research has been conducted to investigate consumers’ beauty product shopping behaviors and attitude toward natural
beauty products. Thus, this study attempts to investigate the Gen Z consumers’ beauty product purchase intention. In addition, this study also examines the influence of Gen Z personal values in the context of their health consciousness, environment consciousness, appearance consciousness, and their need for uniqueness on purchase intention of natural beauty products. The Gen Z refers to individuals that was born between the years of 1990s to 2000. They are described as those who feel responsible about the environment, thus prefers green products. This is because they were born into an environment where global terrorism is rampant and environmental calamities owing to haze and harsh weather are regular occurrences (The Star Online, 2014). This study focused on consumers in their late teens and early 20’s because teens and consumers in their 20s represent a substantial market for beauty products, spending more than older generation in this product category (The Nielsen Company, 2007).

Therefore, as expounded earlier, the major aim of this paper is to assess the purchase intention among Gen Z consumers on natural beauty products. Specifically the objectives of the study were to:

1. Examine the Gen Z consumers’ state of knowledge towards basic environmental issues
2. Determine the relationship between Gen Z consumers’ personal values (health consciousness, environmental consciousness, and need for uniqueness) on their purchase intention toward natural beauty products

LITERATURE REVIEW

Generation Z
Generation Z or the Digital natives are born in the digital world with complete technology of PCs, Mobile, Gaming, Devices, and internet (Westlund, 2010). Individuals of gen Z are knows for collaborative, creative, multi takers and thrives for instant gratification. They prefer latest fashion and the luxury brands available in the international market (Jain & Patel, 2013). They need to talk, get connected and feel belonging to a set of peer group. In order to do so, they read about fashion trends, electronic gadgets, video games, online games and music (Swain, 2007). Gen Z are the children of gen X and followers of Gen Y. Individualistic by nature who believes in speaking their mind and express their opinion. They are highly brand conscious and materialistic as they do not like to be compromise on the coolest product in comparison with their friends and peers. The reality of this challenging environment gets them surging forward to achieve their life’s goal with no hesitation and doing everything they can to have an edge over their peers. Friends have great influence on the purchase decision of Gen Z (Sophocleous, 2013; Clarke et al., 2010). Compared with their older fore runner of this century Gen Y, Gen Z numbers are fairly small at 23 million globally but they are rapidly growing. In addition, the parents of Gen Z are touted to be most educated and more pragmatic in building of their families. Unlike Gen Y, Gen Z are more aware of security, more cautious and more connected.

Personal Values
Personal values have been broadly acknowledged on observation of consumer behavior (Schwartz, 2003). Personal values examine consumer behavior in their choice of products and services and have been of increasing interest to social scientists for many years. Most studies examined determinants of behavior through evaluation of perceived consequences of specific attitudes and specific norms. However, the empirical relationships between personal values and behaviors is generally low (Michael, 1984). Personal values have also been recognize as an important factors in environmental buying (Burgess, 1992), with several studies confirming the relationship between personal values and environmentally friendly behavior (Lee, 2011; Van der Werff, Steg, & Keizer, 2013), and between personal values and sustainable ethical behavior (Mirosa et al, 2013). Personal values also affect product choice consumption of organic products (Kriway & Mecking, 2012; Schosler, De Boer, & Boersema, 2013). Consequently, personal values change due to increasing environmental concerns and are increasingly important for businesses to understand consumer behavior from environmental aspects (Fraj & Martinez, 2006).
Personal values have been integrated into conceptual model based on the limitation in the literature review. In the context of natural consumption, consumer’s purchasing behavior might not fully rely on functional and social values, but rather concerns about the environment (Achabou & Dekhili, 2013). These implications correspond to personal values which refer to consumers’ beliefs that natural products are healthier than conventional products, and more environmentally friendly. Therefore, the current study integrates four dimensions of personal values; health consciousness, environmental consciousness, appearance consciousness, and need for uniqueness. These dimensions were chosen based on existing literature and discussed next and the model is illustrated below:

Health Consciousness

Health consciousness refers to the degree of readiness to undertake health actions (Schifferstein & Oude Ophuis, 1998). Health conscious consumers may adjust their actions affect their health. Consumers buy ecofriendly or environmentally sound products not only because of their concern for environmental conservation but also out of concern for their own health. In a study of Greek consumers, Arvanitoyannis et al. (2004) found that the large majority of organic food buyers believe that organic food is healthier than conventionally grown food and that about half of them were willing to pay more for the organic version. Thus, health conscious people are concerned with their health, and more likely to be interested to improve their health and living condition (Lee, Conklin, Cranage, & Lee, 2014). In fact, the use of natural cosmetics has become a major trend in recent years. There is a growing awareness that the people are responsible for the world in which we live in, as well as an increasing concern for our own health too (Kotler & Armstrong, 2004). Appreciating the delicate balance of the natural world and strive to maintain the harmony, cosmetic users concerns would prefer using environmentally-friendly products that is safe and harmless to the users and to the world. The trend for organic and natural ingredients has spilled over into beauty as consumers start to question what they are putting on their bodies. Thus, the following hypothesis is proposed:

H1: Health consciousness is positively related to purchase intention of natural beauty products in Gen Z

Environmental Consciousness

Matters regarding environmentalism has become an important issues as a result of environmental damage which are caused by products, productions process and environmental disaster, (Easterling et al., 1996). The role of environmental concerns on consumer purchasing intention is becoming clear on the consumption of environmentally friendly products. For consumers, the change in consumerism from the 1960s to the period of 1990s have seen changes in terms of the power voiced out by the consumers
(Makower, 1993). During this period consumer appears to be more aware that the environment is fragile than they once believed and there are limits to the use of natural resources (Krause, 1993). Specifically it has been suggested that consumers with higher level of environmental concern will be more likely to engage in environmental friendly behavior. These claims have been supported by a number of surveys carried out between 1989 and 1990 which reported a dramatic increase in the number of consumers expressing environmental concerns and claiming to have purchased environmentally friendly products (Roberts, 1991; Shetzer et al., 1991). However, many studies were done on the relationship of environmental consciousness and organic consumption (Salleh et al, 2010), others have found environmental consciousness as an important determinants on consumer decision to buy automobile (Hellier et al, 2003) and green hotel (Davies et al, 2012) but rarely on natural beauty products. Thus, the developed hypothesis is:

H2: Environmental consciousness is positively related to purchase intention of natural beauty products in Gen Z

Appearance Consciousness

Many studies were conducted on the relationship between appearance and behavior (Kim & Chung, 2011). In a study done among students by Jain et al., (2013), it was found that they are affected by their concern on physical appearance when purchasing fashion clothing and luxury apparel. Other studies also have confirmed that women who have high desire on improving their physical appearance also have high score on appearance consciousness (O’Mahiny, 2007). In addition, physical appearance consciousness are also related to consumption of luxury cars, dietary products, cosmetics surgery and others (Wang & Waller, 2006). Based on this, appearance consciousness is assumed as a predictor of purchase intention toward natural beauty products. Thus, the following hypothesis is proposed:

H3: Appearance consciousness is positively related to purchase intention of natural beauty products in Gen Z.

Need for Uniqueness

Many consumers’ consumption experience attempts to differentiate themselves from other consumers, making them feel special and unique (Lynn & Harris, 1997). A consumer’s intent to differentiate her/himself from others is termed “consumer’s need for uniqueness” and it is accordance with the theory of uniqueness. According to this theory people engage in a variety of activities, actions and consumption patterns that help them maintain some sense of difference with respect to others. Snyder and Fromkin (1980) show that need for uniqueness can impact a person’s attitudes, beliefs, behaviors, product choices, and even choice of mates. There is widespread approbation that the intent to differentiate one-self from another is persistent and pervasive psychological phenomenon. The role context of the consumer in the domain of need for uniqueness is defined as the trait of pursuing differentness relative to others through acquisition, utilization and disposition of consumers’ goods for the purpose of enhancing one’s social image and self-image (Tian, Bearden, & Hunter, 2001). Thus, the following hypothesis is proposed:

H4: Need for uniqueness is positively related to purchase intention of natural beauty products in Gen Z.

RESEARCH METHOD

Sampling Design and Data Collection

The study was carried out among students at selected University in Klang Valley area as a preliminary research and shall be expanded to other students in different locations in Malaysia. Students were selected according to their age group between 18 to 23 years old, which are currently doing their undergraduate programs. More than 80% of them are living in the urban area. Based on systematic random sampling, a
total of 200 questionnaires were distributed to the selected respondents however only 168 questionnaires were returned which contained the complete necessary information and were thus usable. The questionnaire items cover respondents’ socio-demographic and economic background, their personal values response as well as their purchase intention on natural beauty products.

**Research Instruments and Statistical Test**

In the present study, several variables were used to examine the respondents’ personal values, purchase intentions and basic environmental knowledge. Sections that measured the respondents’ personal values (health consciousness, environmental consciousness, appearance consciousness and need for uniqueness) and purchase intentions were measured using five point Likert scale ranging from (1) strongly disagree to (5) strongly agree. Other sections asked on the respondents’ basic environmental knowledge and demographic information.

Environmental knowledge can be demonstrated through one’s ability to recognize environmental problems, the cause and consequences of such problems, including facts and concepts necessary for explanation (Othman, et. al., 2004). Respondent were tested on their general knowledge of the environment, such as the main causes of air pollution in Malaysia and the need to maintain the environmental balance. The actual intention was to test whether they were aware on environmental issues in Malaysia. The authors have determined the correct and incorrect answers for each item in the section. For example, the item “Natural resources should be preserved for future generation” should be answered as either “Agree” or “Strongly agree” to be considered as correct answer, but if the respondents answered either “Strongly disagree”, “disagree, or “Know nothing about this”, then it is considered wrong answer. The questionnaires were pretested to 30 students who were randomly selected from various study programs. Minor revisions were made after pre-test and revised questionnaires were checked for content validation.

Health consciousness is a composite of 6 item of which were adopted from Michaelidou and Hassan (2008). Environmental consciousness used 6 items adopted from Roberts (1996), whereas appearance consciousness items were customized from Wang and Waller (2006). The need for uniqueness was measured by 6 items adopted from Tian et al.(2001). The scale from need for uniqueness has been tested for validity in many previous studies. Finally the measurement for purchase intention were adopted from Sondoh et al. (2007). All these items were rated on a 5-point Likert scale ranging from 1= strongly disagree to 5= strongly agree. Table 1 shows the summary of items for the scale. The scales used has satisfactory item-total correlation (>0.40) as well as cronbach’s alpha (>0.70) (Nunnally and Bernstein, 1994).

<table>
<thead>
<tr>
<th>Scales</th>
<th>No. of items</th>
<th>Alpha value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Consciousness</td>
<td>6</td>
<td>0.870</td>
</tr>
<tr>
<td>Environmental Consciousness</td>
<td>6</td>
<td>0.813</td>
</tr>
<tr>
<td>Appearance Consciousness</td>
<td>7</td>
<td>0.911</td>
</tr>
<tr>
<td>Need for Uniqueness</td>
<td>6</td>
<td>0.899</td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>5</td>
<td>0.938</td>
</tr>
</tbody>
</table>

**Sample Characteristics**

As indicated in Table 2, the majority (45.2%) respondents are Malays. All respondents are single and currently studying in undergraduate programs with more than 80% of them live in the urban area. High percentage of the respondents (48%) staying in terrace houses. The statistics on monthly household
income indicated 32.9% of the respondents’ family received RM1501 to RM5000 and 18.5% received less than RM1500 per month.

Table 2: Sample Characteristics (n=168)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malay</td>
<td>76</td>
<td>45.2</td>
</tr>
<tr>
<td>Chinese</td>
<td>46</td>
<td>27.4</td>
</tr>
<tr>
<td>Indians</td>
<td>36</td>
<td>21.4</td>
</tr>
<tr>
<td>Others</td>
<td>10</td>
<td>6.0</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>57</td>
<td>33.9</td>
</tr>
<tr>
<td>Female</td>
<td>111</td>
<td>66.1</td>
</tr>
<tr>
<td>Residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>145</td>
<td>86.3</td>
</tr>
<tr>
<td>Rural</td>
<td>23</td>
<td>13.7</td>
</tr>
<tr>
<td>Household Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RM1500 and below</td>
<td>31</td>
<td>18.5</td>
</tr>
<tr>
<td>RM1501 to 3000</td>
<td>47</td>
<td>28.0</td>
</tr>
<tr>
<td>RM3001 to 5000</td>
<td>45</td>
<td>26.8</td>
</tr>
<tr>
<td>RM5001 to 10000</td>
<td>39</td>
<td>23.3</td>
</tr>
<tr>
<td>RM10001 and above</td>
<td>6</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Basic environmental knowledge scale
Table 3 summarizes the number of respondents who answered each item in the knowledge scale correctly. The knowledge scale represents basic and general knowledge related to the environment. The results show that, in general, a high percentage of respondents answered correctly for almost all the 14 statements. From a total 14 questions, 11 questions received more than 80% correct answers. Only one question received less than 50% of the respondents answered correctly. Specifically, when asked if the country will never run short of its natural resources, only 52.9% obtained the correct answer. It is unfortunate that the respondents thought that the natural resources would never be depleted despite of massive development facing by the nation and all around the world.

Similarly, when respondents were asked if the natural environment should be sacrificed in the name of development, only 33.3% disagree to the statement. The younger generations in this study think that economic development is all-important, and that it is alright to sacrifice nature along the way. However, as this misconception reflects poor environmental knowledge, relevant parties should consider what might be done about this. It is no longer acceptable to argue that the more goods and services we produce, the higher the quality of life will be. The challenge for the new generation is to develop a balanced developed that has minimal social-ecological impact without compromising the quality of life.

The respondents did well about having alternative energy to replace electricity, as they believe that source of energy must and can be derived from other alternative rather than electricity alone. However, it is quite interesting to see that more than 60% of these young consumers believe that the natural resources should
be preserved for future generation. This is consistent with the profile that described these generation Z are concerned of the nature and how important it is to preserve the natural environment for future living.

**Table 3: Frequency of correct answers on students’ basic environmental knowledge**

<table>
<thead>
<tr>
<th>Items of Knowledge Scale</th>
<th>Frequency of correct answers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>All living things is important in maintaining balance in ecology</td>
<td>150</td>
<td>89.3</td>
</tr>
<tr>
<td>Natural resources should be preserved for future generation</td>
<td>162</td>
<td>96.4</td>
</tr>
<tr>
<td>The condition of our environment can affect our health</td>
<td>168</td>
<td>100.0</td>
</tr>
<tr>
<td>Destruction of forests will cause biological imbalances</td>
<td>146</td>
<td>86.9</td>
</tr>
<tr>
<td>A country will never run short of its natural resources</td>
<td>89</td>
<td>52.9</td>
</tr>
<tr>
<td>Most rivers in Malaysia are polluted</td>
<td>145</td>
<td>86.3</td>
</tr>
<tr>
<td>Our country is faced with serious solid waste (garbage) and landfill problems</td>
<td>160</td>
<td>95.2</td>
</tr>
<tr>
<td>Alternative energy, e.g. solar energy can be utilized to replace electricity</td>
<td>166</td>
<td>98.8</td>
</tr>
<tr>
<td>The natural environment should be forgo in the name of development</td>
<td>56</td>
<td>33.3</td>
</tr>
<tr>
<td>Usage of disposable goods should be encouraged as it provides convenience to consumers</td>
<td>30</td>
<td>17.8</td>
</tr>
<tr>
<td>Unleaded petrol is better than leaded petrol as it is less harmful to the environment</td>
<td>146</td>
<td>86.9</td>
</tr>
<tr>
<td>Using public transport can help reduce air pollution</td>
<td>162</td>
<td>96.4</td>
</tr>
<tr>
<td>Vehicles improperly maintained will cause pollution</td>
<td>150</td>
<td>89.2</td>
</tr>
</tbody>
</table>

**Statistical analysis**

Multiple regression analysis was utilized to determine the relationships between the independent variables and dependent variable. As shown in table 5, the F-value of 23.984 with p=0.000 showed that the overall model is statistically significant. Moreover, the R-square value of 0.371 indicates that the combined variables explained 37% variance in generation Z intention to purchase natural beauty products. The following tables summarized the findings of the multiple regression analysis.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.609</td>
<td>.371</td>
<td>.355</td>
<td>.63734</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>38.970</td>
<td>4</td>
<td>9.742</td>
<td>23.984</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>66.211</td>
<td>163</td>
<td>.406</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 6: Beta and T Values for Multiple Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.630</td>
<td>.368</td>
<td>1.715</td>
</tr>
<tr>
<td></td>
<td>Environmental Conscious</td>
<td>.397</td>
<td>.085</td>
<td>.339</td>
</tr>
<tr>
<td></td>
<td>Health Conscious</td>
<td>.186</td>
<td>.090</td>
<td>.151</td>
</tr>
<tr>
<td></td>
<td>Need for uniqueness</td>
<td>.157</td>
<td>.066</td>
<td>.186</td>
</tr>
<tr>
<td></td>
<td>Appearance Conscious</td>
<td>.154</td>
<td>.064</td>
<td>.181</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Purchase Intention

As shown in table 6, four variables namely environmental consciousness, health consciousness, appearance consciousness and need for uniqueness have unique contributions to variance in generation Z purchase intention on natural beauty products. Generation Z’s environmental consciousness with β = 0.397 and p = 0.000, has the highest unique contribution to variance in their purchase intention on natural beauty products. This is followed by health consciousness, β = 0.186 and p = 0.039. Consumer’s need for uniqueness is the third variable with unique contribution to generation Z purchase intention on natural beauty products with β = 0.157 and p = 0.017. Appearance consciousness has a minimal unique contribution to generation Z purchase intention with β = 0.154 and p = 0.017.

Discussion and Conclusion

In this study personal values was considered as exogenous variables operationalized by the dimensions of health consciousness, environmental consciousness, appearance consciousness, and need for uniqueness. The results indicated that environmental consciousness was ranked highest, followed by health consciousness, need for uniqueness and appearance consciousness. Hence, the main driver to purchase natural beauty products among the generation Z is environmental consciousness. This is consistent with the findings of previous studies such as Kim and Seock (2009) who found that consumers purchasing intention toward natural beauty products were influence by environmental issues. The current study posits that the dimension of personal values have significant positive impact on purchase intention. This study has confirmed that consumers intend to purchase natural beauty products when they hold a greater degree of concern about the environment, their health, appearance and being different. Thus, this study suggests that creating a positive attitude toward buying intention of natural beauty products may be a significant consideration for retailers to increase consumers’ purchase intentions for the products.

Previous studies about generation Z mainly focuses on these young consumers’ interest on internet, gadgets, and information about brands (Swain, 2007), but the present study looks at a different perspectives of the generation Z a more serious matters, especially their concern toward the environment and health issues. The findings support the notion that the environmentally conscious consumers must be able to understand the basic environmental knowledge thus it will correlate with the higher environmental concerns.
Based on the study’s limitation, several suggestions for future research are made. First, the population must cover more number of university students from various public and private institutions. As most of the current study’s respondents live in the urban area, perhaps different results may derived from those living in the rural area. It is to be suggested that the future research could use both online and offline surveys, to compensate for the weakness of each methods. In addition most of University students rely heavily on online communications (social media) such as Facebook. Second, it would also be valuable to explore the factors influences attitude and purchase intentions toward stores offering natural beauty products.

There could be practical implications of the results. For the practicing marketers, it might be seen that different advertising may work differently for different groups of consumers (Basil & Weber, 2006). An understanding of consumer values may have implication on public policy implementation as well. Understanding of what message will be resonate with different market segment will aid in designing messages with better persuasion. In addition, future research might help natural beauty products retailers to understand how consumer values influence attitude toward the store. It could suggest the establishing a positive attitude toward stores might play an important role in increasing consumers’ store purchase as well as enhancing store preferences. It is also suggested that retailers should develop an effective marketing strategies emphasizing on ecological beauty or product safety to satisfy the values of potential consumers. As the group of respondents in this study are generation Z, the young consumers but is known as potential buyers for natural beauty products, it is suggested that retailers might want to change consumers’ perception of higher price to affordable prices using multiple marketing strategies (such as discount, viral video, new product development), which would make the young consumers believe that they are capable to buy natural beauty products.

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The Interminable Surge in Internal Conflicts in Nigeria: The Legal and Socio-economic Implications

Keywords: Conflicts; Insecurity; Legal; Socio-Economic; Nigeria

INTRODUCTION

Beside the Biafran-Nigeria civil war which spanned between 1967 and 1970 and in which it was estimated that more than two million lives were utterly crushed down and well over ten million persons forced to flee their home to other part of the country (Ibeanu, 1988), in addition to billions of Naira worth of properties—private and public destroyed, the horror of internal conflicts has been a recurring decimal in Nigeria (Jaja, 2012). In the year 2005 it was revealed in a study that between 1980 and 2005, more than 140 cases of internal strife was recorded to have taken place in different part of the country (Abdullahi & Saka, 2007; Elaigwu, 2005). Regrettably too, the current civilian rule which began from 1999 till date have been preoccupied with incidence of internal violence to the extent this period alone took a lion share of the estimated figure in that more than 100 of such cases had occurred within this relatively short span of time.

Most devastating till date is the incidence of a sectarian group under the aegis of Boko Haram whose official name is “Jama’atu Ahlis Sunna Lidda’ Awati Wal-Jihad” which in Arabic language means “People Of The Way Of Prophet Mohammed (Peace Be Unto Him) And Community (Of Muslims) In Line With The Earlier Generation Of Muslims” as opposed to the literary meaning of Boko Haram which is “Western Secular Education Is Forbidden” This group though founded in 2002 launched its first military operations in 2009 to support their call for an Islamic state in the North Eastern Nigeria. Boko Haram has unleashed massive terror on Nigerian citizens as well hampering its economic wellbeing to a deafening degree (Shaibu, Saleh & Shehu, 2015).

Table 1 below shows the list of conflicts and nature that have occurred in Nigeria.

<table>
<thead>
<tr>
<th>Type of Conflicts</th>
<th>Geo-political Zone</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Niger Delta Conflict over Oil Resources</td>
<td>South South</td>
<td>1999 -2007</td>
</tr>
<tr>
<td>Jos Ethno- Religious and Political Conflicts</td>
<td>North Central</td>
<td>1999 till date</td>
</tr>
<tr>
<td>Kidnapping , Armed Robbery, Hostage taking and Ritual Killings</td>
<td>South East</td>
<td>2007- 2010</td>
</tr>
<tr>
<td>Boko Haram Sectarian Violence</td>
<td>North East, North West and North Central</td>
<td>2009 till date</td>
</tr>
</tbody>
</table>

Source: Nwagboso ’s Field Survey, 2011 with modification from the authors.

In all these instances, there are verified cases of monumental loss of lives, infrastructures such as roads and bridges have been wantonly destroyed and reduced to rubbles by bombing activities. In the same
manner millions of people have been forced to flee their habitual place of residence in addition to general atmosphere of insecurity which has been enthroned in the nation (Nwagbosso, 2011). Lamenting on the foregoing implications, the former President Olusegun Obasanjo stated bitterly that:

\[
\text{Violence has reached unprecedented levels and hundreds have been killed with much more wounded or displaced from their homes on account of their ethnic or religious identification. Schooling for children has been disrupted and interrupted; businesses have lost billions of naira and property worth much more destroyed (Obasanjo, 2004)}
\]

This paper without dissipating too much energy on history of internal conflicts in Nigeria which have been thoroughly investigated in existing literature (Abdullahi & Saka, 2007; Fawole & Bello, 2011; Olukayo, Ajayi & Ogungbenro, 2014; Osaretin & Akov, 2013 and Uhunmwuagbo & Epelle, 2011) focuses mainly on the implications that the unfortunate scenario have had on the nation particularly from the legal and socio-economic perspectives.

**CONCEPTUAL CLARIFICATIONS**

**Conflict**

In ordinary lay man parlance, the term ‘conflict’ connotes a state of crisis, disturbance or upheaval which is a misnomer. Conflict is nowhere defined statutorily. However scholars have attempted to describe rather defining the term. Uhunmwuagbo and Epelle (2011) posit that conflict means:

\[
\text{Clash, contention, confrontation, battle, struggle, controversy or quarrel. Conflict may be either violent or non-violent. It also denotes an employment of illegal method of physical coercion for personal or group ends.}
\]

Another scholar (Sampson, 2012) sees conflict from another perspective which is more of description than a definition. According to the author, where conflict is based “on symbolic values such as religion and languages, it is likely to be called ethno-religious conflict.”

As far as this paper is concerned the authors shall adopt the description of the term which lends itself to situations of violence that have serious impact on the legal and socio-economic life of the nation and its citizens.

**LEGAL AND SOCIO- ECONOMIC IMPLICATIONS OF INTERNAL CONFLICTS IN NIGERIA**

The interminable reign of terror in almost all the geo-political axis of Nigeria as can be gleaned from Table: 1 has left behind devastating consequences on the citizens as well the government. Its manifestation in all strata of the Nigerian life is so touching that there is no gathering where the issues of violence and insurgency are not topics of deliberation.

The implications are so intertwined and thus closely knitted that a separate consideration of one form from another under distinct heading will only be smack of unnecessary distinction.
HEIGHTENED DISPLACEMENT AND INFRINGEMENT OF RIGHTS OF CITIZENS

Moment of terror is a misnomer. During situations of violence, citizens are forced to flee from their habitual place of residence to place where they can secure their safety within the territory of their own state or in extreme outside the territory of their own country. This situation bequeaths on them special description with distinct legal consequences under international law. They are referred to as refugees and internally displaced persons.

The distinction between these two groups does not lie in the reasons for their sudden flight from their habitual place of residence but the fact that whereas persecution has taken a refugee outside the territory of his own country, internally displaced persons remains at all times within the shores of his own state.

For fear of misapprehension of the thin line like distinction between these two commonly misused terms, an internally displaced person is defined as:

*Persons who have been forced or obliged to flee or to leave their homes or places of habitual residence in particular as a result of, or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border.* (Guiding Principles, 1998)

On the other hand refugee means:

*Any person ...owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it.* (UN Refugee Convention, 1951: Article 1A2)

The foregoing level deprivations in their individual ways constitutes flagrant infringements of the rights guaranteed by the constitution (CFRN, 1999; Chapter IV) especially those dealing with freedom of movement, expression, association/assembly as well as rights to own movable and immovable properties among others. For instance, following the ethno-religious and political conflicts in Jos in 2004, the then President Olusegun Obasanjo in exercise of his powers under the Constitution declared state of emergency in Plateau State on 18th May 2004 wherein all the democratic structures was put in abeyance for a period of six (6) months that it lasted. During this period, democracy was partially truncated in the state as people’s voice and vote never count in the meantime (Higazi, 2011:16). Military check points and patrol are common sights in Jos in particular. Human and vehicular movement are militarily restricted talk more of gatherings.

The interconnectivity of the impact of internal displacement due to incessant conflicts in Nigeria with other sectors of the economy was aptly put forward by Dr Jamila Shu’ara, Permanent Secretary Federal Ministry of Special Duties and Inter-Governmental Affairs when she stated that:

> Internal displacement has a very negative impact on the economy. Displacement destabilises the very foundation of viable society and

AGBA 12th World Congress
Page 448 of 1173
The Interminable Surge in Internal Conflicts in Nigeria: The Legal and Socio-Economic Implications

robs the citizens of their sense of dignity, patriotism, social and economy (sic) development of the country (Emejar, Daily Independent online, 2015)

INCREASED GOVERNMENT SPENDING ON SECURITY AND DEFENCE

Another devastating implication of the incessant internal conflicts in Nigeria is in relation to the revenue of government as there is a direct relationship between the rate of violence and the amount of resources spent in curtailing it. Instead of the scarce resources being channelled towards the provision of basic infrastructures such as housing, schools, hospitals, roads among others, greater chunk is spent in providing security and procurement of arms and ammunitions in order to repel the endless insurgence (Nwagbosso, 2011).

In the 2011 to 2015 fiscal years, the projected expenditures earmarked for the security and defence sector was outrageous in relation to other sectors of the economy (Premium Times, 2015). A close scrutiny will show that there is an appreciation of the figures on yearly basis in response to the growing rise in internal violence. See Tables 2, 3, 4, 5 and 6.

Table 2: Nigeria’s Budget for Security 2011-2015

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>N920bn</td>
</tr>
<tr>
<td>2012</td>
<td>N924bn</td>
</tr>
<tr>
<td>2013</td>
<td>N923bn</td>
</tr>
<tr>
<td>2014</td>
<td>N923bn</td>
</tr>
<tr>
<td>2015</td>
<td>N934bn</td>
</tr>
</tbody>
</table>


Table 3: Nigeria’s Budget for Defence Ministry 2011-2015

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>N348bn</td>
</tr>
<tr>
<td>2012</td>
<td>N326bn</td>
</tr>
<tr>
<td>2013</td>
<td>N364bn</td>
</tr>
<tr>
<td>2014</td>
<td>N340bn</td>
</tr>
<tr>
<td>2015</td>
<td>N358bn</td>
</tr>
</tbody>
</table>


Table 4: Nigeria’s Budget for Police Formation

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>N304bn</td>
</tr>
<tr>
<td>2012</td>
<td>N307bn</td>
</tr>
<tr>
<td>2013</td>
<td>N311bn</td>
</tr>
<tr>
<td>2014</td>
<td>N302bn</td>
</tr>
<tr>
<td>2015</td>
<td>N329bn</td>
</tr>
</tbody>
</table>


Table 5: Nigeria’s Budget for Interior Ministry 2011-2015

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>N158bn</td>
</tr>
<tr>
<td>2012</td>
<td>N157bn</td>
</tr>
<tr>
<td>2013</td>
<td>N154bn</td>
</tr>
<tr>
<td>2014</td>
<td>N151bn</td>
</tr>
<tr>
<td>2015</td>
<td>N156bn</td>
</tr>
</tbody>
</table>


Table 6: Nigeria’s Budget for Office of the National Security Adviser (NSA)

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>N105bn</td>
</tr>
<tr>
<td>2012</td>
<td>N124bn</td>
</tr>
<tr>
<td>2013</td>
<td>N81bn</td>
</tr>
<tr>
<td>2014</td>
<td>N117bn</td>
</tr>
<tr>
<td>2015</td>
<td>N84bn</td>
</tr>
</tbody>
</table>


From Tables 2-6 above, it is sufficiently established that budgetary allocations to security/defence and other allied sectors was on increase yearly. Whereas this enormous sacrifice by government at the cost of providing basic infrastructures for the citizens does not translate to any meaningful gain as violence/insurgence defies all known interventions as witnessed by the endless surge in the frequency and degree of impact (Jaja, 2012:24).

Apart from government whose resource is continually depleted to ensure the security of lives and property, multinational oil companies operating in Nigeria have been forced by circumstance to invest...
part of their return on investment (profits) in the provision of security for their staff and for the protection of their installations. According to Shell Petroleum, its global security expenditure between 2007 and 2009 is colossal with about 40% (some $383 million) of it spent in Nigeria owing to internal conflicts in the Niger Delta region of Nigeria (Shell, 2008-2009).

It is in the light of this revelation that today Nigeria ranks 57 in the global rating on military expenditure in the world and back at home it occupies the 7th position in Africa and remain the largest spender within the West African sub-region (Gbemire, 2015)

**DROP IN FOREIGN DIRECT INVESTMENTS (FDI)**

Internal violence within the shores of a nation robs it of the opportunity of other countries investing in her economy due to absence of conducive atmosphere to transact businesses for fear of attack on their investments and personal safety.

Foreign Direct Investment by other countries in the local economy of any nation as an engine room of development and economic growth cannot be taken for granted (Oriakhi & Osemwengie, 2012) as an emerging economy like Nigeria cannot survive under the tensed atmosphere that the present state of violence in Nigeria has generated.

However as profound as FDI is to Nigeria, the spate of violence in Nigeria has orchestrated a decline in the flow(Ewetan &Urhie, 2014). For instance it has been argued that the emergence of Boko Haram in about four years ago have occasioned a minimal drop in FDI. The World Investment Report (WIR) reiterated that in just one year – 2011, Nigeria fell by 20% in FDI that is to say from USD 8.9 billion to USD 7 billion in 2012. The impact of this sharp drop is distasteful (Gillespie, 2015).

**IMPACT ON INFRASTRUCTURAL FACILITIES**

At the happening of any violent rift in Nigeria there is bound to be wreckage on infrastructures especially where Boko Haram insurgency is roundly implicated. Bombs and other improvised devices targeted at public places have become the order of the day (Aro, 2013).

For instance, The Christmas day bombing of St Theresa Catholic building in Madalla, a suburb of Abuja on 25th December 2011 and the serial attacks on the United Nations Building on 25th August 2011 (Human Rights Watch, 2012), Louis Edet’s Police House and This day Newspapers House on 26th August 2011 all in Abuja left a maddening tale in the minds of many Nigerians as regards the colossal loss that it has left on the nation (Oriakhi & Osemwengie, 2012). Millions of Nairas have been lost in the circumstances.

**LOW AGRICULTURAL EARNINGS**

The impact of internal conflicts on agricultural value chains is so enormous. Conflict reduces human mobility that is needed for agriculture. In the heightened state of insecurity, farmers found it extremely impossible to go to farm. It also reduces access to inputs and markets as shop are locked up during period of crisis. In similar perspectives, because people cannot go about their normal business, miscreants take advantage to cart away cash products and equipment. There is also the corresponding increase in the cost of transportation of inputs and products owing to insecurity (Kimenyi et al, 2014). This scenario depicts the happenings in the North East which is the epicentre of Boko Haram mayhem and where the major source of income resides in agriculture. Its impact affects the entire value chains-crop, fisheries and livestock. Above all arable land hitherto fertile for agriculture have turned out to be battle grounds and occupied by armed groups (Jaja, 2014: 29).
CONCLUSION AND RECOMMENDATIONS

That Nigeria is blessed with abundant human and natural resources is no longer doubtful. However these resources rather than being a blessing have become a curse as they are wasted and destroyed with utter impunity during violence. This development has prevented the government from effective service delivery to the people.

The endless surges in violence and insurgency in Nigeria suggests that government have not yet dug out the root causes of this incessant problems so as to be able to decipher appropriate solution to them. This is because identifying the cause(s) appropriately is also part of the search for solution (Muzan, 2014).

In the light of the enormous implications of internal conflicts on the nation and its people, this paper recommends the following as recovery strategy from the present situation which is likened to a dungeon end of the road.

The federal government of Nigeria should as a matter of urgency design programmes and policies that will be able to address lingering issues of marginalization, poverty, environmental degradation, youth unemployment, arbitrary and selective and uneven development and deterioration of amenities which are the signpost of internal rifts in the Niger Delta region.

In order to ensure accountability in the face of brazen impunity by perpetrators of violence in Nigeria, mechanism should be put in place for timely arrest and eventual prosecution of culprits rather than extra judicial execution which is too hazy a decision.

For disputes or conflict bearing on issue of indigene or citizenship which is the hallmark of ethno-religious and political conflicts particularly in North Central Nigeria, the National Assembly should take a critical look at the provisions of the constitution with a view to reviewing all the grey areas.

Owing to the changing dynamics of the Boko Haram attacks in Nigeria in particular which is beyond traditional military warfare, there is need for relevant security agencies in Nigeria to seek for expertise and collaboration outside the shores of this nation. Intelligence gathering is the order of the day and the best in terms of global best practices (Oriakhi & Osemwengie, 2012).

Employment generation should form the basis of new priority to government as this will checkmate the incidence of recruitment of young Nigerians into participation in nefarious and dastardly act of violence against fellow citizens. The agencies responsible for job generation need to be re-activated again. This patriotic and thoughtful suggestion is similarly shared by other writers on the same subject (Shaibu, Saleh & Shehu, 2015:58).

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The Interminable Surge in Internal Conflicts in Nigeria: 
The Legal and Socio-Economic Implications


Knowledge Spillovers via Patenting Activity and the Financial Performance of Malaysian Firms

Keywords: Knowledge Spillover, Patent Citations, Patent Claims, Patent Family, Firm Financial Performance

INTRODUCTION

Traditional view of a person having knowledge is to share amongst its peers without having a goal to make any profits. When it comes into business making with the goal of maximizing profits, having knowledge is a crucial point that need not to be shared with others. Nowadays however, by safeguarding the knowledge or knowhow, a firm can always “share” their intellectual property (IP) in an appropriate manner so that maximizing profits are not compromised. Patenting activity is one of many forms of IP that enables a firm to protect its products or processes. When a firm patents, it must reveal the knowledge or knowhow of the product or process through patent specification. From there, other parties can always learn from the patent specifications in making a better product or better known as “creative destruction” (Schumpeter, 1942). In this paper, we test whether patenting activity of firms in an emerging economies are able to profit from the advanced economies via knowledge spillovers.

This is done using a micro panel dataset on Malaysian firms that have been granted patents for the period from 2000 to 2008, we use three measures of patenting activity; namely, backward citations, patent claims and patent family. To measure financial performance we use the profit margin. To measure patent quality we employ an average-value of patent counts with respect to patent citations, patent claim and patent family. This follows the approach in Lanjouw and Schankerman (2004) who pioneered the use of a patent quality index as a measure of these three variables. Even though the focus is on patent citations that resembles knowledge spillover, to ensure that the models is not miss-specified, the patent claims and family variables are added in the model specification. The model is estimated using a random effects model and generalized method of moments.

We extend the literature on patents and financial performance in the following directions. First, there are a lack of studies that examine the relationship between patent quality measures and accounting-based financial performance measures at the firm level. Most studies have examined the relationship between patent quality and patent value (Harhoff, Scherer, & Vopel, 2003; Sapsalis & Potterie, 2007) or the firm’s market value (Hall, Thoma, & Torrisi, 2007; Lanjouw & Schankerman, 2004). Second, there is little research on the relationship between patents and financial performance in developing countries and in Malaysia in particular. Previous studies which have examined the relationship between patent quality and financial performance have focused on developed countries (Hall et al., 2007; Lanjouw & Schankerman, 2004), reflecting the lack of patent data in developing countries. The problem with accessing appropriate data is compounded when there is a need for detailed data, such as patent citations, claims and family.

Third, we test whether there are knowledge spillovers to firms in developing countries. Patent citations can be proxies for both technological impact and knowledge spillovers among similar organizations with a similar technology field. Because our focus in on backward citations, we are specifically examining the extent to which learning from advanced economies spills over and affects the financial performance of Malaysian firms. Foreshadowing our main results, contrary to expectations, we find that knowledge from patent quality, denoted by backward citations, patent claims and the patent family, has a statistically
significant negative effect on Malaysian firms’ financial performance, although the magnitude of the coefficients is small. This finding is inconsistent with the central prediction of the theory of knowledge spillover.

A recent study by Ghapar, Brooks and Smyth (2013) also examined the relationship between patent activity and financial performance of Malaysian firms. This paper differs from that study in the following respects. The first is in terms of patent measurement. In this paper, patent is measured based on patent quality, while in the other study it was based on patent renewal. Second, the focus of the two studies is different. While the earlier study used the profit maximization model as the theoretical underpinning, our focus, in this paper, is on testing the ability of firms in a developing country to profit from advanced economies via knowledge spillover. Given that Malaysia is still very much still in the learning phase in terms of patent activity, our measure of patent activity is more appropriate given our focus than that employed in Ghapar et al. (2013).

RESEARCH MOTIVATION AND THEORETICAL BACKGROUND

In this study, the theoretical foundation is knowledge spillover theory using patent data, as pioneered by Jaffe and Trajtenberg (1999). These authors used patent citations to resemble knowledge flows from one patent to another. They theorized that knowledge goes through a diffusion process through geographic, institutional and technological spaces. Jaffe and Trajtenberg’s (1999) empirical results suggest that there is a tendency for the same geographic, institution and technological setting to cite each other more than any other patents. In Malaysia, though, the situation is a little different in that Malaysian firms cite the patents of advanced economies more than Malaysian patents. This situation reflects the fact, evident in Figure 1, that in Malaysia, patent applications by Malaysian firms are lower than patent applications from firms in the advanced economies. Figure 1 is also consistent with the existence of knowledge spillover in which there is a concentration of patents from the advanced economies in Malaysia.

Figure 1: Patent Applications in Malaysia by Malaysian and Selected Advanced Economies
Source: MyIPO (2010)
Jaffe and Trajtenberg (1999) do not relate knowledge spillover to firm performance. However, we follow Lanjouw and Schankerman (2004), who relate knowledge spillover theory with firm performance using patent data. They focused on the level of demand, the quality of patents and technological exhaustion. They assumed that innovation quality is drawn from a distribution with a firm-specific and time-varying mean in which the flow of profits depreciates during the patent life and no rent is earned after the patent expires.

**LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

A patent represents a stock of knowledge (Griliches, 1981, p. 183). Some knowledge is said to be tacit, which according to Polanyi (1966, p. 4) means we know more than we can tell. While tacit knowledge is difficult to transfer even when written down with paper and pencil (Teece, 2005), patent citation is said to be the best measure to study how knowledge transfers from one setting to another (Hu & Jaffe, 2003). There are two types of patent citations; namely, backward citations and forward citations. The former are citations to the patents of others by the patent applicant, their attorney and patent examiners. The latter are citations in the patents of others to the patents of the firms being studied. The forward citation is a more common indicator of patent value compared to the backward citation (Hall, Jaffe, & Trajtenberg, 2005; Trajtenberg, 1990). The backward citation, however, represents a good proxy for knowledge diffusion or spillover from one setting to another (Hu & Jaffe, 2003; Jaffe & Trajtenberg, 1999).

Due to unavailability of forward citation data, we are unable to use forward citations to measure patent quality in terms of how many others have cited Malaysian firm patents. However, since our sample is Malaysian firms, we are more interested in examining knowledge flows from advanced economies to these Malaysian firms. This objective is realizable through using backward citation data from the patent specification. The Malaysian patent office is flooded with patents from firms from advanced economies and, thus, Malaysian firms may learn implicitly, or explicitly, from these firms. In fact, almost all backward citations in our sample data were from advanced economies, with the U.S., U.K., Germany and Japan having the highest citations in Malaysian patent specifications from Malaysian firms. This is to be expected given that firms from these countries have the highest number of applications and are granted the most patents in Malaysia. Turning to Malaysian firms in the U.S, our sample data also shows that almost all citations in U.S. patent specifications from Malaysian firms come from advanced economies, especially from the U.S. This latter phenomenon reflects that there is a clear country-specific citation tendency (Bacchiocchi & Montobbio, 2009; Jaffe & Trajtenberg, 1999).

Given that patent citations are proxies for knowledge flows from one party to another in facilitating innovation, it follows that the resultant innovations should increase the firm’s financial performance. Since we focus on the backward citation, we expect the higher the backward citation in the patent specification, the higher the resultant profit margin. Most studies have found a positive significant relationship between forward citations and financial performance (see eg. Jaffe, Fogarty, and Banks, 1998; Maurseth and Verspagen, 2002; Trajtenberg 1987, 1990). Other studies have used backward citations to examine international knowledge flows across borders (Hu & Jaffe, 2003; Jaffe & Trajtenberg, 1999). Hu and Jaffe (2003) examined the patterns of knowledge diffusion from the U.S. and Japan to Korea and Taiwan. Their research on patent citations shows that the emerging economies of Korea and Taiwan are learning from the advanced economies of the U.S. and Japan. One would expect the knowledge spillovers to have a positive effect on firms’ financial performance in these countries.

The claim embodies the patent owner’s right to exclude others from the invention. The claim is the most important subject matter in the patent specification as it is the focus of any litigation (Mueller, 2006). Several studies exist which relate patent claims to the level of patent litigation (Hall, Thoma & Torrisi, 2009; Lanjouw & Schankerman, 2001, 2004). The claim is a proxy for the quality of the patent in the sense that it reflects the relative novelty of the patent. Conceptually the patent claim can be expected to
have a positive impact on the firm’s financial performance, as other firms are no longer able to legally imitate the claim.

A patent is territorial in nature (MyIPO, 2008; WIPO, 2006, 2007). Securing the same patent in more than one territory is referred to as a patent family. Patent family is a measure of patent quality in the sense that it is a measure of the breadth of the claim and, as such, is regarded as a good indicator of patent value (Putnam, 1996). Conceptually, the patent family should have a positive relationship with the firms’ financial performance. Patent family suggests that if the firm has the ability to invest in patenting activity in more than one territory, it may result in better financial performance compared to patenting only in one territory. Several previous studies have found a positive relationship between either patent family or the territory in which the firm applies for the patent and financial performance of the firm or market value (see Greenhalgh & Rogers, 2006; Hall, Toma & Torrisi, 2007; Sapalis & Potterie, 2007).

Among studies which have related multiple indicators of patent quality to firm outcomes or patent value, Lanjouw and Schankerman (2004) used forward citations, backward citations, claims and family as measures of patent quality to examine the relationship between patents and firms’ productivity and market value. In addition, they created an index with all the said measures and divided the sample into fields of technology to examine the impact differences. They found that patent quality is positively related to the firms’ market value, but negatively related to productivity. Meanwhile, Harhoff, Scherer and Vopel (2003) used backward and forward citations as well as family size to value patent rights. Their finding was that backward citations, forward citations and family size each had a significant positive impact on patent value.

Profit represents the return to the factors of production. Even though the marginalist theory of distribution does not include profits as a type of earnings (Brue & Grant, 2007), profit is seen as an important element of production and as a source of investment. One of many ways to account for profits in a firm is by introducing new technology (Mansfield, 1962). The new technology and profits are said to be dynamic (Schumpeter, 2008). The new invention is developed with the hope of reducing costs and/or producing more efficiently than one’s competitors. Therefore, the knowledge learned that is encapsulated in inventing a new technology is captured in the patent specifications and can be expected to have a positive impact on the profits of a firm.

Since we study, Malaysian firms that have been granted patents in the two territories of Malaysia and the U.S., and measure the firm’s financial performance with the profit margin, the above discussion suggests the following hypothesis:

H1: There is a positive relationship between the broader number of backward citations, patent claims and having a patent family in patents granted to Malaysian firms in both Malaysia and the U.S. and the financial performance of these firms.

DATA AND METHODS

The Data
The sample in our study consists of Malaysian firms that were identified based on their being granted patents by the Intellectual Property Corporation of Malaysia (MyIPO) and the United States Patent and Trademark Office (USPTO). The patent data were obtained from the MyIPO office in Malaysia and the USPTO website, while the financial performance data were taken from the Companies Commission of Malaysia (CCM), respectively. In the preliminary stage, we identified that there were 95,124 applications for patents at MyIPO from 1986 to 2008; of which, 37,161 were granted. Malaysian residents filed 7% of the patent applicants and received 3% of the patents which were granted. Malaysian firms filed 2,344 patent applications at MyIPO from 1986 to 2008; of which 450 were granted. A further 156 patents were
The Interminable Surge in Internal Conflicts in Nigeria:
The Legal and Socio-Economic Implications

granted to Malaysian firms in the U.S. When the patent data from MyIPO and USPTO was matched with the financial performance data from CCM, we found that 450 patents granted to 296 Malaysian firms in Malaysia and 156 patents granted to 77 Malaysian firms in the U.S. from 1986 to 2008. In addition to the full sample, we also employ a subset of manufacturing firms. Our sample study falls further since the financial statements available only commenced in 1994 at the time of the final data gathering.

Model Specification and Measurement
The basic econometric model is represented in Equation (1), as follows:

\[ Y_{it} = c_0 + \beta_1 MBWC_{it} + \beta_2 SBWC_{it} + \beta_3 MCL_{it} + \beta_4 SCL_{it} + \beta_5 FAM_{it} + \delta_1 LNTGA_{it} + \delta_2 NAGE_{it} + \mu_{it} \]  

(1)

where \( Y_{it} \) represents the profit margin; MBWC and SBWC is the number of backward citations in the Malaysian and U.S. patent system respectively; MCL and SCL is the number of patent claims in the Malaysian and U.S. patent system respectively; FAM is the patent family; LNTGA is the log of the tangible assets of the firm and NAGE is the firm’s age since incorporation. \( i = 1,2,3,\ldots, N \) specific firms over \( t = 1,2,3,\ldots,T \) time periods with \( \mu_{it} = u_i + \nu_{it} \) where the \( u \)’s describe the firm-specific time invariant effect and the \( \nu \)’s are the idiosyncratic error terms. The idiosyncratic error terms are assumed to come from normal distributions, independent of each other. Table 1 defines each of the variables and presents descriptive statistics.

We estimate the empirical specification using static and dynamic panel models. The static panel model is further estimated using panel least squares, fixed effects and random effects. The dynamic panel model is estimated using the generalized method of moments. The \( u \) is treated differently between fixed and random effects models. The fixed effects model allows the \( u \) cross-section specific error component to be correlated with the explanatory variables, while the random effects model assumed \( u \) not to be correlated with each other.

The dependent variable is the firm’s profit margin. The explanatory variables of interest are MBWC, SBWC, MCL, SCL, and FAM. MBWC and SBWC are measured by the number of backward citations in the patent specification to the number of patent stocks in the Malaysian and U.S. territory respectively. MCL and SCL are measured by the number of claims in the patent specification to the number of patent stocks in the Malaysian and U.S. territory respectively. Since we had access only to those patent specifications which had been granted both in the Malaysian and U.S. territory, only patents granted were included. The calculation of the patent stocks begins when the patent application is lodged and continues to be calculated while granted and until the end of the time series dimension. This is because backward citations and claims are proxies for the knowledge of the firm. When the patent is lodged, the knowledge comes into existence with the invention and remains with the firm. Further control variables are the firm’s size and age. The data are taken from the firm’s financial statement at CCM.
### Table 1: Descriptive Statistics

<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
<th>All Firms</th>
<th>Manufacturing Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBWC</td>
<td>Ratio of number of backward citations to number of patent stocks in Malaysian patents</td>
<td>2.71</td>
<td>2.00</td>
</tr>
<tr>
<td>SBWC</td>
<td>Ratio of number of backward citations to number of patent stocks in U.S. patents</td>
<td>4.06</td>
<td>0.00</td>
</tr>
<tr>
<td>MCL</td>
<td>Ratio of number of claims to number of patent stocks in Malaysian patents</td>
<td>10.38</td>
<td>5.00</td>
</tr>
<tr>
<td>SCL</td>
<td>Ratio of number of claims to number of patent stocks in U.S. patents</td>
<td>4.64</td>
<td>0.00</td>
</tr>
<tr>
<td>FAM</td>
<td>Dummy variable for having a patent family</td>
<td>0.02</td>
<td>0.00</td>
</tr>
</tbody>
</table>
The measurement of the patent starts with the year of application. For example, if a particular patent was applied for in 2000 and had 5 backward citations, the ratio for that backward citation to the patent stock is 5. It will be measured as 5 until the end of the time series dimension of that particular firm. Since a firm can apply for more than one patent, total backward citations will be summed and divided by the additional number of patent stocks for the firm. This simple weighting scheme is applied to the number of backward citations (MBWC and SBWC) and claims (MCL and SCL) in both territories. FAM is ascertained by matching priority data in both territories. It is denoted by a dummy variable set equal to one if a patent consists of a family in the Malaysian and U.S. territories. Since we employ panel data, the dummy variable is set equal to one only when the priority data finds a match in both territories. For instance, if a particular patent is first granted in 1999 in Malaysia, but the same patent is only granted in the U.S. in 2001, the dummy variable for FAM variable will only be set equal to one from 2001.

FINDINGS

We commenced through conducting diagnostic tests for multicollinearity, autocorrelation, heteroskedasticity, and misspecification. To examine whether multicollinearity exists, we used Variance Inflation Factors (VIF). For both the full sample and manufacturing subsample the VIFs were less than 10 for each variable, suggesting multicollinearity is not a problem in the sample. The Durbin Watson test was used to test if autocorrelation exists for the panel data model. We found that autocorrelation was present, and therefore corrected the first-order serial correlation with an AR(1) model. For the dynamic panel model, GMM estimation was used to address autocorrelation. We used the White Cross-Section coefficient covariance method to correct for heteroskedasticity in our panel model, and White Period in our dynamic panel model. Potential misspecification of the model surrounds the patent citation. As discussed earlier, previous literature includes the forward citation to measure patent quality, but we used backward citation instead. Another important variable, which we may have misclassified, is the patent family. We were unable to ascertain whether the patent had been granted in territories other than Malaysia and the U.S. The Ramsey (1969) Regressions Specification and Error Test (RESET) and Jarque-Bera (1980) normality of the residuals test were not satisfied. Nevertheless, since our observations were large, we adopted the assumptions of the central limit theorem (CLT). The CLT shows that if there is a large number of independent and identically distributed random variables, then with few exceptions the distribution of their sums tends to a normal distribution as the number of such variables increases indefinitely.

Table 2 presents the panel model results for the full sample, while Table 3 presents the panel model results for the manufacturing sample. We begin with the PLS estimates in columns (1) and (2) of Tables 2 and 3. For the full sample, the coefficients on SBWC and MCL are negative and significant, although the magnitude of the coefficients are small. Both variables are of similar magnitude with a unit increase in either the backward citation in the U.S. patent specification or claim in the Malaysian patent specification decreasing the firm’s profit margin by 0.6% to 0.8% (columns 1 and 2 of Table 2). In the manufacturing sample, the coefficients on MCL and SCL are negative and statistically significant at the 1% level. The magnitude of the coefficient is also very low with a unit increase in a claim either in the U.S. or Malaysian patent specification decreasing the firm’s profit margin by 0.1% (columns 1 and 2 of Table 3).

The results for the FEM and REM estimates are presented in columns (3) to (7) of Tables 2 and 3. In the FEM estimates having a patent family in both territories decreases the firm’s profits by 7% to 8% in the full firm sample. The coefficient on MCL is also negative and significant with a unit increase in a claim in the Malaysian patent specification reducing profits by 1% to 2%. The coefficient on MBWC is positive and significant with each additional backward citation in the patent specification to patents in Malaysia increasing profits by 3.3% to 3.9% (see columns 3 to 5 of Table 2). In the FEM estimates for the manufacturing firms subsample, the coefficients on the number of patent claims in Malaysia and the U.S
are negative and significant. An additional patent claim in Malaysia and the U.S reduces profits by roughly 1% to 2% in each case.

The REM estimates are presented in columns (6) and (7) of Tables 2 and 3. For the full sample, the results for MCL are similar to the FEM estimates, while the coefficient on SBWC becomes significant and the coefficient on FAM insignificant. For the manufacturing subsample, the results for MCL and SCL are similar to the FEM estimates, while the coefficient on MBWC becomes significant. A Hausman test was implemented to ascertain whether FEM or REM should be preferred. We found that for the cross-section random effects specifications, the null hypothesis of favoring REM can be rejected for both samples at the 1% significance level.

Tables 4 and 5 present the GMM estimates for the full sample and manufacturing subsample respectively. For the full sample, the coefficient on MCL is negative and significant in each specification and a unit increase in Malaysian patent claims decreases the firm’s profit margin by 0.6% to 1.1%. A unit increase in the backward citation in the Malaysian patent specification increases the profit margin by 2% to 3% in the orthogonal deviations cross-section transformation. The coefficient on FAM is only negative and significant in the cross-section fixed effects specification with orthogonal deviations cross-section transformation. The results for the manufacturing subsample in Table 5 are more consistent across specifications. The coefficients on MBWC, MCL and SCL are negative and significant across each of the specifications, while the coefficient on SBWC is negative and significant across three of the four empirical specifications. Similar to the full sample, the magnitude of the effect of backward citations on profit is greater than that of claims on profit across territories.

Table 6 presents a summary of our findings across approaches. We break the presentation of results into the PLS/FEM/REM estimates, on one hand, and GMM estimates on the other. The PLS estimates are based on the specification with an AR(1) correction, while the choice between the FEM and REM estimates is based on the Hausman test. We only include coefficient estimates for which the coefficient is significant in two or more specifications.

Comparing across approaches MBWC is significant in the full sample and manufacturing subsample with GMM, but not PLS/FEM/REM and SBWC is significant in the manufacturing subsample with GMM, but not PLS/FEM/REM, while FAM is significant in the full sample and manufacturing subsample with PLS/FEM/REM, but not GMM. With the exception of MBWC in the full sample in the GMM estimates, the sign on each variable, which is significant is negative, is the same. For those variables for which both static and dynamic specifications suggests are significant (MCL, SCL) the signs are the same and the magnitude of the coefficients are similar.

This result implies that, with the exception of backward citations for patents granted in Malaysia in the full sample, there is an inverse relationship between knowledge flows from the patent citations, claims and family and the firms’ profit margin. The magnitude of the relationship is generally small. This finding does not support the hypothesis in this study, which was based on the predictions of knowledge spillover. Several factors potentially explain the results.
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The dependent variable is profit margin. C is the constant; MBWC and SBWC are the backward citations in Malaysian and the U.S. patent specification, respectively; MCL and SCL are the patent claims in Malaysian and the U.S. patent specification, respectively; FAM is the patent family; LNTGA is the tangible assets; NAGE is the age. Values shown are the coefficient estimates. Values below the coefficient estimates in the parentheses are the robust standard error. ***, **, and * indicate the significance level at 1%, 5%, and 10% respectively. (a) The specification is run with AR(1) correction.
Table 3: Panel Model Result with PLS, FEM & REM Estimations – Manufacturing Firms

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The dependent variable is profit margin. C is the constant; MBWC and SBWC are the backward citations in Malaysian and the U.S. patent specification, respectively; MCL and SCL are the patent claims in Malaysian and the U.S. patent specification, respectively; FAM is the patent family; LNTGA is the tangible assets; NAGE is the age. Values shown are the coefficient estimates. Values below the coefficient estimates in the parentheses are the robust standard error. \(***\), \(**\), and * indicate the significance level at 1%, 5%, and 10% respectively. \(^{(a)}\) The specification is run with AR(1) correction.
## Table 4: Dynamic Panel Model Result with GMM Estimation – All Firms

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Number of Observations: 1185

The dependent variable is profit margin. MBWC and SBWC are the backward citations in Malaysian and the U.S. patent specification, respectively; MCL and SCL are the patent claims in Malaysian and the U.S. patent specification, respectively; FAM is the patent family; LNTGA is the tangible assets; NAGE is the age. Values shown are the coefficient estimates. Values below the coefficient estimates in the parentheses are the robust standard error. ***, **, and * indicate the significance level at 1%, 5%, and 10% respectively.
The Interminable Surge in Internal Conflicts in Nigeria: The Legal and Socio-Economic Implications

Table 5: Dynamic Panel Model Result for Model 3 with GMM Estimation – Manufacturing Firms

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<td>(0.017192)</td>
<td>(0.012598)</td>
<td>(0.013946)</td>
</tr>
<tr>
<td>MBWC</td>
<td>-0.066513**</td>
<td>-0.046599**</td>
<td>-0.019046**</td>
<td>-0.019331**</td>
</tr>
<tr>
<td></td>
<td>(0.03001)</td>
<td>(0.023553)</td>
<td>(0.009613)</td>
<td>(0.008366)</td>
</tr>
<tr>
<td>SBWC</td>
<td>-0.018283***</td>
<td>-0.014791***</td>
<td>-0.005264*</td>
<td>-0.003366</td>
</tr>
<tr>
<td></td>
<td>(0.003419)</td>
<td>(0.0033)</td>
<td>(0.002696)</td>
<td>(0.00242)</td>
</tr>
<tr>
<td>MCL</td>
<td>-0.00575*</td>
<td>-0.006543*</td>
<td>-0.0073***</td>
<td>-0.003661*</td>
</tr>
<tr>
<td></td>
<td>(0.003347)</td>
<td>(0.003475)</td>
<td>(0.001877)</td>
<td>(0.002029)</td>
</tr>
<tr>
<td>SCL</td>
<td>-0.009554***</td>
<td>-0.00696**</td>
<td>-0.007761***</td>
<td>-0.005247**</td>
</tr>
<tr>
<td></td>
<td>(0.002893)</td>
<td>(0.002844)</td>
<td>(0.002458)</td>
<td>(0.002252)</td>
</tr>
<tr>
<td>FAM</td>
<td>-0.506071*</td>
<td>-0.291507</td>
<td>-0.124972</td>
<td>-0.101093</td>
</tr>
<tr>
<td></td>
<td>(0.263823)</td>
<td>(0.240131)</td>
<td>(0.101669)</td>
<td>(0.118422)</td>
</tr>
<tr>
<td>LNTGA</td>
<td>0.101022***</td>
<td>0.069486**</td>
<td>0.048469***</td>
<td>0.134676***</td>
</tr>
<tr>
<td></td>
<td>(0.028649)</td>
<td>(0.029666)</td>
<td>(0.013859)</td>
<td>(0.016732)</td>
</tr>
<tr>
<td>NAGE</td>
<td>-0.076894</td>
<td>-0.005161</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.047168)</td>
<td>(0.077923)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of Observations 967  967  967  967

The dependent variable is profit margin. MBWC and SBWC are the backward citations in Malaysian and the U.S. patent specification, respectively; MCL and SCL are the patent claims in Malaysian and the U.S. patent specification, respectively; FAM is the patent family; LNTGA is the tangible assets; NAGE is the age. Values shown are the coefficient estimates. Values below the coefficient estimates in the parentheses are the robust standard error. ***, **, and * indicate the significance level at 1%, 5%, and 10% respectively.
Table 6: Summary of Findings

<table>
<thead>
<tr>
<th>Estimations</th>
<th>Explanatory Variables</th>
<th>Expected Sign</th>
<th>Reported Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>All Firms</td>
</tr>
<tr>
<td>PLS/ FEM/ REM</td>
<td>MBWC</td>
<td>(+)</td>
<td>0.019–0.006</td>
</tr>
<tr>
<td></td>
<td>SBWC</td>
<td>(+)</td>
<td>0.012–0.007</td>
</tr>
<tr>
<td></td>
<td>MCL</td>
<td>(+)</td>
<td>(-)</td>
</tr>
<tr>
<td></td>
<td>SCL</td>
<td>(+)</td>
<td>0.012–0.007</td>
</tr>
<tr>
<td></td>
<td>FAM</td>
<td>(+)</td>
<td>8.25–4.04</td>
</tr>
<tr>
<td>GMM</td>
<td>MBWC</td>
<td>(+)</td>
<td>0.022–0.025</td>
</tr>
<tr>
<td></td>
<td>SBWC</td>
<td>(+)</td>
<td>(-)</td>
</tr>
<tr>
<td></td>
<td>MCL</td>
<td>(+)</td>
<td>(-)</td>
</tr>
<tr>
<td></td>
<td>SCL</td>
<td>(+)</td>
<td>0.011–0.006</td>
</tr>
<tr>
<td></td>
<td>FAM</td>
<td>(+)</td>
<td></td>
</tr>
</tbody>
</table>

Only significant variables are reported; (+) means positive relationship between the dependent and explanatory variables; (−) means negative relationship between the dependent and explanatory variables; the values shown below the sign are the coefficient estimates from the lowest to the highest.

This finding does not support the hypothesis in this study, which was based on the predictions of knowledge spillover. Several factors potentially explain the results. First, the result may be due to the demand and supply for the patented invention. On the demand side, Malaysian firms may learn from the patented invention from advanced economies, but when it comes to appropriating returns from the new patented invention, the demand for such inventions may be low. On the supply side, while the new invention may have been successfully patented, it may not be ready to be manufactured and sold in the market. Second, Lanjouw and Schankerman (2004) theorized that the expected profit flow of the invention depends on the expected innovation quality encapsulated in the patent. It is possible that the quality of the patents of Malaysian firms’ is low, which leads to a negative effect on their profits.

Third, Lanjouw and Schankerman (2004) also argued that patent quality is related to the relevant market size for the firm. Malaysia’s market size is small. Ghapar et al (2013) found that the market for Malaysian firms with patents is highly competitive with low levels of persistence. As such, the results might reflect technological exhaustion or obsolescence. As technology is moving faster, the knowledge that spills over from the previous invention may have already become obsolete in the market. The obsolescence of the invention is supported by the other explanatory variable, that is the patent claims. Even though the patent claims have a negative impact, the impact is much smaller than that of backward citations. This shows that the Malaysian inventors are learning from their counterparts and be able to genuinely invent their own claims in the patent. The largest negative impact in the model specification that is the patent family variable, may also reflects obsolescence, as securing a patent in other territories may take more effort and a longer time as well as entailing larger costs.
CONCLUSION

In this study, we analyzed patent quality and financial performance using panel data on manufacturing firms for Malaysian firms that have been granted patents for the period from 1994 to 2008. The patenting activity variables were based on proxies for quality, which comprise backward citations, patent claims and patent family. The financial performance variable is based on the profit margin. Based on spillover theory, we hypothesized that should be a positive relationship between patent quality and the firm’s financial performance. However, we found that the signs of the coefficients were mostly negative and the size effects small. This situation may due to the level of demand, quality of patents and technological exhaustion at the firm level.

REFERENCES


Entrepreneurial Motivation and Intention of Undergraduates: Investigating the Moderating Role of Entrepreneurship Course

Keywords: Autonomy, Competence, Entrepreneurial Intention, Entrepreneurship Education.

INTRODUCTION

Developing entrepreneurship, promoting and rendering it attractive and advantageous to people is at the core of public policy in many nations as entrepreneurship offers many fruitful outcomes such as job creation, encouraging competitiveness and enhancing economic efficiencies. It is well-established that the development of economies, prosperity of countries and growth of wealth of societies are mostly attributed to entrepreneurship (Carree & Thurik, 2010; Praag & Versloot, 2007).

Entrepreneurship is viewed as an intentional act and entrepreneurial intention is a rapidly evolving area of research since it was introduced a quarter of a century ago as it is considered one of the first steps in the business creation process (Bird & Jelinek, 1988; Krueger, Reilly, & Carsrud, 2000). As a result, studies on entrepreneurial intention and factors influencing it are growing due to its powerful prediction of entrepreneurial behaviour. A number of intention-based models have been developed, but theory of planned behaviour (TPB) is the most commonly used as it conceptualizes that intention is the single best immediate predictor of behaviour (Ajzen, 1991). TPB argues that intention to be entrepreneur is predicted by three attitudinal factors, namely attitude, subjective norms and perceived behavioural control.

Understanding the formation of entrepreneurial intentions is essential for better understanding of the entrepreneurial behaviour (Shane & Venkataraman, 2000). Given the importance of entrepreneurial intention, then it is important to examine the factors that may foster or hinder it. In fact, this topic has been researched extensively, but only few, if any, have focused on why people start business? Is it because they choose to or is it because they have to? If they have a choice on starting a business, then they have some intrinsic reasons. However, if they start business for extrinsic reasons, it means they are compelled to do so. Self-determination theory of human motivation posits that people have three needs, when satisfied, that become more intrinsically motivated to act. Satisfaction of these needs may enhance and foster youth intention to start their own business. Therefore, the first objective of this research is to examine the effect of the satisfaction of these psychological needs on entrepreneurial intentions and its proximal predictors among university final year students in Yemen. Further, entrepreneurship education and training are of particular relevance, interest and importance to governments and universities. It is claimed that it has an impact on shaping students’ perception, beliefs and intentions by equipping them with the necessary and right knowledge, skills and tools that make them more entrepreneurially-oriented. Thus, the second objective is to examine possible moderation effect of entrepreneurship course on entrepreneurial intention. After this introduction, this paper is structured as follow. The next section presents some theoretical background on the study constructs and highlight the study hypothesis. Then, the methods and data analysis are presented next. The last section discusses briefly the findings of the study.

LITERATURE REVIEW
Entrepreneurial Motivation and Intention of Undergraduates: Investigating the Moderating Role of Entrepreneurship Course

Theory of Planned Behaviour
Theory of Planned Behaviour (TPB) has attracted a lot of attention among researchers (Armitage & Conner, 2001; Kautonen et al., 2013; Krueger et al., 2000). It has been applied in various research domains and it is considered as one of the most applicable theories of human intentions to perform actions. Based on the social cognitive approach, theory of planned behaviour postulates that intention influences behaviour.

Central to TPB is the behavioural intention. According to TPB, behavioural intention is determined by three conceptually independent antecedents, namely attitudes towards behaviour, subjective norms and perceived behavioural control. In turn, the three behavioural intention antecedents are themselves preceded by three beliefs that guide human behaviours: behavioural beliefs (leading to attitudes towards behaviour), normative beliefs (leading to subjective norms) and control beliefs (leading to perceived behavioural control) (Ajzen, 1991). In the present study, subjective norms is not included as in many studies it has been found to be the least or not significant predictor of entrepreneurial intention (Almobaireek & Manolova, 2012; Krueger et al., 2000; Liñán & Chen, 2009).

Entrepreneurial intention refers to the readiness that people show to engage in a given behaviour such as being an entrepreneur. It is considered an immediate determinant of behaviour. Ajzen (1991) argues it is most likely a given behaviour will be performed if a strong intention to engage in that behaviour exists. For an individual to demonstrate a behaviour, motivation (intention) and ability (behavioural control) should be combined as intention alone is not enough. That is why perceived behavioural control is included in the model of TPB. Thus, intention to engage in an activity is determined by attitudes and perceived behavioural control. To strengthen the behavioural intention to perform an action, people should have a positive evaluation of it, should believe that important others want them to do it and perceive it as easy to be performed.

Attitude toward Entrepreneurship (ATE) refers to people’s overall evaluation (positive or negative) or appraisal of entrepreneurial behaviour (Ajzen, 1991). Prior to forming intention, people seem to make assessment in favour or not in favour of this behaviour. Positive attitudes toward entrepreneurship, if perceived as attractive and advantageous to individuals, will lead to better entrepreneurial intention. In fact, attitude has shown to be a strong predictor of entrepreneurial intention (Almobaireek & Manolova, 2012; Liñán & Chen, 2009) among others. Further, it has been found that attitude mediates the relationship between intention and SDT constructs (Roca & Gagne, 2008).

Perceived Behavioural Control (PBC) refers to people’s perception of how easy or difficult the behaviour is, such as starting a business, and how much volitional control they have over it (Ajzen, 1991). It has been attested that PBC, also treated as feasibility and self-efficacy, has been an influential determinant of entrepreneurial intention (Almobaireek & Manolova, 2012; Kautonen et al., 2013; Krueger et al., 2000; Liñán & Chen, 2009), to name a few.

Self-Determination Theory
Self-determination theory (SDT) is a macro-theory of human motivation, development and wellness that was developed about three decades ago by two psychologists, Edward Deci and Richard Ryan. Since its development, it has been extensively researched and widely used in different settings and various contexts such as parenting, education, work, relationships, physical activity, health care, sports environmental issues, psychotherapy and so forth (Deci & Ryan, 2008; Gagne & Deci, 2005; Ryan & Deci, 2008). SDT posits that human beings have an inherent motivation for growth and achievement (Stone, Deci & Ryan, 2009) and they have natural motivational tendencies and readiness to learn, explore and assimilate knowledge and develop new skills (Ryan & Deci, 2000b). These natural tendencies, however, can be either facilitated and supported or hindered by social contexts (Ryan & Deci, 2000b). Not only what makes people motivated is the interest of SDT, but also, what makes them thrive and flourish (Ryan &
Entrepreneurial Motivation and Intention of Undergraduates: Investigating the Moderating Role of Entrepreneurship Course

Deci, 2011). SDT conceptualizes three psychological needs namely autonomy, competence and relatedness as essential nutriments for people to function optimally and grow psychologically (Deci & Ryan, 2000). These needs are thought to be universal across people and cultures and are applicable throughout all aspects of a person’s life (Milyavskaya & Koestner, 2011). Satisfying these needs seems to represent the underlying motivational mechanism that energizes and directs people’s behaviour (Broeck, Vansteenkiste, Witte, Soenens & Lens, 2010; Deci & Ryan, 2000).

Autonomy refers to the perception that one’s behaviour is self-congruent and volitional. Competence refers to the perception that one is capable of influencing the environment in desirable ways. Relatedness involves the feeling of meaningful closeness and connectedness with others (Weinstein & Ryan, 2011). All three innate needs are argued to have intrinsic value to the self and are essential for well-being and behavioural persistence (Teixeira, Silva, Mata, Palmeira & Markland, 2012). Metaphorically, just like the sunlight, water and minerals are essential nutriments for plants to bloom, thrive or flourish; the three basic psychological needs are conceptualized as essential nutriments for people’s growth, integrity and health as well (Broeck et al., 2010; Reis, Sheldon, Gable, Roscoe & Ryan, 2000; Ryan & Deci, 2000c).

In entrepreneurship, autonomy was found as one of the most relevant motivational factors to start a business (Gelderen, 2010; Shane, Locke, & Collins, 2003). Satisfying this basic psychological need means that individuals engage in starting a business because they want to be their own bosses and not be controlled by others. Autonomy represents actions that originate from the inner self of an individual and he/she acts volitionally based on his/her personal choices (Niemiec & Ryan, 2009b; Ryan & Deci, 2002). A number of studies have supported the argument that autonomy is an essential motivational factor to start a business and its association with entrepreneurship and entrepreneurial intention (Caliendo and Kritikos, 2012; Douglas and Shepherd, 2002), self-employment (Croson & Minniti, 2012) and entrepreneurial orientation (Lumpkin, Cogliser & Schneider, 2009).

The need for competence concerns the feeling of effectiveness in interacting with the social or physical world (Niemiec et al., 2006) and “the belief that one has the ability to influence important outcomes” (Stone et al., 2009, p. 4). The feeling of competence about doing a certain task is characterized by challenge but within the capabilities and abilities of an individual, so that he/she can satisfy his/her innate need of competence and thus be intrinsically motivated. Consequently, tendency for personal growth, well-being and performance is high (Deci & Ryan, 2000). It is argued that adapting to complex and changing environment may result when the need for competence is satisfied (Deci & Ryan, 2000). The argument of SDT is that competence is an innate human need and people have a natural tendency to be competent and influence their environment rather than just perception of one’s capabilities to reach desired outcome. According to Van den Broeck, Vansteenkiste, De Witte and Lens (2008), “the satisfaction of the inborn need for competence represents current (instead of future-oriented) and more general (instead of specific) feelings of effectiveness. The need for competence is likely to stimulate individuals’ functioning and well-being on a more general level” (p. 280).

The need for relatedness refers to the feeling of being related and connected to others. It is the sense of belonging to a certain group; family, peers, managers or any social group. In addition to the needs for autonomy and competence, SDT posits that satisfaction of the need for relatedness facilitates the process of internalization. People tend to internalize and accept as their own values and practices of those to whom they feel, or want to feel, connected and from contexts in which they experience a sense of belonging. In the classroom, relatedness is deeply associated with a student feeling that the teacher genuinely likes, respects and values him/her. Students who report such relatedness are more likely to exhibit identified and integrated regulation for the arduous tasks involved in learning, whereas those who feel disconnected or rejected by teachers are more likely to move away from internalization and thus respond only to external contingencies and controls (Niemiec & Ryan, 2009). However, relatedness has received support in some contexts and thus it is excluded from being tested in the current study.
Entrepreneurship Education and Entrepreneurial Intention

While a number of very successful entrepreneurs either drop out of universities or never even enrol, there are many more whose education has a substantial influence on their entrepreneurial life (Robinson & Sexton, 1994). It is crucial to understand that acquiring knowledge and developing and sharpening skills and competencies are very important, without which many ideas would not have seen light and not have been transformed into successful projects and enterprises. Universities and similar higher learning institutions could provide a good avenue for students to get the necessary knowledge and skills from the early stage of ideation to the implementation of those ideas.

Entrepreneurship education is rapidly growing in universities and colleges around the world (Katz, 2003; Martin, McNally, & Kay, 2013). Indeed, entrepreneurship education plays a vital role in shaping and fostering students’ attitudes and perceptions towards entrepreneurship. While there are few studies that found that entrepreneurship education is negatively related to intention to start a business (e.g., Oosterbeek, van Praag & Ijsselstein, 2010), many others have found that entrepreneurship education positively reinforces students’ attitudes and intention towards entrepreneurial activity (Fayolle, Gailly, & Lassas-Clerc, 2006; Sánchez, 2013; Tkachev & Kolvereid, 1999; Yun, 2010).

To address the conflicts in the findings of the previous studies, Martin et al. (2013) conducted a meta-analysis and found support for entrepreneurship education and training. The study was based on the theory of human capital that indicates that those with higher knowledge and skills and other competencies are more likely to demonstrate better and greater performance than those with less or no knowledge and skills. The results of the 42 independent samples, comprising a total of 16,657 student, reveal that entrepreneurship education and training were associated with higher levels of (a) total entrepreneurship-related human capital assets, (b) entrepreneurship-related knowledge and skills (c) positive perceptions of entrepreneurship, and d) intentions to become an entrepreneur. Further, the study found that entrepreneurship education and training was positively associated with (a) entrepreneurship outcomes in general (b) start-up and (c) entrepreneurship performance. In line with these findings, Morris et al. (2013) demonstrate that entrepreneurship education enhances the entrepreneurial competencies and intentions to start a business.

In support of the above studies, a number of studies has shown how entrepreneurship education positively affect students’ attitudes, skills and intentions to start a business. For instance, in the United States, Wilson, Kickul and Marlino (2007) conducted a study to investigate whether targeted education like entrepreneurship education can play a role in fostering self-efficacy and increasing confidence level among students. The study used two different student samples. The first sample comprised middle and high school students whereas the other set of sample was among MBA students from different American schools and universities. More than five thousand students participated in this study. The findings suggest that entrepreneurship education played a crucial role in fostering the perception of self-efficacy and intention in both sample groups, though the perception of self-efficacy was stronger among female MBA students. Another study in the U.S. has further investigated the role of entrepreneurship education and training in business venture effectiveness (Elmuti, Khoury & Omran, 2012). The findings of the study, which utilized two sample groups entrepreneurs and prospective entrepreneurs, found that entrepreneurship education and training were vital to the success of business ventures.

Consistent with Wilson et al.’s (2007) study, similar findings were found in the Chinese context (Wu & Wu, 2008; Yun, 2010). Yun (2010) conducted a study to empirically test the impact of entrepreneurship education on entrepreneurial intention mediated by self-efficacy using undergraduate management students. According to the study, there are three benefits of entrepreneurship education to students that included learning, inspiration and incubation resources. Findings suggest that learning and inspiration had
significant influence on the intention to become an entrepreneur mediated by self-efficacy, whereas incubation resources impacted intentions directly.

**Theoretical Framework and Hypotheses.**
Self-determination theory (SDT) and theory of planned behaviour (TPB) are integrated in a one comprehensive framework, incorporating entrepreneurship course as a moderator. It is hypothesized that the distal constructs of SDT namely autonomy and competence are predictors of entrepreneurial intention and its proximal constructs namely attitude and PBC. Based on the above discussion, the following hypotheses are offered:

- **H1a, b and c:** Autonomy is positively related to attitude, PBC and entrepreneurial intention.
- **H2a, b and c:** Competence is positively related to attitude, PBC and entrepreneurial intention.
- **H3a:** Attitude is positively related to entrepreneurial intention.
- **H3b and c:** Attitude mediates the relationships between autonomy and competence and entrepreneurial intention.
- **H4a:** PBC is positively related to entrepreneurial intention.
- **H4b and c:** PBC mediates the relationships between autonomy and competence and entrepreneurial intention.
- **H5a and b:** Entrepreneurship course moderates the relationship of attitude and PBC and entrepreneurial intention.

**METHODOLOGY**

Participants of this study were final year undergraduate university students from one public university, Sana’a University (76.8%), and one private university, University of Science & Technology (23.2%) located in the Yemeni Capital, Sana’a. The final sample consisted of 622 students (58.04% males and 41.96% females) enrolled in various disciplines in 15 faculties from both universities. It was ensured that an approximate representation of the final year undergraduate student population was reflected in the sample. The age distribution of the sample ranged from 21 years old (minimum) to 27 years (maximum). The mean age was 23.32 (SD= 1.47). Around 50% of the respondents indicated that they have taken some entrepreneurship related courses and have some entrepreneurial experience as well. Table provides further details about the sample.

Research instrument was drawn from previous studies to measure all specified constructs in the study model. Theory of planned behaviour constructs were measured by a scale developed by Liñán and Chen (2009). Basic psychological needs constructs of self-determination theory (SDT) were assessed by using existing measures that have been empirically validated and used in many studies. These scales are known as the Basic Psychological Needs Scale (BPNS) (Gagné, 2003) and the Balanced Measure of Psychological Needs (BMPN) scale (Sheldon & Hilpert, 2012). Several statistical techniques were used in order to test the hypothesized model of the current study. SPSS (version 21) was utilized for data entry and management and thus provided the desired descriptive statistics of the sample. To test the hypotheses, confirmatory factor analysis (CFA) was first used in order to validate the measures and then a full structural model was constructed. AMOS 20 and Mplus 7.3 were utilized for the analysis.
Entrepreneurial Motivation and Intention of Undergraduates: Investigating the Moderating Role of Entrepreneurship Course

Table 1: Sample Distribution by University, Faculty and Gender

<p>| University of Science &amp; Technology (UST) | Administrative Sciences | 24 | 3.9 |</p>
<table>
<thead>
<tr>
<th>University</th>
<th>Faculty</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commerce &amp; Economics</td>
<td>130</td>
<td>20.9</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>15</td>
<td>2.4</td>
<td></td>
</tr>
<tr>
<td>Computer Science</td>
<td>21</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>Education-Sana'a</td>
<td>62</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td>59</td>
<td>9.5</td>
<td></td>
</tr>
<tr>
<td>Languages</td>
<td>28</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>Law</td>
<td>43</td>
<td>6.9</td>
<td></td>
</tr>
<tr>
<td>Medicine</td>
<td>31</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td>47</td>
<td>7.6</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>478</strong></td>
<td><strong>76.8</strong></td>
<td></td>
</tr>
</tbody>
</table>

FINDINGS

Descriptive Statistics
The descriptive statistics and intercorrelations among the constructs included in the study are displayed in Table 2.

Table 2 Means, Standard Deviations, and Correlation among Study Constructs

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Mean</th>
<th>SD [No. of Items]</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Entrepreneurial Intention</td>
<td>5.91</td>
<td>.96 [6]</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Attitude</td>
<td>5.89</td>
<td>.94 [5]</td>
<td>.535**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Perceived Behavioural Control</td>
<td>4.72</td>
<td>1.32 [6]</td>
<td>.398**</td>
<td>.306**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Autonomy</td>
<td>5.83</td>
<td>1.11 [6]</td>
<td>.275**</td>
<td>.345**</td>
<td>.232**</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Structural Equation Modeling
Structural equation modeling (SEM) has become enormously popular among researchers (Kline, 2011; Ullman, 2006) and without a doubt it is regarded as one of the most important data analysis techniques (Kaplan, 2009). SEM has become a preferred tool for investigating the plausibility of theoretical models in many scientific disciplines (Hu & Bentler, 1999). It is a collection of statistical techniques that allow for modeling complex relationships between one or more independent variables and one or more dependent variables that are observed or unobserved latent variables simultaneously (Narayanan, 2012; Ullman, 2006). It consists of two parts namely the measurement and structural parts. The measurement part links the manifest variables (observed) to their latent (unobserved) variables via confirmatory factor analysis. The structural part links latent constructs to each other via a system of simultaneous equations (Kaplan, 2009). One primary function of SEM is that it can simultaneously estimate these two parts (measurement and structural) in one full model (Kline, 2011).
Model Fit Evaluation
The evaluation of model fit should involve the significance and strength of parameter estimates, variance accounted for in the endogenous variables and the overall model fit as indicated by several model fit indices (Weston & Gore, 2006). The latter is the first to be examined in model fitting evaluation process. If acceptable, other fitting criteria are then examined. As suggested by Hoyle and Panter (1995), multiple indices are readily available to address the well-fitting of models. These include the Chi-square ($\chi^2$) statistics, Root Mean Square Error of Approximation (RMSEA), Standardized Root Mean Square Residual (SRMR), Tucker-Lewis Index (TLI) also referred to as Non-Normed Fit Index (NNFI) and Comparative Fit Index (CFI). A brief description of these indices is presented in Table 3.

Table 3 Summary of Fit Indices used in the Study

<table>
<thead>
<tr>
<th>Fit Index</th>
<th>Type/Description</th>
<th>Range for Adequate or Good Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>$\chi^2$. $\chi^2$ can be sensitive to sample size</td>
<td>Smaller indicated better model fit, should be non-significant</td>
</tr>
<tr>
<td>The Comparative Fit Index (CFI)</td>
<td>Incremental/comparative</td>
<td>$\geq 0.90$ acceptable; $\geq 0.95$ good fit</td>
</tr>
<tr>
<td>Tucker-Lewis Index (TLI)</td>
<td>Incremental/comparative</td>
<td>$\geq 0.90$ acceptable; $\geq 0.95$ good fit</td>
</tr>
<tr>
<td>Root Mean Square Error of Approximation (RMSEA)</td>
<td>Absolut fit</td>
<td>$\leq 0.05$ good fit; $\leq 0.08$ acceptable</td>
</tr>
</tbody>
</table>

Measurement Model. The hypothesized measurement model consisted of five unobserved latent constructs that were measured by 23 observed variables (indicators): autonomy (PA), competence (PC), attitudes (ATE), perceived behavioural control (PBC) and lastly, entrepreneurial intention (EI). In order to test the study’s measurement model, confirmatory factor analysis was performed. As depicted in Figure 1, the first-order CFA yielded a good and acceptable good fit indices: $\chi^2 = 611.624$, df = 220, CFI = .932, TLI = .921, RMSEA = .054, suggesting for further analysis.

![Figure 1: The Measurement Model](image-url)
The Structural Model. Following the successful fitting of measurement model, a full structural equation modeling (containing both measurement model and structural model) was then conducted using Amos 22. As mentioned earlier, the present study sought to examine the following relationships to understand students’ motivation and intention to start their own business. The hypothesized relationships among latent variables are as follow: PA and PC → EI; PA → ATE and PBC; PC → ATE and PBC; ATE and PBC → EI. As depicted in Figure 2, these structural relationships had been tested and the results show that the full hypothesized structural model had achieved a good fit to the observed data: $\chi^2 = 623.829$, df = 221, CFI = .930, TLI = .920, RMSEA = .054.

**Figure 2: The Structural Model**

**Hypotheses Testing: Direct Effects.** The result of the structural equation modeling indicate the current model is accepted for hypotheses testing. In this section, the hypothesized direct structural relationships are discussed. The significance of estimated path was examined as it provided the basis to accept or reject a hypothesis. The following hypotheses of direct relationships were proposed for the present study. All of the direct effects hypotheses were supported expect the direct effects from PA and PC to EI.

Hypotheses 1a, b, and c proposed that psychological need satisfaction is positively related to entrepreneurial intention attitude, and perceived behavioural control. The result of H1a and H2a were not significant: PA and PC into EI (Standardized Coefficient = 0.04, $z = .85$, $p = 0.36$) and (Standardized Coefficient = -0.05, $z = -1.08$, $p = 0.28$) respectively. The result of H1b and c and H2 b and c were all significant: PA into ATE and PBC (Standardized Coefficient = 0.32, $z = 5.36$, $p = 0.00$) and (Standardized Coefficient = 0.12, $z = 2.11$, $p = 0.03$) respectively and PC into ATE and PBC (Standardized Coefficient = 0.25, $z = 4.39$, $p = 0.00$) and (Standardized Coefficient = 0.32, $z = 5.69$, $p = 0.00$) respectively. Further, the result of H3a and H4a were significant: ATE and PBC into EI.
Entrepreneurial Motivation and Intention of Undergraduates: Investigating the Moderating Role of Entrepreneurship Course

(Standardized Coefficient = 0.57, z = 9.80, p = 0.00) and (Standardized Coefficient = 0.30, z = 6.80, p = 0.00) respectively. It can be concluded that all of direct hypotheses were supported except PA and PC into EI, which were not supported.

**Hypotheses Testing: Indirect Effects (Mediational Analysis).** To test for mediation, the bootstrap procedure, suggested by Shrout and Bolger (2002), was used. Given that an AMOS 22 procedure only estimates bootstrap confidence intervals for total mediation effects, Mplus was additionally used to examine the specific medication effects. One of the advantages of Mplus is that it can estimate specific indirect effects, total indirect effects, and total effects for the relationship between independent and dependent variables in addition to the direct effect. It also provides standard errors that result in z-score (estimate divided by standard errors) for each effect. The z-scores can be used to determine the significance of any effect. Based on an α level of .05, then a critical ratio of z-score needs to be ± 1.96 to be a significant estimate (Byrne, 2012). To explore the significance of the indirect effects that emerged, the bootstrap generated bias-corrected confidence interval approach was used (Preacher & Hayes, 2004; Shrout & Bolger, 2002). When examining indirect effects, past work has shown the bootstrapping approach (especially when combined with the bias correction) to be superior to the alternative Sobel test with respect to power and Type 1 error rates (MacKinnon, Lockwood, & Williams, 2004).

It has been hypothesized that ATE and PBC mediate the relationship between SDT constructs and entrepreneurial intention. Specifically, Hypotheses 3b and c state that “Attitude mediates the relationships between autonomy and competence and entrepreneurial intention” and Hypotheses 4b and c state that “PBC mediates the relationships between autonomy and competence and entrepreneurial intention”.

**The Mediating Effect of ATE.** The result of mediation analysis indicates that ATE mediates the relationship between PA and PC and EI. The specific indirect effect of the path from PA to entrepreneurial intention via ATE was significant (Standardized Coefficient = 0.184, z = 3.15, p = 0.002, [Bootstrap 95% CI= 0.069, 0.299]). The second specific indirect effect of the path from PC to entrepreneurial intention via ATE was significant (Standardized Coefficient = 0.144, z = 3.49, p = 0.000, [Bootstrap 95% CI= 0.063, 0.225]). Thus these hypotheses were supported.

**The Mediating Effect of PBC.** The result of mediation analysis indicates that PBC only mediates the relationship between PC and EI. The specific indirect effect of the path from PA to entrepreneurial intention via PBC was not significant (Standardized Coefficient = 0.035, z = 1.92, p = 0.055, [Bootstrap 95% CI= 0.005, 0.070]). The second specific indirect effect of the path from PC to entrepreneurial intention via PBC was significant (Standardized Coefficient = 0.095, z = 3.79, p = 0.000, [Bootstrap 95% CI= 0.046, 0.144]). Thus these hypotheses were supported.

To conclude the mediation analysis section, all mediational hypotheses were supported except for H4b, which indicates that PBC does not significantly mediate the relationship between PA and EI.

**Moderation Analysis.** It has been hypothesized that entrepreneurship education plays a moderating role in the relationship between EI and its proximal predictors. Specifically, H5a and b state that “Entrepreneurship course moderate the relationship of attitude and PBC and entrepreneurial intention”. A moderator is a variable that modifies the form or the strength of relation between an independent and a dependent variable (Mackinnon, 2008). The relationship between an independent variable and a dependent variable can be strengthened, weakened, removed or even change the direction of the relationship between two variables from positive to negative and vice-versa (MacKinnon, 2008; Preacher, Rucker & Hayes, 2007). According to Muthen and Muthen (1998-2012), multiple-group analysis is used to simultaneously study group differences among several groups of individuals. By using multi-group SEM, the invariance of specific structural path coefficients across males and females can be evaluated. To do this, the path coefficients that are of interest for investigation can be restricted to be equal across the
Entrepreneurial Motivation and Intention of Undergraduates: Investigating the Moderating Role of Entrepreneurship Course

two groups, while the rest of the coefficients can be left to vary across groups (Wang & Wang, 2012). As illustrated in Table 4, the chi-square difference test revealed that both groups (Those with entrepreneurship course and those without entrepreneurship course are not different at the level model. The difference between the constrained and unconstrained models was not significant. Therefore, Moderation hypotheses were not supported.

Table 4: Summary of Multi-Group Analysis

<table>
<thead>
<tr>
<th></th>
<th>Chi-Square</th>
<th>DF</th>
<th>P-Value</th>
<th>Invariant?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Model</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unconstrained</td>
<td>914.429</td>
<td>448</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fully constrained</td>
<td>941.664</td>
<td>471</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of groups</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>27.235</td>
<td>23</td>
<td>0.246</td>
<td>YES</td>
</tr>
</tbody>
</table>

DISCUSSION

The present study contributes to body of knowledge with regard to entrepreneurial intention. Its originality lies in the attempt to examine the relevancy of self-determination theory to entrepreneurial intention. Autonomy and competence are considered ones of the most valued motivational determinants. In spite of their importance, autonomy and competence, as conceptualized in SDT, were neglected and have not been integrated with entrepreneurial intention models such as TPB.

The main objective of this study was to examine the effect that basic psychological need satisfaction on students’ entrepreneurial intention. It has been found that autonomy and competence were one of the most relevant predictors of entrepreneurial intention, but through its proximal predictors ATE and PBC. As self-determination theory suggests that positive outcomes usually result from the satisfaction of basic psychological needs (Deci & Ryan, 2000), the present study confirms that perception of starting business result from autonomy and competence fulfilment. Further, ATE and PBC were also significant predictors of EI supporting the applicability and relevancy of TPB in the context of Yemen. These two constructs of TPB also fully mediated the relationship between PA and PC of SDT and EI. That is, No direct effect from the SDT constructs to entrepreneurial intention was observed, signifying that entrepreneurial intention can only be influenced through its very proximal constructs. The integration of both theories in entrepreneurship research concurs with previous studies in other contexts (Chan, Fung, Xing, & Hagger, 2013; Hagger, Chatzisarantis, & Harris, 2006; Hagger & Chatzisarantis, 2009; Jacobs, Hagger, Streukens, Bourdeaudhuij, & Claes, 2011; Roca & Gagne, 2008). The model explained about 46% of variance in entrepreneurial intention. Therefore, it can be concluded that the main objective was fulfilled and the integrated entrepreneurial motivation and intention model provided good explanation of students’ intention to start their own businesses. Further, the study investigated potential moderation role of entrepreneurship course taken by students, but no significant difference was found between those who have taken and those who have not. Perhaps the non-significance of the moderator could be attributed to the balanced percentage of the two groups as almost 50% indicated that they have taken entrepreneurship course. It also could be attributed to the type of measurement and statistical test. Perhaps entrepreneurship education scale could be used in future studies and the construct of entrepreneurship education should be conceptualized as an independent or a mediator constructs. Furthermore, a longitudinal research design could be applied, where study is conducted, before and after entrepreneurship course. Therefore, future research may consider adopting these research directions to deeply understand the effect of entrepreneurship education on entrepreneurial intention.
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**Motivational and Attitudinal Determinants of Entrepreneurial Intention: Application of Structural Equation Modeling**

**Keyword:** Self-Determination Theory, Theory of Planned Behaviour, Entrepreneurial Intention, Malaysia

**INTRODUCTION**

Entrepreneurship is one of the major factors that contributes positively to the development of a nation’s economy and well-being of societies (Praag & Versloot, 2007). It is regarded as the main drive for job creation and a major force of economic development. Entrepreneurship is perceived as a panacea to some of the problems and challenges countries encounter today such as unemployment (Thurik, 2003). Regardless of what constitutes entrepreneurship or what defines entrepreneurs, the role of entrepreneurship is increasingly becoming more noticeable. However, research on entrepreneurship in Muslim countries and Arab cultures in particular is very scarce and underrepresented in the literature (Almobaireek & Manolova, 2012; Rasem. Kayed & Hassan, 2010).

Entrepreneurship offers fruitful outcomes to societies such as reducing unemployment rates and its burden on people and governments as well. Yet, it is perceived differently by people in different cultural and religious contexts (Dana, 2009). The influence of culture on entrepreneurship flows through many channels; individually valued priorities being the most central channel (Licht, 2010). Some cultures promote entrepreneurial activities more than other cultures and some religions are seen as less conducive to entrepreneurship than others (Dana, 2009). Islam encourages people to be entrepreneurs and engage in trade for the betterment of self and the community at large. Although there are some claims that Islam has negative effects on entrepreneurship (Landes, 1999 as cited in Zelekha et al., 2013), such claims cannot be considered as not many research confirming these claims have been conducted (Zelekha et al., 2013). Therefore, the present study plans to examine how university students in a Muslim country such as Yemen perceive entrepreneurship and whether they intend to be entrepreneurs at some point of time after their graduation.

Entrepreneurship is regarded as intentional behaviour and entrepreneurial intention is considered the single best predictor of entrepreneurial behaviours (Krueger et al., 2000). However, entrepreneurial intention is claimed to be dead (Krueger, 2009) and a number of research directions have been offered to bring it back to life where entrepreneurship motivation is a critical component in reviving it (Fayolle and Liñán, 2014; Fayolle et al., 2014). They offer some perspectives that include integrating entrepreneurial intention models with other theories, understanding what could influence attitudinal determinants of intention and investigating the possible mediation, moderation and interaction effects (Fayolle and Liñán, 2014; Fayolle et al., 2014).

Following these guidelines and based on the two prominent behavioural and cognitive theories, namely, self-determination theory (SDT) and theory of planned behaviour (TPB) the present study’s main objective was to integrate both to better understand the intention and motivation to be entrepreneurs. TPB argues that intention to be entrepreneur is predicted by three attitudinal factors, namely attitude, subjective norms and perceived behavioural control. SDT posits that people, regardless of their cultural backgrounds, have three universal psychological needs, namely autonomy, competence and relatedness.
when satisfied positive outcomes are expected to result. The study is motivated by the desire to understand university students’ motivation and attitudes toward entrepreneurship. Specifically, it seeks to comprehend whether the basic psychological needs as proposed in SDT would enhance their perception and intention to start their own businesses. Further, it seeks to examine the mediation role of the three attitudinal factors embedded in the TPB in the relationships between basic psychological needs and entrepreneurial intention.

Therefore, the argument of the current study is that people who are internally satisfied will have better perception and attitude towards entrepreneurship. By integrating TPB and SDT in a single framework to understand students’ attitudes and intention to behave entrepreneurially in a non-Western context, the present study hopes to offer better explanation regarding the effect of self-determination motivation on students’ attitudes and perceptions of entrepreneurship. As such, this is one of the first studies that integrates both theories in entrepreneurship research conducted in a Muslim country. The remainder of the article is structured as follows. The next section highlights the theoretical background and hypotheses. Section 3 presents the methodology. The final two sections present the actual data analysis and discussion.

THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

Self-Determination Theory

Self-determination theory (SDT) is a macro-theory of human motivation, development and wellness that was developed about three decades ago by two psychologists, Edward Deci and Richard Ryan. Since its development, it has been extensively researched and widely used in different settings and various contexts such as parenting, education, work, relationships, physical activity, health care, sports, environmental issues, psychotherapy and so forth (Deci & Ryan, 2008; Gagne & Deci, 2005; Ryan & Deci, 2008). SDT posits that human beings have an inherent motivation for growth and achievement (Stone, Deci & Ryan, 2009) and they have natural motivational tendencies and readiness to learn, explore and assimilate knowledge and develop new skills (Ryan & Deci, 2000b). These natural tendencies, however, can be either facilitated and supported or hindered by social contexts (Ryan & Deci, 2000b). Not only what makes people motivated is the interest of SDT, but also, what makes them thrive and flourish (Ryan & Deci, 2011). SDT conceptualizes three psychological needs, namely autonomy, competence and relatedness as essential nutriments for people to function optimally and grow psychologically (Deci & Ryan, 2000). These needs are thought to be universal across people and cultures and are applicable through all aspects of a person’s life (Milyavskaya & Koestner, 2011). Satisfying these needs seems to represent the underlying motivational mechanism that energizes and directs people’s behaviour (Broeck, Vansteenkiste, Witte, Soenens & Lens, 2010; Deci & Ryan, 2000).

Autonomy refers to the perception that one’s behaviour is self-congruent and volitional. Competence refers to the perception that one is capable of influencing the environment in desirable ways. Relatedness involves the feeling of meaningful closeness and connectedness with others (Weinstein & Ryan, 2011). All three innate needs arguably to have intrinsic value to the self and are essential for well-being and behavioural persistence (Teixeira, Silva, Mata, Palmeira & Markland, 2012). Metaphorically, just like the sunlight, water and minerals are essential nutrients for plants to bloom, thrive or flourish; the three basic psychological needs are conceptualized as essential nutriments for people’s growth, integrity and health (Broeck et al., 2010; Reis et al., 2000; Ryan & Deci, 2000c). According to Niemiec et al. (2006), “the need for autonomy is feeling a sense of choice, endorsement, and volition with respect to initiating, maintaining, and terminating behavioural engagement” (p. 763).

In entrepreneurship, autonomy has been found as one of the most relevant motivational factors to start a business (Gelderen, 2010; Shane et al., 2003). Satisfying this basic psychological need means that individuals engage in starting a business because they want to be their own bosses and not be controlled by others. Autonomy represents actions that originate from the inner self of an individual and he/she acts
volitionally based on his/her personal choices (Niemiec & Ryan, 2009b; Ryan & Deci, 2002). A number of studies have supported the argument that autonomy is an essential motivational factor to start a business and its association with entrepreneurship and entrepreneurial intention (Caliendo & Kritikos, 2012; Douglas & Shepherd, 2002), self-employment (Croson & Minniti, 2012) and entrepreneurial orientation (Lumpkin, Cogliser & Schneider, 2009).

The need for competence concerns the feeling of effectiveness in interacting with the social or physical world (Niemiec et al., 2006) and “the belief that one has the ability to influence important outcomes” (Stone et al., 2009, p. 4). The feeling of competence about doing a certain task is characterized by challenge but within the capabilities and abilities of an individual so that he/she can satisfy his/her innate need for competence and thus be intrinsically motivated. Consequently, the tendency for personal growth, well-being and performance is high (Deci & Ryan, 2000). It is argued that adapting to complex and changing environment may result when the need for competence is satisfied (Deci & Ryan, 2000). The argument of SDT is that competence is an innate human need and people have a natural tendency to be competent and influence their environment rather than just perception of one’s capabilities to reach desired outcome. According to Van den Broeck, Vansteenkiste, De Witte and Lens (2008), “the satisfaction of the inborn need for competence represents current (instead of future-oriented) and more general (instead of specific) feelings of effectiveness. The need for competence is likely to stimulate individuals’ functioning and well-being on a more general level” (p. 280).

The need for relatedness refers to the feeling of being related and connected to others. It is the sense of belonging to a certain group; family, peers, managers or any social group. In addition to the needs for autonomy and competence, SDT posits that satisfaction of the need for relatedness facilitates the process of internalization. People tend to internalize and accept as their own values and practices of those to whom they feel, or want to feel, connected and from contexts in which they experience a sense of belonging. In the classroom, relatedness is deeply associated with a student feeling that the teacher genuinely likes, respects and values him/her. Students who report such relatedness are more likely to exhibit identified and integrated regulation for the arduous tasks involved in learning, whereas those who feel disconnected or rejected by teachers are more likely to move away from internalization and thus respond only to external contingencies and controls (Niemiec & Ryan, 2009).

According to SDT, satisfying basic psychological needs for autonomy, competence and relatedness can make intrinsic motivation sustainable. All needs are important for maintaining intrinsic motivation. Stated differently, if one need is satisfied and the other is not, intrinsic motivation may be hindered (Niemiec & Ryan, 2009; Stone et al., 2009). Based on the above discussion, positive outcomes result from the satisfaction of basic psychological needs and thus it is expected that they can play a role in making entrepreneurship more attractive and advantageous to university students. Therefore, the following hypotheses are formulated.

H1a, Autonomy is positively related to attitudes toward entrepreneurship.
H2a, Competence is positively related to attitudes toward entrepreneurship.
H3a, Relatedness is positively related to attitudes toward entrepreneurship.
H1b, Autonomy is positively related to perceived behavioural control.
H2b, Competence is positively related to perceived behavioural control.
H3b, Relatedness is positively related to perceived behavioural control.

Theory of Planned Behaviour
Theory of Planned Behaviour (TPB) has attracted a lot of attention among researchers (Armitage & Conner, 2001; Kautonen et al., 2013; Krueger et al., 2000). It has been applied in various research domains and it is considered as one of the most applicable theories of human intentions to perform
actions. Based on the social cognitive approach, theory of planned behaviour postulates that intention influences behaviour.

Central to TPB is the behavioural intention. According to TPB, behavioural intention is determined by three conceptually independent antecedents, namely attitudes towards behaviour, subjective norms and perceived behavioural control. In turn, the three behavioural intention antecedents are themselves preceded by three beliefs that guide human behaviours: behavioural beliefs (leading to attitudes towards behaviour), normative beliefs (leading to subjective norms) and control beliefs (leading to perceived behavioural control) (Ajzen, 1991). In the present study, subjective norms is not included as in many studies it has been found to be the least or not significant predictor of entrepreneurial intention (Almobaireek & Manolova, 2012; Krueger et al., 2000; Liñán & Chen, 2009).

Entrepreneurial intention refers to the readiness that people show to engage in a given behaviour such as being an entrepreneur. It is considered an immediate determinant of behaviour. Ajzen (1991) argues it is most likely a given behaviour will be performed if a strong intention to engage in that behaviour exists. For an individual to demonstrate a behaviour, motivation (intention) and ability (behavioural control) should be combined as intention alone is not enough. That is why perceived behavioural control is included in the model of TPB. Thus, intention to engage in an activity is determined by attitudes and perceived behavioural control. To strengthen the behavioural intention to perform an action, people should have a positive evaluation of it, should believe that important others want them to do it and perceive it as easy to be performed.

Attitude toward Entrepreneurship (ATE) refers to people’s overall evaluation (positive or negative) or appraisal of entrepreneurial behaviour (Ajzen, 1991). Prior to forming intention, people seem to make assessment in favour or not in favour of this behaviour. TPB posits that attitudes are determined by a set of behavioural beliefs, linking the behaviour to various outcomes and other attributes. Based on the evaluation of the beliefs, people acquire attitudes either positively or negatively. In this way, a favourable attitude toward behaviour (e.g. starting a business) is formed when it is perceived that it has advantages and desirable consequences for them. The undesirable consequences result from the negative attitude toward the behaviour. Positive attitudes toward entrepreneurship, if perceived as attractive and advantageous to individuals, will lead to better entrepreneurial intention. In fact, attitude has shown to be a strong predictor of entrepreneurial intention (Almobaireek & Manolova, 2012; Liñán & Chen, 2009) among others. However, in a contradicting view, Siu and Lo (2011) reported that attitude did not significantly predict entrepreneurial intention in the Chinese context which is characterized as a collectivistic society. Further, it has been found that attitude mediates the relationship between intention and SDT constructs (Roca & Gagne, 2008). Therefore, the following hypotheses are proposed:

- H4a, Attitude toward Entrepreneurship is positively related to entrepreneurial intention.
- H4b, Attitude toward entrepreneurship mediates the relationship between autonomy and entrepreneurial intention.
- H4c, Attitude toward entrepreneurship mediates the relationship between competence and entrepreneurial intention.
- H4d, Attitude toward entrepreneurship mediates the relationship between relatedness and entrepreneurial intention.

Perceived Behavioural Control (PBC) refers to people’s perception of how easy or difficult the behaviour is, such as starting a business, and how much volitional control they have over it (Ajzen, 1991). As outlined by TPB, PBC is preceded by control beliefs that have to do with the presence or absence of requisite resources and opportunities (Veciana et al., 2005). Ajzen (1991) states that “These control beliefs may be based in part on past experience with the behaviour, but they will usually also be influenced by second-hand information about the behaviour, by the experiences of acquaintances and
friends, and by other factors that increase or reduce the perceived difficulty of performing the behaviour in question” (p. 196). It can considerably affect intention and action. It has been attested that PBC, also treated as feasibility and self-efficacy, has been an influential determinant of entrepreneurial intention (Almobaireek & Manolova, 2012; Kautonen et al., 2013; Krueger et al., 2000; Liñán & Chen, 2009), to name a few. Based on the above, the following hypotheses are offered:

H5a, Perceived behavioural control is positively related to entrepreneurial intention.
H5b, Perceived behavioural control mediates the relationship between autonomy and entrepreneurial intention.
H5c, Perceived behavioural control mediates the relationship between competence and entrepreneurial intention.
H5d, Perceived behavioural control mediates the relationship between relatedness and entrepreneurial intention.

METHODS

Participants
Participants of this study were final year undergraduate university students from one public university, Sana’a University (76.8%), and one private university, University of Science & Technology (23.2%) located in the Yemeni Capital, Sana’a. The final sample consisted of 622 students (58.04% males and 41.96% females) enrolled in various disciplines in 15 faculties from both universities. It was ensured that an approximate representation of the final year undergraduate student population was reflected in the sample. The age distribution of the sample ranged from 21 years old (minimum) to 27 years (maximum). The mean age was 23.32 (SD= 1.47).

Instrument
Research instrument was drawn from previous studies to measure all specified constructs in the study model. Theory of planned behaviour constructs were measured by a scale developed by Liñán and Chen (2009). Entrepreneurial intention was assessed by a 6-item scale, ranging from 1= total disagreement to 7= total agreement. Sample item included “I have the firm intention to start a firm someday”. Attitude toward entrepreneurship construct was assessed by a 5-item scale, ranging from 1= total disagreement to 7= total agreement. Sample item was “Among various options, I’d rather be an entrepreneur”. PBC was assessed by using a 6-item scale, ranging from 1= total disagreement to 7= total agreement. Sample items included “I am prepared to start a viable firm” and “I can control the creation process of a new firm”. Basic psychological needs constructs of self-determination theory (SDT) were assessed by using existing measures that have been empirically validated and used in many studies. These scales are known as the Basic Psychological Needs Scale (BPNS) (Gagné, 2003) and the Balanced Measure of Psychological Needs (BMPN) scale (Sheldon & Hilpert, 2012). An 18 seven-point item scale was utilized to measure the three basic needs. Autonomy was assessed by using six items, an example of a positive item is “I generally feel free to express my ideas and opinions” and an example of a negative item is “In my daily life I frequently have to do what I am told”. Competence was measured by six items. Samples of positive and negative items are “Most days I feel a sense of accomplishment from what I do” and “Often I do not feel competent”, respectively. Relatedness was assessed by six items as well. Samples of positive and negative items are “I feel close and connected with other people who are important to me” and “Often I feel unappreciated by one or more important people”, respectively. All measures were administered in Arabic as the original measures were developed in English. A back translation procedure was performed and measures were verified by bilingual experts.

Data Analysis
Several statistical techniques were used in order to test the hypothesized model of the current study. SPSS (version 21) was utilized for data entry and management and thus provided the desired descriptive statistics of the sample. To test the hypotheses, confirmatory factor analysis (CFA) was first used in order
to validate the measures and then a full structural model was constructed. AMOS 20 and Mplus 7.3 were utilized for the analysis.

RESULTS

Prior to the main analysis, a number of procedures and tests of assumptions were performed. This included data editing and coding to ensure the appropriateness of data. Also, negative items used in the study were reverse-coded. Next, data cleaning was performed to ensure that the data can be used for analysis. This procedure included checking for missing data, outliers, normality and multicollinearity. It is important to address these issues beforehand to safeguard against any violation of statistical assumptions (Hair et al., 2010).

Structural Equation Modeling

Structural equation modeling (SEM) has become enormously popular among researchers (Kline, 2011) and without a doubt, it is regarded as one of the most important data analysis techniques (Kaplan, 2009). It is very useful particularly in developing and testing processes of theories (Hair, Ringle & Sarstedt, 2012). SEM has the capability to assess complex models, especially the ones that hypothesize multivariate interrelationships and thus is ideally suited to answer research questions in psychology, business, education and any other related fields (Smith & Cribbie, 2013). It consists of two parts, namely the measurement and the structural parts. The measurement part links the manifest variables (observed) to their latent (unobserved) variables via confirmatory factor analysis. The structural part links latent constructs to each other via a system of simultaneous equations (Kaplan, 2009).

The Hypothesized Measurement Model. The initial hypothesized measurement model consisted of six unobserved latent constructs that were measured by 35 observed variables (indicators): autonomy, competence, relatedness, attitudes, perceived behavioural control and lastly, entrepreneurial intention. In order to test the study’s measurement model, confirmatory factor analysis was performed. According to Byrne (2001), the measurement model should be tested prior to full structural model. This procedure is recommended as CFA confirms whether the measuring instruments are appropriately measuring the underlying constructs they are designed to measure. Also, it is better to assess the measurement model for any inadequacy or misfit before fully testing the structural model (Hair et al., 2010). As data exhibited some non-multivariate normality, Robust Maximum Likelihood (MLR) estimation available in Mplus program was used. MLR estimator is recommended to be used with continuous variables as it uses a sandwich estimator to produce parameter estimates and a $\chi^2$ statistic that is robust to non-normality and non-independence of observations (Muthén & Muthén, 1998-2012) and yields a robust chi-square test of model fit (Kaplan, 2009). Along with chi-square index, Mplus provides several goodness-of-fit indices such as Root Mean Square Error of Approximation (RMSEA), Standardized Root Mean Square Residual (SRMR), Tucker-Lewis Index (TLI) also referred to as Non-Normed Fit Index (NNFI) and Comparative Fit Index (CFI).

The unsatisfactory model fit of the initial measurement model resulted in the deletion of a number of items that contributed to the model misfit of the model. Nine indicators from the BSN constructs were eliminated. They were the ones that were negatively worded in the questionnaire and then reversed-coded in the data entry namely PA2r, PA4r, PA6r, PC2r, PC4r, PC6r, PR2r, PR4r and PR6r. Individual indicators should make sense and be significant (Bollen, 1989), should not have negative values and the correlation should not exceed 1 (Schumacker & Lomax, 2010). They displayed either very low loadings, larger measurement errors or confounding estimates. Further, four items from TPB scale were eliminated as well namely EI1, EI2, ATE1 and ATE2. The revised final measurement model shows a good and acceptable good fit indices: MLR $\chi^2 = 456.002$, $df = 194$, CFI = .945, TLI = .934, SRMR = .047, RMSEA = .047.
Table 1 presents means, standard deviations and inter-correlations of the study constructs. All means of the constructs were moderately high, ranging from 4.72 (SD=1.32) for PBC in 7-Likert scale to 5.97 (SD=1.02) for attitude. Also, an examination of bivariate correlations among the study constructs was performed. Correlation matrix informs the direction, strength and significance of the bivariate relationships (Sekaran & Bougie, 2010).

### Table 1 Means, Standard Deviations, and Correlation among Study Constructs

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Mean</th>
<th>SD</th>
<th>[No. of Items]</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Entrepreneurial Intention</td>
<td>5.89</td>
<td>1.05</td>
<td>[4]</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Attitude</td>
<td>5.97</td>
<td>1.02</td>
<td>[3]</td>
<td>.618</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Perceived Behavioural Control</td>
<td>1.32</td>
<td>1.32</td>
<td>[3]</td>
<td>.463</td>
<td>.313</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Autonomy</td>
<td>5.83</td>
<td>1.11</td>
<td>[6]</td>
<td>.325</td>
<td>.437</td>
<td>.262</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Competence</td>
<td>5.38</td>
<td>1.28</td>
<td>[3]</td>
<td>.301</td>
<td>.402</td>
<td>.370</td>
<td>.489</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>6. Relatedness</td>
<td>5.81</td>
<td>1.01</td>
<td>[3]</td>
<td>.268</td>
<td>.317</td>
<td>.205</td>
<td>.491</td>
<td>.403</td>
<td>1.000</td>
</tr>
</tbody>
</table>

**Construct Validity and Reliability**. Construct validity refers to the extent to which a set of measured variables are actual representation of theoretical latent variables they are designed to measure (Hair et al., 2010). One of the CFA’s primary uses and biggest advantage is to assess construct validity; providing psychometric evidence of convergent validity and discriminant validity. Convergent validity refers to the high proportion of variance shared by indicators measuring a specific construct or the extent to which these indicators converge with that construct. As a guideline for assessing convergent validity, factor loading should be 0.50 or greater, or ideally 0.70 or higher, the average variance extracted (AVE) values should be greater than ≥ 0.50 and construct reliability (CR) should be greater than .70. Discriminant validity refers to the extent to which latent variables are truly distinct from other constructs (Hair et al., 2010). In order for discriminant validity to be achieved, the AVE should be greater than the Maximum Shared Squared Variance (AVE>MSV) and the Average Shared Squared Variance (AVE > ASV) (Hair et al., 2010). Table 2 provides evidence of constructs reliability and validity.

### Table 2 Standardized Factor Loading, Constructs Reliability, Convergent and Discriminant Validity

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
<th>Standardized loadings</th>
<th>Cronbach’s Alpha</th>
<th>C.R.</th>
<th>AVE</th>
<th>MSV</th>
<th>ASV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Intention</td>
<td>EI3</td>
<td>.684</td>
<td></td>
<td>.814</td>
<td>.524</td>
<td>.375</td>
<td>.171</td>
</tr>
<tr>
<td></td>
<td>EI4</td>
<td>.750</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EI5</td>
<td>.683</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EI6</td>
<td>.774</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude toward Entrepreneurship</td>
<td>ATE3</td>
<td>.645</td>
<td></td>
<td>.750</td>
<td>.502</td>
<td>.375</td>
<td>.181</td>
</tr>
<tr>
<td></td>
<td>ATE4</td>
<td>.679</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATE5</td>
<td>.788</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Behavioural Control</td>
<td>PBC1</td>
<td>.530</td>
<td></td>
<td>.865</td>
<td>.522</td>
<td>.213</td>
<td>.111</td>
</tr>
<tr>
<td></td>
<td>PBC2</td>
<td>.707</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PBC3</td>
<td>.682</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PBC4</td>
<td>.865</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PBC5</td>
<td>.838</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Motivational and Attitudinal Determinants of Entrepreneurial Intention: Application of Structural Equation Modeling

The Structural Model. Following the successful fitting of measurement model, a full structural equation modeling (containing both measurement model and structural model) was then conducted using Mplus. The hypothesized relationships among latent variables are as follows: autonomy → attitude, perceived behavioural control and entrepreneurial intention; competence → attitude, perceived behavioural control and entrepreneurial intention; relatedness → attitude, perceived behavioural control and entrepreneurial intention and, attitude and perceived behavioural control → entrepreneurial intention. As depicted in Figure 1, these structural relationships were tested and the results show that the full hypothesized structural model had achieved a good fit to the observed data: MLR $\chi^2 = 470.966$, df = 198, CFI = .943, TLI = .933, SRMR = .053, RMSEA = .047.

Hypothesis Testing (Direct Effects). This section discusses the hypothesized direct structural relationships (indirect relationships are discussed next). The significance of estimated paths were examined as they provided the basis to accept or reject a hypothesis.

Hypotheses 1a and 1b proposed that autonomy has direct and positive effect on attitude towards entrepreneurship and perceived behavioural control. Result shows that the first hypothesis was significant
and in the hypothesized direction as expected (Standardized Coefficient = .286, z = 3.274, p = 0.001). This indicates that autonomy had a strong positive effect on attitude and thus the hypothesis was supported. However, hypotheses 1b was not significant (Standardized Coefficient = .104, z = 1.657, p = 0.098) and as a result, this hypothesis was not supported.

Hypotheses 2a and 2b also proposed that attitude and intention are affected positively and directly by competence. Results show that these two hypotheses were significant (Standardized Coefficient = .230, z = 3.454, p = 0.001) for H2a and (Standardized Coefficient = .311, z = 5.348, p = 0.000) for H2b, which indicate that competence had a strong positive effect on attitude and PBC, and thus these hypotheses were supported.

Relatedness was hypothesised to have effect on the two endogenous constructs but contrary to expectations, it did not have an influence on any and thus H3a and 3b were not supported. Hypotheses 4a and 5a proposed that attitude and PBC have a direct and positive effect on entrepreneurial intention. The results were significant and in the hypothesized direction as expected (Standardized Coefficient = .531, z = 8.393, p = 0.000) for H4a and (Standardized Coefficient = .323, z = 6.536, p = 0.000) for H5a, which indicate that attitude and PBC had a positive effect on entrepreneurial intention, thus these hypotheses were supported.

Hypothesis Testing (Indirect Effects). In accordance with the study’s objectives, the present study basically examined the mediating effects of attitude and PBC of theory of planned behaviour in the relationship between the independent SDT constructs and the dependent variable entrepreneurial intention. Mediation has been defined by Baron and Kenny (1986) as “the generative mechanism through which the focal independent variable is able to influence the dependent variable of interest. It causes variation in the dependent variable and itself is caused to vary by the independent variable” (p. 1173). So, the effect of the independent variable on the dependent variable is transmitted through the mediator(s) (MacKinnon, 2008). For a variable to be called a mediator, there are a number of steps or criteria that need to be followed. Baron and Kenny's (1986) causal steps method is one of the most widely used methods in testing for mediation (MacKinnon, 2008). These steps include 1) the independent variables, X, (e.g., autonomy, competence and relatedness) must have a significant relationship with the dependent variable, Y, (e.g., entrepreneurial intention). The purpose of this first step is to provide evidence that there is an effect to be mediated, 2) the independent variables (e.g., autonomy, competence and relatedness) must have a significant relationship with the mediators, M (e.g., attitudes and perceived behavioural control), 3) the mediators (e.g., attitudes and perceived behavioural control) must have significant relationship with the dependent variable (e.g., entrepreneurial intention) and 4) the direct effect from the independent variables to the dependent variable must be non-significant. In the present study, a number of mediation were not modelled in the final mediation structural model as they did not meet some or all these guidelines. For instance, relatedness did not have a significant relationship either with the independent variable or with the mediators, thus it had to be excluded from the mediation analysis.

It has been hypothesized that attitudes mediate SDT constructs and entrepreneurial intention. Specifically, Hypotheses 4b, c and d state that “The relationship between entrepreneurial intention and autonomy is mediated by the attitudes toward entrepreneurship”, “The relationship between entrepreneurial intention and competence is mediated by the attitudes toward entrepreneurship” and “The relationship between entrepreneurial intention and relatedness is mediated by the attitudes toward entrepreneurship”. The latter hypothesis was not tested as relatedness was not included in the mediation analysis.

The indirect effect of the path from autonomy to entrepreneurial intention via attitude was significant (Standardized Coefficient = 0.152, z = 2.803, p = 0.005). Also, the specific indirect effect of the path from competence to entrepreneurial intention via attitude was significant Standardized Coefficient = 0.122, z = 3.276, p = 0.001). Thus, Hypotheses 4b and c were supported.
Motivational and Attitudinal Determinants of Entrepreneurial Intention: Application of Structural Equation Modeling

Perceived behavioural control was proposed to mediate SDT constructs and intention. Specifically, Hypotheses 5b, c and d state that “The relationship between entrepreneurial intention and attitude is mediated by PBC”, “The relationship between entrepreneurial intention and competence is mediated by PBC” and “The relationship between entrepreneurial intention and relatedness is mediated by the PBC”. H5a and c were not tested as these relationships did not meet mediation requirements. The indirect effect of the path from competence to entrepreneurial intention via PBC was significant (Standardized Coefficient = 0.100, $z = 4.250$, $p = 0.000$) and thus Hypothesis 5 c was supported. Both mediation relationships were full mediation.

**DISCUSSION**

The purpose of the present study was to examine students’ intention and motivation to start their own business. Specifically, it aimed at testing an integrated model of entrepreneurship motivation and intention in a Muslim country like Yemen. Its originality lies in the attempt to integrate theory of planned behaviour and self-determination theory to better understand students’ perceptions and what fosters them.

The results clearly confirm the relevancy and importance of SDT constructs to entrepreneurship research. Autonomy and competence needs fulfillment have a great effect on fostering students’ attitudes towards entrepreneurship and perceived behavioural control. This is in line with previous studies that suggest that positive outcomes result from satisfying this basic psychological need (Croson & Minniti, 2012; Niemiec & Ryan, 2009; Oliver et al., 2008). The results indicate that students have the freedom to choose their career paths and this choice is endorsed by their self as they believe that their choice emanates from their inner self. Autonomy and competence contribute to students’ intention to start their own business via its proximal determinants; attitudes towards entrepreneurship and perceived behavioural control. As for relatedness, it was not found to be a significant predictor of the attitudinal determinants of entrepreneurial intention. This is perhaps because of the nature of entrepreneurial behaviour where students need autonomy to choose and endorse their actions and need to be competent in executing such behaviour, thus feeling connected to people may not be that important for them.

The applicability of theory of planned behaviour in entrepreneurship research had been supported by this study. Attitudes towards entrepreneurship and perceived behavioural control were strong predictors of intention to be entrepreneurs. This is in line with a number of studies such as Almobaireek and Manolova (2012 and Liñán and Chen (2009). Further, attitudes and PBC played a full mediation role in the relationships between SDT constructs and entrepreneurial intention. This is another evidence that supports TPB applicability.

In line with the study’s objective, examining the motivation and intention of Muslim university students is necessary in order to understand whether Islam encourages entrepreneurship or not. From the current results, it is obvious that those students inspire to be entrepreneurs and they would strive for it. The findings of the present study indicate that Landes’s (1999) claim that Islam has a negative effect on entrepreneurship is untrue. In support of our findings, in a recent study, Audretsch et al. (2013) found that Islam strongly supports entrepreneurial activities. Islam is also found to strongly support entrepreneurship tendency in another recent research conducted by Zelekha et al. (2013).

**CONCLUSION**

The importance of entrepreneurship to any economy, given its impact on job creation, innovation and market efficiencies (Shane & Venkataraman, 2000), and the role of motivation in entrepreneurship tendencies cannot be downplayed (Fayolle et al., 2014). Despite the significance of basic psychological needs satisfaction in human motivation to thrive and flourish in general life activities, entrepreneurship...
included, it is striking that SDT has not been given its due attention in entrepreneurship research, knowing that SDT is very much applicable to voluntary behaviours such as entrepreneurship. The role of SDT of motivation in facilitating positive attitudes towards entrepreneurship has been rather neglected in the existing literature, at least not much research on this issue has been undertaken in Arab Muslim countries such as Yemen.

In an attempt to fill this void, this study has tested a model that proposes basic psychological needs indirect influence on entrepreneurial intention by fostering positive attitudinal determinants towards entrepreneurship in the Yemeni context. The findings demonstrate that autonomy and competence are strong predictors of students’ entrepreneurial intention via its proximal antecedents, namely attitude and perceived behavioural control. These antecedents fully mediate the relationship between autonomy and competence of SDT and intention, confirming the applicability of SDT and TPB.

The findings of the current study provide theoretical and practical implications. This is one of the first studies that integrates an organismic theory of motivation SDT and social cognitive approach of TPB in entrepreneurship motivation and intention research. The study’s findings substantiate previous evidence that positive outcomes result from the satisfaction of basic psychological needs of SDT. The role of SDT in facilitating students’ perceptions and in predicting their intentions of volitional behaviours such as entrepreneurship behaviours has been emphasised by the current study.

This study is without no limitations. First, final year undergraduate university students were surveyed and therefore, generalizing the findings to the entire youth of the country may be impractical. Second, this study is based on cross-sectional design, which means students are not tracked after their graduation to check whether their intentions have led to entrepreneurial behaviour. It is recommended that future studies may use longitudinal design to test intention-behaviour relationship. Also, future research may consider including subjective norms constructs in the model and examine how they can relate to other constructs.

REFERENCES


Factors Influencing the Satisfaction of Distributors of Network Marketing: A Study of Amway India and Hindustan Unilever Network Companies in India

Key Words: Network Marketing, Distributors, Satisfaction, Customers, Product Selling, Business Orientation, India

INTRODUCTION

The concept of ‘Network Marketing’ has been transforming the way companies are doing business and is gaining a steady momentum. Many companies across the world have perceived the potential of this concept to reach prospective customers in the nook and corners of the world. The traditional distribution structure in most of the marketing companies for a long time depended on tried and tested physical distribution system of “Manufacturer – Wholesaler – Retailer - Consumer”. It is like lessening the scale of networking of sales persons in selling products to the end-users through ‘Referral’ and ‘Word of Mouth’ (WOM) publicity.

Network Marketing is an opportunity through which people can protect themselves from the unemployment or insufficient salary of paid jobs. In foreseeable future significant number of goods and services sold in the world will be through Network Marketing companies. Most of the Network Marketing companies feel that there is a bright future because of plethora of reasons like ‘diffusion of brands’ through powerful ‘word of mouth’, ‘referral’, ‘product quality’, ‘Low Investment-cum-High Returns’ and ‘Royalty Income’ etc. While Network Marketing has been fast growing as per organizational spectrum, it has sizable unorganized sector.

Network Marketing in India: Need for the Study

It is observed that ‘Attrition’ percentage has been distressingly high among Network Marketing distributors especially in India (differs from company to company and time to time). Misuse or abuse of practices by a few Fly-by-night operators, lack of distributor motivation, high pricing etc. necessitated in Network Marketing domain studies are required to understand Network Marketing practices in true spirit as an alternative distributor mechanism focusing on its dimensions and the perception of existing Network Marketing distributors.

Network Marketing Companies’ sales revenues are rapidly increasing year by year with a Compounded Average Growth Rate (CAGR) of 20% additional source of income, employment, contribution of tax revenue to government for development, and Corporate Social Responsibility (CSR) initiatives.

As per the Indian Direct Selling Association (IDSA) estimates Direct Selling (DS) industry in India is estimated to reach INR 3,40,000 million in 2011-2012 while the distributor base is expected to reach 80 Lakhs by 2014-2015. Direct Selling has generated sundry self-employment opportunities to women. According to FICCI (Federation of Indian Chambers of Commerce & Industry) and Indicus Analytics (April 2013), Direct Selling is going to increase its importance in India, which will provide an additional
source of employment often part-time and to women. Contribution of direct selling to tax revenues to Governments will also increase and it is indicating that a positive correlation between ‘direct selling’ and ‘Monthly Income’ was indicated by PHD (Progressive, Harmony and Development) studies. Many myths were prevailing on Multilevel Marketing doubting their ethical perspectives.

In light of the above facts, it is quite relevant and pertinent to study Network Marketing in Indian context focusing on the factors influencing the satisfaction of distributors of network companies.

The market size of the Direct Selling industry was INR 63,851 million for 2011-2012 and is expected to reach INR 1, 08,436 million by 2014 -2016. The members of these groups are spending time and effort, meeting rigorous requirements and paying money to attend the business building seminars. The distributors are willing to sacrifice because they hope to generate new sales and form alliance.

LITERATURE REVIEW

The study of network marketing has been attracting the attention of the scholars across the world since few years. Richard Berry (1997) explains that in essence, Network Marketing is a way of organizing sales operations of a direct selling organization. It is a non-store approach to relating and distribution of goods and services, directly to the customers. Network Marketing embodies the essence of free enterprise by providing an opportunity for the interested individuals or independent contractors to run a home based business. The author also indicates that, instead of a supply organization constructing a large administrative and sales force comprising of employees, self-employed independent contractors can be encouraged to build a sales organization of persons, like themselves, by using a unique coaching and training system called ‘sponsoring’. In this system of sponsoring the distributor (sometimes referred to as an ‘independent contractor’ or ‘a direct salesperson’) shares knowledge and expertise with new entrants leaving the business for the first time. In turn, for this commitment, the sponsor earns commission based on a percentage of the sales from those recruited, subject to the structure of the organization plan.

Antony K.Y.P. (2003) provides the definitions to network marketing and explains that the direct selling are constantly changing and being interpreted differently by various scholars and even industrial practitioners.

Farrellw J. and Michael (2005) established that although network effects can make predation more likely to succeed, it is found that the leading anti-predation rules may lower or raise efficiency and consumer welfare in network markets. The authors found that: (a) the extensive debates about the ‘correct’ measure of cost on which to base price floors are unlikely to be productive; (b) the Ordover-Willig rule that is widely thought to be correct in theory but difficult to apply in practice is, in fact, incorrect in theory; and (c) efficient price floors would have to depend on consumer expectations and co-ordination processes that are unlikely to be observable in practice.

Alexander A. and Nicholls A. (2006) studied the value of a network perspective in enhancing the understanding of the business to consumer marketing of high-involvement product categories. This is achieved through the analysis of the development of fair trade marketing in the UK. The relevance of an Actor Network Theory (ANT) informed interpretation of the development of the fair trade marketing network is revealed. Its emphasis on the processes of exchange and the role of human and nonhuman actors in enabling interactions within the network are shown to be important and fair trade marketing is shown as occurring within an unfolding network of information exchanges. Analysis of this emerging network highlights a shift of emphasis in fair trade marketing from the fair trade process to fair trade products and finally, fair trade places.
Ylikoski E. O. (2006) in her research reveals that the purpose is to explore conflicting representations of selling and especially Network Marketing. Her first objective is to identify the fundamental features of sales discourses within academic and practitioner communities. The second objective is to understand in what ways the combination and contestation of these discourses produce ambiguous images of selling and network marketing, for example, in the media.

Mylonakis J. and Malioukis A. (2007) stated that the rapid growth of Multilevel Marketing (MLM), or Network Marketing industry, in the last decade has made itself an attention-gathering star in the retailing industry. Hoping to reap the merits and benefits of this unique marketing method, more and more companies who marketed their products and services through traditional market channels previously are now testing the possibility of employing the Network Marketing formula. Nevertheless, influenced by numerous factors, not every product or service has equal chance for realizing its market potential in the area of direct selling. The paradigm of this study raises the question of how a business, in which almost none of its sales representatives earn a profit and almost none has a sustainable retail distributor base, could be called direct selling company. Indeed, how such an enterprise could be considered a legitimate business.

The study of network marketing has been attracting the attention of the Indian scholars. Sreekumar P. (2007) in his study, Multilevel Marketing (MLM) embraces more and more arenas today whereas insurance business is just one among them. Selling Insurance policies, traditionally, is considered as a demotivating and dragging job. With the competition heating up in the Insurance sector, companies are looking for innovative methods to spread the message and gain maximum business in shorter time. Many local MLM companies having quite large spread in the market are joining hands with leading insurance brands to promote their products along with an assortment of their own products. Insurance sector makes available long term debt for the economic development of the country. At the same time, the MLM route provides employment opportunities to millions of people and enhances their social status. The MLM members also get tremendous opportunity to develop themselves personally. This multiple role of MLM companies can be looked at as a social contribution and these companies or cooperatives are emerging as a development oriented social movement. The study emphasizes the significance of the economic and social impact of MLM as a tool which can impact society through employment generation, mobilizing long term funds and improving quality of life of people.

The study conducted by Bhavannarayana Kandala, Madhusudhan Prasad V (2010) found that Amway India and Hindustan Unilever Network promote individual ‘business opportunity’ through their direct selling approach of world-class network products. Most of the distributors collected information about Amway India and Hindustan Unilever Network through the ‘Friends’ and ‘Relatives’, who are also distributors and in the opinion that the favorable products of the distributors are fast moving Network products. A majority of the distributors opined that the long-term association with Amway India and Hindustan Unilever Network influences the distributors to pursue the business. The level of satisfaction has been measured with the help of five-point Likert scale technique and Henry Garret Rank technique. The demographic characteristics such as gender, education, marital status, occupation, and monthly income of the distributors of Amway India and Hindustan Unilever Network products do not influence their level of satisfaction.

Geevarghese K. Mathews, James Manalel, Siby Zacharias (2007) explains that the studies have shown that ‘consumers often have negative perception’ of direct selling organisations and network marketing organisations in particular. The aggressive selling techniques, exaggerations of facts in recruiting, pyramiding scams and unethical way of exploiting relationships all together form a basis for this negative perception. The study presents the exploitation of relationships viz friends, relatives, colleagues and attitude of channel members in network marketing.
Neena Vyas and Savita Batish (2009) studied the involvement of women in direct selling enterprises and their income contribution. The purposively selected direct selling enterprises were Amway India, Aviance, Avon, Oriflame and Tupperware. The total sample for the study comprised of 298 respondents from Ludhiana city selected through probability proportional to size sampling method. Data were collected through personal interview method. The study found that the majority of the respondents were middle-aged, graduates, having nuclear families and housewives before joining the enterprises. Maximum number of the respondents joined these enterprises during the year 2002-2003 by just paying membership fee less than rupees 5000. Income earned by the respondents ranged between rupees 5000 to 15,000 per month from their respective enterprises.

Arpita Mukherjee et.al (2009), in their report mentioned that there is need for a clear definition, need to streamline the Foreign Direct Investment policy, need for a governing legislation and need for a nodal ministry.

**OBJECTIVE AND METHODOLOGY**

The main objective of the study is to identify the factors influencing the satisfaction of distributors of Amway India and Hindustan Unilever Network companies.

This study is descriptive in nature and based on a survey. The study units are select distributors of ‘Amway India’ and ‘Hindustan Unilever Network’. These two leading network marketing companies have attained high level of marketing success in the network marketing type of business organizations and are considered as market leaders in this kind of business. Both companies are subsidies for Multi-National Companies i.e. Amway Corporation and Unilever, which have major market shares. They have similar comparable profile and product range.

The population of the study was limited to distributors (commission earners on the basis of performance) from single digit per centers and double digit per centers. The respondents were selected on simple random sampling basis. The sample size of 600 taken in this survey is valid.

The study was conducted by administering a questionnaire to fill up by the distributors who has come for ordering products fag end of month at the stock delivery point. The time period of about nine months from May 2011 to January 2012 was spent to collect the data.

**DATA ANALYSIS AND RESULTS**

The data analysis and results were obtained by using ‘Descriptive’ as well as ‘Inferential’ statistics on the basis of responses collected from the distributors of selected Network marketing companies through questionnaire survey method. ‘Inferential’ statistical tools like Reliability Test and Factor Analysis were applied.

**DEMOGRAPHICS**

Demographic characteristics of the respondents include Age, Gender, Marital Status, Education, Occupation and Monthly Income are as shown in the below table (Table 1).

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>Description</th>
<th>No of respondents</th>
<th>Percent</th>
<th>Mean</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Years)</td>
<td>18-30</td>
<td>276</td>
<td>46</td>
<td>33</td>
<td>7.887*</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>181</td>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Factors Influencing the Satisfaction of Distributors of Network Marketing: A Study of Amway India and Hindustan Unilever Network Companies in India

Table 1 shows the profiles of 600 respondents. The respondents are the distributors of sample companies. 46% of respondents are between 18-30 years of age, 30% are between 31-40 years age group. Respondents above 41 years constitute 24% of the sample. Women dominated constituting 66% of the sample. 61% of the respondents are married. 50% of the respondents are graduates. SSC constituted 24% of the sample. Housewives constituted the segment 41% of the sample. 37% of respondents have monthly Income above Rs.20,001, 29% have income in the range of Rs.10,001-Rs.20,000 and 34% have income of less than Rs.10,001. Thus the sample represents heterogenic demographic categories.

Reliability Statistics

Table 2: Reliability Table

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>No of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.712</td>
<td>18</td>
</tr>
</tbody>
</table>

Cronbach’s Alpha Reliability statistics shows .712 for 18 Items, it is more than .600 which is close to .6. In social sciences, it is adequate Malhotra hence proceeded with further study.

Adequacy of Sample Size
At the outset KMO (Kaiser-Meyer-Olkin) sample adequacy test is conducted. KMO & BARTLETT’S test of sphericity Appx Chi-square it produced KMO measure of sample adequacy revealed KMO & BARTLETT’S value is .614(> greater than .500) and confirms the size of sample is adequate. Therefore the factors analysis is statistically significant.

Table 1: KMO and BARTLETT’S Test

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>KMO Measure of Sampling Adequacy</td>
<td>.614</td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity Approx. Chi-Square</td>
<td>667.536</td>
</tr>
<tr>
<td>Degree of Freedom</td>
<td>153</td>
</tr>
</tbody>
</table>
The following eighteen statements out of thirty statements are adopted from the study conducted on “Business Women, Dabbler, Revivalist or Cornmen” by Ylikoski E. O.

Table 4: Principle Component Matrix

<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>COMPONETS 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>I guide my down line in product selling activities</td>
<td>.19</td>
<td>.31</td>
<td>.67</td>
<td>.074</td>
<td>.317</td>
<td>-.197</td>
<td>.11</td>
<td>.09</td>
</tr>
<tr>
<td>I orient my down line into our practices and procedures</td>
<td>.33</td>
<td>.62</td>
<td>-.24</td>
<td>.087</td>
<td>-.292</td>
<td>-.003</td>
<td>-.21</td>
<td>-.07</td>
</tr>
<tr>
<td>I recruit new members into the sales organization</td>
<td>.14</td>
<td>.58</td>
<td>.03</td>
<td>.076</td>
<td>-.396</td>
<td>.300</td>
<td>.11</td>
<td>.02</td>
</tr>
<tr>
<td>I refer Network products to acquaintances</td>
<td>.13</td>
<td>.43</td>
<td>-.59</td>
<td>.080</td>
<td>.191</td>
<td>-.195</td>
<td>-.06</td>
<td>.58</td>
</tr>
<tr>
<td>I recommend Network products to other people besides acquaintances</td>
<td>.30</td>
<td>.11</td>
<td>.12</td>
<td>.285</td>
<td>.381</td>
<td>.282</td>
<td>.04</td>
<td>.01</td>
</tr>
<tr>
<td>I use my Network products regularly</td>
<td>.41</td>
<td>.21</td>
<td>-.87</td>
<td>-.059</td>
<td>-.092</td>
<td>.104</td>
<td>.20</td>
<td>.62</td>
</tr>
<tr>
<td>I participate in training and meetings organized by my Network Marketing Company or my up line.</td>
<td>.09</td>
<td>.32</td>
<td>-.35</td>
<td>.430</td>
<td>.101</td>
<td>.358</td>
<td>.01</td>
<td>-.22</td>
</tr>
<tr>
<td>I keep in touch with my up line</td>
<td>.39</td>
<td>.10</td>
<td>-.07</td>
<td>-.076</td>
<td>-.045</td>
<td>-.072</td>
<td>-.18</td>
<td>.12</td>
</tr>
<tr>
<td>I aim at contributing to the development of direct selling and networking activity, e.g. through associations</td>
<td>.18</td>
<td>.32</td>
<td>-.06</td>
<td>.368</td>
<td>-.064</td>
<td>.331</td>
<td>.62</td>
<td>-.08</td>
</tr>
<tr>
<td>I keep in touch with the personnel in the my Network Marketing Office</td>
<td>.05</td>
<td>.01</td>
<td>-.07</td>
<td>-.051</td>
<td>-.293</td>
<td>-.419</td>
<td>.28</td>
<td>.35</td>
</tr>
<tr>
<td>In my activities, I follow the business model given by my sponsor (or up line) with extreme care</td>
<td>.29</td>
<td>.03</td>
<td>-.08</td>
<td>-.076</td>
<td>-.405</td>
<td>-.072</td>
<td>-.16</td>
<td>.01</td>
</tr>
<tr>
<td>I follow the distributor contract with extreme care</td>
<td>-.54</td>
<td>.27</td>
<td>.273</td>
<td>.148</td>
<td>.031</td>
<td>-.16</td>
<td>.01</td>
<td>.03</td>
</tr>
<tr>
<td>I keep in touch with my customers regularly</td>
<td>.14</td>
<td>.46</td>
<td>-.317</td>
<td>.041</td>
<td>-.117</td>
<td>.31</td>
<td>-.03</td>
<td>.05</td>
</tr>
</tbody>
</table>
Factors Influencing the Satisfaction of Distributors of Network Marketing: A Study of Amway India and Hindustan Unilever Network Companies in India

<table>
<thead>
<tr>
<th>I recommend Network membership to acquaintances.</th>
<th>.48</th>
<th>.10</th>
<th>.45</th>
<th>-</th>
<th>-.175</th>
<th>-.088</th>
<th>.153</th>
<th>-.23</th>
<th>-.02</th>
</tr>
</thead>
<tbody>
<tr>
<td>I aim at contributing to issues concerning direct selling network outside the NW organization.</td>
<td>.45</td>
<td>.28</td>
<td>.03</td>
<td>0</td>
<td>.145</td>
<td>.389</td>
<td>-.383</td>
<td>-.31</td>
<td>.13</td>
</tr>
<tr>
<td>I keep in touch with distributors in Network Marketing Organization.</td>
<td>-.21</td>
<td>.07</td>
<td>.08</td>
<td>9</td>
<td>.744</td>
<td>-.248</td>
<td>-.030</td>
<td>.14</td>
<td>.06</td>
</tr>
<tr>
<td>I make recommendations to Network Marketing Organization concerning issues that affect the distributor network.</td>
<td>-.63</td>
<td>.09</td>
<td>.05</td>
<td>3</td>
<td>-.020</td>
<td>-.011</td>
<td>.088</td>
<td>.07</td>
<td>.23</td>
</tr>
</tbody>
</table>

Source: Primary Data

The Principal Component Matrix is rotated using the Varimax rotation technique which gives the Rotated Component Matrix. Rotation of factors helps in the better interpretation of factors.

**Factor Analysis: Dimensions**

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigen Values</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance Explained</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>1</td>
<td>2.003</td>
<td>11.130</td>
<td>11.130</td>
</tr>
<tr>
<td>3</td>
<td>1.580</td>
<td>8.779</td>
<td>30.393</td>
</tr>
<tr>
<td>4</td>
<td>1.264</td>
<td>7.022</td>
<td>37.415</td>
</tr>
<tr>
<td>5</td>
<td>1.223</td>
<td>6.797</td>
<td>44.212</td>
</tr>
<tr>
<td>6</td>
<td>1.156</td>
<td>6.420</td>
<td>50.632</td>
</tr>
<tr>
<td>7</td>
<td>1.080</td>
<td>5.999</td>
<td>56.631</td>
</tr>
<tr>
<td>8</td>
<td>1.048</td>
<td>5.822</td>
<td>62.452</td>
</tr>
<tr>
<td>9</td>
<td>.975</td>
<td>5.419</td>
<td>73.109</td>
</tr>
<tr>
<td>10</td>
<td>.943</td>
<td>5.237</td>
<td>78.055</td>
</tr>
<tr>
<td>11</td>
<td>.890</td>
<td>4.946</td>
<td>82.896</td>
</tr>
<tr>
<td>12</td>
<td>.871</td>
<td>4.841</td>
<td>87.203</td>
</tr>
<tr>
<td>13</td>
<td>.775</td>
<td>4.308</td>
<td>90.946</td>
</tr>
<tr>
<td>14</td>
<td>.674</td>
<td>3.742</td>
<td>94.342</td>
</tr>
<tr>
<td>15</td>
<td>.611</td>
<td>3.396</td>
<td>98.626</td>
</tr>
<tr>
<td>16</td>
<td>.411</td>
<td>2.284</td>
<td>100.000</td>
</tr>
</tbody>
</table>

Note: Variance in the ‘percentage of variance’ is explained by varimax rotation.
Source: Primary Data
FACTORS: The initial number of factors is the same as the number of variables used in the factors analysis. However all 18 statements will be not be retained; only 8 factors are retained since their Eigen value is greater than 1.

EIGEN VALUES: Eigen values represent the variances of the factors.

Influencing factors are those factors which are Eigen value more than 1. Influencing factors are those factors with Eigen value is greater than 1. In this test only 8 factors out of 18 statements are considered since their Eigen value is more than ‘1’ i.e. 2.003, 1.887, 1.580, 1.264, 1.223, 1.156, 1.080 and 1.048 for the components (Regular usage of products), (Regular Contact with Customers), (Guiding Down line in Product Selling), (Recruitment of new members), (Continuous Contact with distributors of other Networks), (Contribution for Development of Network marketing Activities), (Continuous Contact with Network Marketing Office Personnel) and (Referring Network Products to Acquaintances) respectively. The total variance for the eight factors is 62.45%, which is considered to be statistically sufficient.

Table 3: Rotated Component Matrix

<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>COMPONENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>I guide my down line in product selling activities</td>
<td>- .05</td>
</tr>
<tr>
<td>I orient my down line into our company practices and procedures</td>
<td>- .01</td>
</tr>
<tr>
<td>I recruit new members into the sales organization</td>
<td>.02</td>
</tr>
<tr>
<td>I keep in touch with my down line</td>
<td>- .01</td>
</tr>
<tr>
<td>I refer Network products to acquaintances</td>
<td>- .11</td>
</tr>
<tr>
<td>I recommend Network products to other people besides acquaintances</td>
<td>.02</td>
</tr>
<tr>
<td>I keep in touch with my customers regularly</td>
<td>- .02</td>
</tr>
<tr>
<td>I recommend Network membership to acquaintances</td>
<td>.28</td>
</tr>
<tr>
<td>I aim at contributing to issues concerning direct selling and network marketing outside the Network organization</td>
<td>.62 3</td>
</tr>
<tr>
<td>I keep in touch with distributors in other Network Marketing Organizations</td>
<td>- .00</td>
</tr>
<tr>
<td>I aim at contributing to the development of networking activity, e.g. through associations</td>
<td>.11 3</td>
</tr>
<tr>
<td>I make recommendations to Network Marketing Organizations concerning</td>
<td>- .55</td>
</tr>
</tbody>
</table>
Factors Influencing the Satisfaction of Distributors of Network Marketing: A Study of Amway India and Hindustan Unilever Network Companies in India

<table>
<thead>
<tr>
<th>Issues</th>
<th>Factor</th>
<th>Factor</th>
<th>Factor</th>
<th>Factor</th>
<th>Factor</th>
<th>Factor</th>
<th>Factor</th>
<th>Factor</th>
<th>Factor</th>
<th>Factor</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>I use my Network Marketing Organizations products regularly</td>
<td>.64</td>
<td>.031</td>
<td>.087</td>
<td>.122</td>
<td>.105</td>
<td>.120</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.231</td>
</tr>
<tr>
<td>I participate in training and meetings organized by my Network Marketing Company and my up line</td>
<td>.27</td>
<td>.057</td>
<td>.118</td>
<td>.012</td>
<td>.402</td>
<td>.068</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.377</td>
</tr>
<tr>
<td>I keep in touch with my up line</td>
<td>.28</td>
<td>.011</td>
<td>.078</td>
<td>.056</td>
<td>.082</td>
<td>.227</td>
<td>.529</td>
<td>.436</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I keep in touch with the personnel in my Network Marketing Organizations office</td>
<td>-.03</td>
<td>.011</td>
<td>.002</td>
<td>.014</td>
<td>.136</td>
<td>.001</td>
<td>.674</td>
<td>.106</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In my activities, I follow the model given by my sponsor (or up line) with extreme care</td>
<td>.10</td>
<td>.156</td>
<td>.265</td>
<td>.314</td>
<td>.188</td>
<td>.066</td>
<td>.274</td>
<td>.020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I follow the distributor contract with extreme care</td>
<td>-</td>
<td>.087</td>
<td>.146</td>
<td>.161</td>
<td>.170</td>
<td>.178</td>
<td>.228</td>
<td>.133</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


- Rotation converged in 12 iterations

Source: Primary Data

**Figure 1: Scatter Scree Plot**

The Scatter Scree plot depicts the Eigen values against the corresponding factor. One can see these values in the first two columns of the table immediately above. From the third factor onwards, one can see that the line is almost flat, meaning the each successive factor is accounting for smaller and smaller explained variation in the data. The researcher employed ‘Phi Cramer’s V Test’ to find out the strength of association, Karl Pearson’s Chi Square ($\chi^2$) test for independence of attributes and also ANOVA (Analysis of Variance) to test the homogeneity of several means.
Table 4: Factors Influencing Business Orientation

<table>
<thead>
<tr>
<th>Factor No</th>
<th>Name</th>
<th>Description</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regular Usage of Products</td>
<td>I use my Network Marketing Organizations products regularly</td>
<td>0.644</td>
</tr>
<tr>
<td>2</td>
<td>Regular Contact with Customers</td>
<td>I keep in touch with my customers regularly</td>
<td>0.713</td>
</tr>
<tr>
<td>3</td>
<td>Guiding Down line in Product Selling</td>
<td>I guide my down line in product selling activities</td>
<td>0.826</td>
</tr>
<tr>
<td>4</td>
<td>Recruitment of new Members</td>
<td>I recruit new members into the sales organization</td>
<td>0.744</td>
</tr>
<tr>
<td>5</td>
<td>Continuous Contact with Distributors other Networks</td>
<td>I keep in touch with distributors in other Network Marketing Organization distributors</td>
<td>0.793</td>
</tr>
<tr>
<td>6</td>
<td>Contribution for Development of Network Activities</td>
<td>I aim at contributing to the development of networking activity, e.g. through associations</td>
<td>0.853</td>
</tr>
<tr>
<td>7</td>
<td>Continuous Contact with Network Marketing Office Personnel</td>
<td>I keep in touch with the personnel in the my Network Marketing Organizations office</td>
<td>0.674</td>
</tr>
<tr>
<td>8</td>
<td>Referring Network Products to Acquaintances</td>
<td>I refer Network products to acquaintances</td>
<td>0.871</td>
</tr>
</tbody>
</table>

Source: Primary Data

Eight factors namely ‘Regular usage of products’, ‘Regular Contact with Customers’, ‘Guiding Down line in Product Selling’, ‘Recruitment of new Members’, ‘Continuous Contact with Distributors other Network’, ‘Contribution for Development of direct selling and Network activities’, ‘Continuous Contact with Network Marketing Office Personnel’, and ‘Referring Network Products to Acquaintances’ are influencing the distributors to be actively participating in Network Marketing.

CONCLUSION

The study highlights the network marketing with special reference to Indian context and the factors influencing business orientation of network marketing. The factor analysis has revealed that the eight factors such as ‘Regular Usage Products’, ‘Regular Contact with Customers’, ‘Guiding Down line in Product Selling’, ‘Recruitment of new Members’, ‘Continuous Contact with Distributors other Network’, ‘Contribution for Development of direct selling and Network activities’, ‘Continuous Contact with Network Marketing Office Personnel’, and ‘Referring Network Products to Acquaintances’ are influencing the distributors to be actively participating in Network Marketing. This study is limited to two major Network Marketing Companies (NMCs). Even though these two Network Marketing Companies capture the essence of Network Marketing, there are more number of players in the market. A detailed study of the entire spectrum of Network Marketing will reveal nitty-gritty’s of this business model. The study does not cover actors, layers and verticals in Network Marketing business. However, distributing for Network products are in least cases seen as a mere routine and necessary task for a vast majority of households. Thus, findings of this study addressed critical issues of distributor behavior by developing an integrative theory supporting the sequential structure of the constructs in Network selling.

REFERENCES


For a complete copy of this paper with omitted endnotes see author(s).
Central Bank Intervention in Foreign Exchange Market: A Review of Literature

Keywords: Foreign Exchange Market, Intervention, Oral Intervention

Central bank intervention has been one of the critically examined topics of exchange rate economics in recent years. A number of researchers have attempted to understand the impact of central bank intervention operations on the foreign exchange markets, especially on currency value, on exchange rate volatility and on market conditions. Before the discussion of different kinds, impacts and features of intervention, we start with the definition of this central bank operation given by different theorists.

According to Neely, “official intervention is generally defined as those foreign exchange transactions of monetary authorities that are designed to influence exchange rates, but can more broadly refer to other policies for that purpose”. David Archer defines central bank intervention as, “any transaction that alters the net foreign currency position of the public sector for policy, or non-commercial reasons”. Craig and Humpage describe, “foreign exchange-market intervention is purchases and sales of foreign exchange for the purpose of influencing exchange rates. This definition distinguishes foreign-exchange-market intervention from other policy actions, most notably open-market operations in domestic securities, which might also affect exchange rates”. In the words of Steiner, “purchases or sales of currencies in the market by central banks in an attempt to reduce exchange rate fluctuations or to maintain the value of a currency within a particular band, or at a particular level. Similarly, central bank operations in the money market to maintain interest rates at a certain level”.

DIFFERENT TYPES OF CENTRAL BANK INTERVENTION

Literature has categorized foreign exchange Intervention on different bases, i.e. its impact on the monetary base, its mechanism and the kind of market in which authorities intervene. Based on its impact on the monetary base studies classify it as sterilized and unsterilized intervention. When a monetary authority buys (sells) foreign currency, its own monetary base increases (decreases) by the amount of the purchase (sale) of foreign currency, but, if the authority insulates its domestic money supply by offsetting sales or purchases of domestic assets e.g. domestic currency bonds this is called sterilized foreign exchange intervention (Neely, 2000). However, Foreign exchange market intervention in which the monetary authorities do not insulate their domestic money supply (by domestic open market purchases or sales of domestic securities) from the foreign exchange transactions is unsterilized intervention.

According to H. J. Edison (1993) many central banks routinely sterilize foreign exchange operations by reversing the effect of the foreign exchange operation on the domestic monetary base. Many empirical researches are of the view that sterilized intervention is largely ineffective, for example, see Baillie, Humpage, and Osterberg (2000). At times, it affects exchange rates, but its influence is not predictable and trivial. Moreover, in case of sterilized intervention, the fundamental or economic determinants of exchange rates are not directly affected, but it occasionally seems to modify market perceptions and expectations of those fundamentals (Craig & Humpage, 2001). In general, studies like (Humpage, 1999, 2000) suggest that the sterilized intervention remains largely ineffective. The author is of the view that at the time of its effectiveness, the intervention only slows down the rate of appreciation or depreciation; however, it does not change the direction of an exchange-rate movement. Hence, sterilized intervention...
cannot change the trend in depreciating currency. The study quotes the example of the US Federal Reserve bank and finds that the likelihood of a successful U.S. foreign exchange intervention is low. One of the possible impediments attached to the sterilized intervention is its coordination with monetary policy that is not easy to achieve in practice (Mohanty & Turner, 2005). Few major potential problems in this regard are inconsistency of objectives between monetary policy and exchange rate. The authorities might delay fundamental adjustments hoping that intervention will succeed. Another problem is the possibility of sending the wrong signal about monetary policy. Central banks also have some limitations on their part to conduct sterilized intervention on sustained basis; these include, first to control both the exchange rate and interest rate simultaneously for the long period, is a difficult task. The second limitation is related to the cost of intervention, normally the foreign currency reserves acquired through intervention are low yielding whereas, local currency debts issued in the process of sterilization are high in yield.

This phenomenon leads to increase fiscal deficits and ultimately threatens economic stability. This situation can be especially critical in highly indebted economies. Third, the assets, which are exchanged in the case of sterilized intervention (i.e. domestic securities for foreign currency), may not be perfect substitutes for each other. Consequently, the authorities have to add some premium to the offered interest rate to allure the holders of foreign currency or foreign currency bonds to switch their assets.

On the other hand, unsterilized interventions can influence nominal exchange rates in the economy, but it creates excessive money supply and affects interest rate target. Consequently, it creates the tradeoff between price and exchange rate stability. Moreover, the objective of unsterilized interventions may be achieved by typical open-market operations (Craig & Humpage, 2001). In general, unsterilized intervention seems to be more productive in accomplishing the required objectives. Therefore, central bank intervention in transition and developing economies may be more useful in affecting the exchange rate than foreign exchange intervention by the central banks of major developed nations, because the foreign exchange intervention by the former is not fully sterilized (Canales-Kriljenko, 2003).

The available literature on foreign exchange intervention alternatively segregates it as direct and indirect methods of intervention. The direct method is a more evident mode of intervention. In this method, monetary authorities can depreciate a currency by injecting a large amount of it in the market. An increased supply of a specific currency results into its depreciation. In contrast, the monetary authorities can appreciate a currency by purchasing large amounts of it. The short supply of the currency will yield into its appreciation. The long-term effect of this kind of (direct intervention) is limited. Gradually, the market will stabilize and move to its previous trend (Suranovic). In the indirect mechanism, the money supply in the domestic market is changed to affect the exchange rate. If the money supply of a currency is increased, the value for that currency will decrease and vice versa. As this approach has to pass through all market operations, therefore; often it takes a relatively long time to impact exchange rate. Moreover, it also requires the central bank to change the domestic interest rate (through an open market operation and auctions of domestic bonds and securities) to compensate for the change in money supply.

Based on the nature of intervention methods and tools used, the central bank intervention can be of two kinds, physical or actual and oral intervention. There is a large amount of literature available on these types of interventions, their effectiveness and application by different central banks (the details of literature available on these are discussed in subsequent pages). Here for simplicity we define these two types. “An official sale or purchase of foreign assets against domestic assets in the foreign exchange market that intended to influence the exchange rate” is called the actual intervention. Whereas, “a statement issued by an official to express whether his view on fundamentals (private information) or on possible actual interventions in the near future” is called the oral intervention (Gnabo & Teiletche, 2009).

**OBJECTIVES OF CENTRAL BANK INTERVENTION**

AGBA 12th World Congress
Page 508 of 1173
There are a number of overall economic objectives, which induce Central banks to intervene in foreign exchange markets. These may include financial stability, inflation control and economic competitiveness. According to Moreno (2005) these objectives are dependent on other factors like the development stage of a country and its financial market and extent of their integration, a country’s overall vulnerability to shocks. Furthermore, the literature identifies three core objectives of foreign exchange intervention, these include, (a) influencing the exchange rate level (b) the liquidity of foreign exchange markets, and (c) the level of foreign reserves. These are further discussed below.

Currency peg or managed float exchange rate regime has prevailed in many emerging market economies in early nineties. One of the major aims of exchange rate policy in those countries was to curtail the volatility within a band and target the level of the exchange rate. These targets were attempted through monetary policy and foreign exchange interventions. For example, Thailand and Malaysia followed basket pegs (closely resembled to the dollar peg), Mexico and Indonesia (before their crises) were experiencing crawling, depreciating band arrangement, and Hong Kong, Argentina, etc. were supporting (through official intervention) a peg under a currency board mechanism. The main motives of influencing the exchange rate, through official intervention, under these arrangements were as follows; first, inflation control or maintaining internal balance, second to attain trade competitiveness and economic growth. The third motive was to prevent crises or avoid any significant currency mismatch (Moreno, 2005).

According to the study under consideration (Moreno, for BIS), since the collapse of pegged exchange rate regimes after mid-1990s, the countries which opted for flexible exchange rate regimes with inflation targeting witnessed excessive volatility in these markets. Although dependence on intervention declined in the floating regime, yet the exchange rate volatility remained the main concern for policy makers. The motives of intervention under this scenario were (a) reducing volatility (b) offsetting overshooting of currency (c) following the “leaning against the wind” strategy and (d) market liquidity management. The third major objective of the foreign exchange intervention policy of a central bank is the management of currency reserves for the country. In certain countries, the central bank have to intervene in the market to accumulate reserves as a policy matter, whereas in certain developing countries the Central banks intervene in the foreign exchange market by buying foreign currency in order to devalue the domestic currency. In certain cases, such interventions are usually effective in devaluing currency but led to a buildup of foreign exchange reserves beyond what the central bank may need (Kaushik, 2009).

**CHOICE OF MARKET AND TRANSACTION METHOD FOR OFFICIAL INTERVENTION**

The concern about the choice of the market for official intervention is important because it is one of the decisive factors for its effectiveness. In majority of the emerging and developing economies, the bulk of central bank interventions (82%) are conducted in the spot market (Canales-Kriljenko, 2003). Later on, a BIS survey confirmed these results with an addition that the majority of central bank interventions are conducted in the onshore wholesale spot market. It is because the onshore-wholesale market is the market with the largest amount of liquidity having no alternative (Archer, 2005). The study further highlighted that in order to have the most profound transaction impact majority of central bank intervention is conducted during normal business hours. The study also discusses the choice of the instrument for the central bank intervention and described that the spot foreign exchange transaction has been the major choice for intervening central banks. Moreover, in many instances the intervening authorities have used the forwards, derivatives and cross-currency debt instruments. The main motive for using spot rather than other instrument like forward, options and swaps is the secrecy, which needed to be kept for a rather longer period for these derivative instruments as compared to spot transactions. With regard to the forward contract, the bad experience of countries like South Africa (in mid-nineties), Thailand (in 1997) along-with growing preference for transparency and secrecy is the main constraint for ample use of it as an intervention instrument. Using the currency swap as an instrument for central bank intervention has
some preference over forward. As with the swap transaction, no currency exposure is created whereas cash flow is spread. The spreading of credit risk has advantages in relation to the use of risk limits, which is advantageous for some central banks. The central banks of India, Pakistan and Indonesia from time to time have used the currency swap market for intervention. The use of currency options as an intervention tool has some commonalities with the use of forward contracts. Both instruments require no immediate funding and allow central bank interventions to be kept secret, at least for a certain period of time (BIS Survey 2005).

Different central banks use different transaction methods for foreign exchange market intervention. These include,

(a) Transaction directly; this is being normally done through the telephone. In this case, the central bank transacts with a market maker in order to inject or mop-up a particular currency in the market to influence its supply or demand. This type of transaction may be with a large corporate to replace the job of the market maker, if the central bank is aware of the fact that a lumpy transaction is imminent.

(b) Transaction through an agent is the other common form of market intervention by the central bank. Under this arrangement, a large commercial bank (that is normally a market maker) acts on behalf of the central bank with the consideration of secrecy.

(c) Transaction through the broker system is the third main category through which intervention is routed. This broker system can be in the form of a brokerage house, voice broker’s customers and an electronic brokerage system. Transactions through this arrangement differ compared to direct transaction with market maker because in this case the identity of the central bank, as a counter party, is not revealed to the market maker knows. Under this system, the market makers quote a two-way price without prior knowledge of the potential counter party, which is a good choice for central banks seeking secrecy in intervention.

**CHANNELS OF FOREIGN EXCHANGE INTERVENTION**

The primary motive for the intervention in the foreign exchange market is an attempt to change the value of a currency in a desired direction. Heterogeneity of market participants and their objectives, in the foreign exchange market, require central bank operations to be routed using a variety of channels or methods that effectively influence currency values. Economic literature has identified the following main channels of intervention affecting currency values.

**Portfolio Balance Channel**

In the portfolio balance channel, the large swings in the exchange rate are caused by the desired allocation of currencies in the portfolios.

Under this channel, the central bank provides the necessary supply of currency in the form of sterilized intervention which reduces excessive volatility. Sterilised interventions change the relative supply of domestic and foreign assets. If investors are risk averse, they are not indifferent to the currency distribution in their portfolios. This implies that domestic and foreign assets are not perfect substitutes for each other. Therefore, in order to change the demand and supply of assets and hence prices, a change in domestic interest rate or exchange rate is the remedy. This may be done through foreign exchange intervention. The researches like De Gregorio and Tokman (2004) concluded that quite often the sterilised interventions have short lived effects. Rogoff (1984) and Lewis (1988) even found the reverse effect rather than what is expected through intervention. This is because the intervention capacity of the central bank is normally small as compared to the total quantum of domestic and foreign assets that is needed to be exchanged for each other. However, the researches like K. Dominguez, Frankel, Jeffrey A (1993)
found that official interventions using the portfolio balance channel remained effective. Galati and Melick (2002), argued that in smaller emerging financial systems, the central bank has more intervention capacity compared to set of substitutable assets. Hence, the portfolio channel appears to work under these particular circumstances. With regard to oral intervention, the coordination channel is irrelevant. This is because the channel requires actual intervention (i.e. injection or mop-up of assets in the market) as a prerequisite to change the portfolios of investors, which cannot be possible when only communication, is used.

**Signalling or Expectations Channel**

Monetary authorities can change perceptions of the market participants through the actual and oral intervention. Perceptions of future changes in income and risk, demand and supply of assets can change prices without any transaction-taking place (i.e. through communication). The assumption of this channel is that intervention serves as a signal of future monetary policy changes by providing the foreign exchange market with new relevant information. One of the major prerequisite for the signalling channel to work properly is that the central bank operating in the market has information that is not available to the market participants (Popper & Montgomery, 2001). Sterilised interventions can influence the expectations of the market participants by transmitting the signals about future monetary policy. For instance, a central bank can signal a tighter future monetary policy by purchasing domestic currency. Such expectations of a restricted monetary policy can alter the perceptions of market participants hence, affecting the actual exchange rate in the desired direction. Similarly, a communication or speech about monetary policy accompanied by an actual intervention can appear to be more credible in terms of its effectiveness.

Empirical literature highlighted that interventions conducted by G7 countries in 70s and 80s influenced exchange rates through the signalling channel, i.e., by indicating future monetary policy or future actual FX interventions (Fatum & Hutchison, 1999; Mussa, 1981; Vitale, 2003). In their study, K. Dominguez, Frankel, Jeffrey, A (1993) distinguish between reported intervention, announcements of the Federal Reserve in support or against the US dollar and non-reported intervention (secret interventions). They found that reported intervention significantly affect exchange rate expectations. If an intervention is publicly announced, there will be a strong effect on exchange rate expectations and oral intervention is nothing but a public announcement. Chen et al. (2014) verified it on yen/US dollar dynamics.

**Coordination Channel**

The foreign exchange market intervention through the coordination channel helps in creating coordination among the fundamental based traders. The intervention is conducted to eliminate misalignments of the exchange rate generated by non-fundamental influences (Reitz & Taylor, 2008, 2012). This phenomenon encourages the stabilizing speculators and agents re-enter the market. Under this channel monetary authorities use the communication policies or oral interventions, as a tool, which act as a coordination device. Such intervention helps in building and then moving public sentiments in the desired direction (Fratzscher, 2008).

Morris and Shin (2002) and Morris, Amato, and Shin (2004) commented oral intervention or official communication as a double-edged" sword. It has useful information content and builds expectation and beliefs among market participants, but at the same time it may discourage formulation of private beliefs which are important for the transmission mechanism of monetary policy.

**Microstructure or Order Flow Channel**

In recent years there has been an increased debate on the approach focusing the structure and practises in foreign exchange and other financial markets, this is called microstructure approach to market. This approach developed as a result of those researches, which used high frequency market data. This literature argued that there exists a relationship between order flow and subsequent price action. Furthermore, this
relationship has better predictive powers compared to the relationship between news releases on
conventional fundamentals and subsequent price (Archer, 2005). Monetary authorities can use the
microstructure or order flow channel (with their intervention) to alter exchange rate behaviours or order
flow of the market. This channel is more effective in the emerging market economies having less liquid
markets, because in such cases the volume of the intervention can be large as compared to the market
turnover. Moreover, in emerging market economies central banks enjoy better access to information on
flows mainly due to small size of the market and less number of participants. Studies like Scalia (2008)
empirically applied the microstructure framework to the central bank intervention in an emerging market
economy like the Czech Republic.

**CENTRAL BANK INTERVENTION: SECRECY VS. TRANSPARENCY**

Before we discuss the available literature on the actual and verbal intervention (which is the main theme
of our study) we discuss here secrecy, which is another important aspect of official intervention. Secret
interventions are those foreign exchange operations that are not disclosed to market participants.
Although there are evidences, which state that the market participants subsequently got the information
about the central bank intervention, but they seldom knew the magnitude of the intervention (Domínguez
and Frankel, 1993). So, we can broaden the definition by adding that these are the intervention operations,
which are at least not disclosed to other market players at the time when those were conducted. Beine and
Lecourt (2004) have defined a secret intervention as “an intervention that has not been reported to market
participants by the involved central bank or banks on the day it was carried out”. In their paper, they
applied a new identification scheme attempting to eliminate limitations that occur from using financial
newspapers. They used the data for the two markets, the Euro against the U.S. dollar, and the Japanese
yen against the USD over the period 1985 to 2004. The study estimated conditional probabilities of
reported and secret interventions, by the central bank and by the type of operation (coordinated vs.
unilateral intervention) and documented the evolution of the proportion of the secret interventions over
time. The main conclusion drawn by the paper was that the Bank of Japan, which was the most active
central bank on the FX markets (at that time), was involved in secret operations. The study further found
that both the US and the European central banks adopted the increasingly transparent policy over time in
the conduct of their foreign exchange interventions. Especially a major shift in the Bank of Japan’s
policies was observed. Up-to 2002, in 60% instances of intervention, markets participants were unable to
detect presence of the Bank of Japan on the day of the intervention. However, up-to April 2004, about
80% of these official interventions remained secret. Another study conducted by Beine and Bernal (2007)
investigated the determinants of secret interventions in the foreign exchange market by examining the
intervention policy of the Bank of Japan over the period 1991–2004. This period was selected because in
this period the BoJ has remained the most active central bank in the foreign exchange market. By
applying a logit analysis, it attempted to determine the percentage of secret versus reported interventions.
The paper concluded by identifying the following factors as the major determinants that favor a central
bank’s operations being detected (a) the size of the operation; unilaterally intervention or in coordination
with other monetary authorities, (b) the intervention’s success, and (c) the intensity of the past
intervention policy by the Bank of Japan. More importantly, the study suggested, “the BoJ mostly
conducted the secret operations when it was targeting an exchange rate value that was inconsistent with
the fundamental equilibrium level”. Despite several studies on the issue, the question as to the effect of
secrecy on foreign exchange intervention is yet not well understood. Most central banks usually intervene
secretly and publish actual intervention data with a lag (Neely, 2000). There are also interesting facts
about the contents of the announcements. It differs among different monetary authorities. The central
banks of Canada, Europe, and the USA only confirm the event of intervention. Whereas the Hong Kong
Monetary Authority also discloses the amount of intervention (Chiu, 2003). The question arises, if the
authorities conduct intervention to convey some message to the market (signaling approach), then why
choose to keep it secret? K. Domínguez, Frankel, Jeffrey A (1993), gave the following justifications.
Monetary authorities try to keep their interventions as secret when the fundamentals are not in line with
the objectives of intervention. Alternatively, the falling credibility of monetary authority is another
ground compelling it for secrecy in operations. The management of currency reserves or the adjustment of
the currency portfolio of the central bank is another area where the central bank prefers to keep secrecy.
Bhattacharya and Weller (1997), gave another possible explanation for the secrecy of central bank
intervention. They present a model in which small amounts of intervention reveal the authority’s
information to private parties, thus influencing exchange rates. Their model also provides an
explanation for two forms of policy for the secrecy of central bank intervention stating that “secrecy
about the scale of an intervention operation is always desirable, and secrecy about the target is
sometimes desirable”. Ghosh (1996), presented a model encompassing goods prices, and a forward-
looking exchange rate in the economy and indicated that in such scenario central bank does not intend a
full disclosure of its information about the possible future shocks to the economy. Hence, the central bank
may prefer hidden intervention in the foreign exchange markets when it is responding in anticipation of
future shocks, but in reaction to current shocks may openly intervene. The paper further asserts, “Secret
intervention allows the central bank to achieve its objectives with only partially disseminating its
information and the minimum amount of intervention”. Fatnassi (2009) conducted a study on the
intervention data of the Reserve Bank of Australia and the Bank of Japan. The study examined the
effectiveness of central bank intervention through the noise-trading channel. This channel suggests that
central banks should intervene in highly volatile market stages through secret interventions. The authors
used Logit and Probit model and results favored the secret interventions and noise-trading channel.

Another interesting puzzle with regard to the secret intervention is its linkage to the signaling channel
(Mussa, 1981) which assumes the central bank intervention as a signal or way of change in exchange rate
expectations through the dissemination of private information in the market. The use of secret
intervention is contrary to this argument. The theoretical point of view outside the framework of signaling
theory was later on developed to rationalize the choice of secret intervention. These include noise trading
by Hung (1997), who state that under the noise-trading framework, the effectiveness of sterilized
intervention depends upon the prudence of intervention strategies. According to the study using noise
trading channels the central bank prefers to intervene secretly, whereas; under signaling channels it
prefers announced intervention. The other approach, which attempted to rationalize covert central bank
intervention, was the microstructure framework put forth by Vitale (1999). This study examined the
signaling effect of sterilized intervention under the market microstructure framework. The study
suggested that concealed intervention seems to be more desirable for the central bank; particularly in the
case when the intentions are to target the value of the exchange rate. In this scenario, the target level and
the fundamental value might not be equal and the central bank’s attempt to deceive the market is more
successful when its action is kept hidden. The study further asserted that the goals of sterilized market
operations by the central bank should be disclosed. The reason behind is not only the central bank
preference to conceal its target exchange rate levels, but it also boosts the efficiency of the market. This
is because the central bank trades more aggressively when the dealers are unaware of this target level, so
more information on the fundamental value is revealed. This result was contrary to the general opinion
that the objectives of sterilized intervention should be openly disclosed.

An interesting aspect of open or secret intervention is linked with the authority who is deciding about
intervention. In a case where this decision is made by some other authority (like the Ministry of Finance
etc.), the central bank mostly keeps its presence as a secret (K. Dominguez, Frankel, Jeffrey A, 1993).
The argument is more relevant in the case of the United States and Japan where the intervention decisions
were not taken by the central bank itself but by some other (political) authorities. The BIS survey (2003)
regarding the transparency of central bank interventions discussed different factors and their impacts on
the secrecy of intervention as follow. With regard to the exchange rate regime, the survey probed its
relationship with the disclosure policy of intervention. It indicated that, under the less flexible exchange
rate regime countries remained very transparent in their exchange rate objective. The choice of
intervention transparency is not affected by autonomy of the central bank from the ministry or the
political authorities. The third consideration discussed was the frequency of intervention. The central banks with more frequent operations in the foreign exchange market appeared to have less imminent in disclosing the details of such interventions. One of the probable reasons is that recurrent failure to achieve target may harm the credibility of the institution if the central bank operation is not concealed. Whereas, if the central bank is targeting the certain level of exchange rate and the momentum is already swinging towards the intended direction, the monetary authority will be more open with a view to enhancing the announcement effect. It implies that the more the probability of success more the chances of visible interventions and vice versa. The survey also revealed that those central banks, which were more transparent with their monetary policy stances, were having the more likelihood of covert policy for the conduct of foreign exchange operations. Similarly, the interventions, which are concerted (conducted simultaneously by two central banks in the same direction), are having more possibility of strong transmission of signaling effect. These types of intervention transactions are having more chances of disclosure. Conversely, unilateral interventions are more hidden in nature. Finally, the survey observed both sterilized and unsterilized types of interventions. It stated that, both these types do not appear to have any influence on the choice of disclosure practice by different central banks. The survey also shed some light on the benefits and risk associated with the central bank’s secret interventions. The main advantages include, first, in the case where the central bank is forced to intervene in the market (i.e. in a distress situation), only the secrecy can keep this information away from other market players. Secondly, the ability to create surprises in the market is only possible in the case of secret intervention policy. The third advantage (which is already discussed in this section) is the retention of credibility, which may be under threat in the case of frequent apparent interventions. The risks or disadvantages associated with the concealed central bank operations include the inability to transmit desired signals through secret intervention, the canceled central bank operations may lead to rumors and hence speculative attacks. The transparent operations increase the dealing capacity and hence working capabilities of other market participants whereas secrecy keeps them in the puzzle and hesitant risk avoiding phase.

**PROFITABILITY OF INTERVENTION**

Another widely discussed issue pertaining to central bank intervention is its profitability. A general perception of central bank intervention operations in the foreign exchange market is that, this result into losses. This opinion especially seems true in the circumstances where central banks intentionally follow the policies, which led to losses, for instance, when central banks describe their interventions as a part of ‘leaning against the wind’ strategies. According to an argument if the central bank intervenes temporarily, i.e. it tries to slow down the currency adjustment rate, the central bank may be expected to make losses on such operations (Corrado & Taylor, 1986). The objective of market stabilization and making profit in the intervention operations at the same time is opposed by another argument by H. J. Edison (1993). According to her, a central bank may successfully pursue its goals even at the expense of intervention losses. The other study, which present evidence of the substantial losses on the central bank’s intervention operations, includes Taylor (1982).

The entire discussion of profitability as one measure to judge the effectiveness of the intervention started with the study of Friedman (1953). He proposed that the success of the intervention of the monetary authorities should be evaluated based on its profitability just as if the other market players evaluate their currency operations. It implies that the successfulness of central bank in intervention operations depends upon two factors, stabilization of the foreign exchange market and profits and vice versa. This argument of the study is based on the principle that the intervention should promote economic efficiency, instead of smoothing and retarding the currency market fluctuations. Subsequently, Becker and (Sinclair (2004)) examined the intervention operations of the Reserve Bank of Australia after the float. The authors found that the RBA made a profit of 5.2 billion AUD on its intervention operations. The paper concludes that the profitability of intervention suggests that the RBA’s operations have had a stabilizing influence on the exchange rate. The other researchers also continued to uncover that major central banks have made a
significant amount of profits through the intervention in markets with flexible exchange rate regime (Andrew and Broadbent (1994); Sjöö (1996); Fischer (2003)). The profitability argument by Friedman further raised two concerns, whether the intervention intended to stabilize the exchange rate is always profitable or it is the profitable intervention, which is stabilizing in nature. The others observed that if the central banks are able to fix the abnormal exchange rate movements, these operations should yield zero profit. Jacobson (1983) opposed the argument of exchange rate stability and intervention profitability at the same time. Dominguez, Frankel, Jeffrey (1993) argument that if the central bank cannot affect the exchange rate, its intervention may yield into profit but may not stabilizing, is one of those opposing arguments. Some other authors provided theoretical evidences of profitable but destabilizing intervention (Baumol, 1957). A study conducted by Saacke (2002) used the daily foreign exchange market data of the Bundesbank and the Federal Reserve Bank and found the evidence of profitable intervention.

LEAHY (1995), attempted to examine profitability of intervention by the US Federal Reserve and Treasury for the period March1973 to the end of 1992. He also found the evidence of profitability, especially US intervention in Deutsche Mark and the Yen from March 1973 to end of 1992 earned a net profit of nearly $16.5 billion though the reason for profit was not established.

INTERVENTION AND THE EXCHANGE RATE VOLATILITY

In literature, one of the most commonly discussed issues about intervention is its effect on the exchange rate volatility. The importance of intervention to handle the volatility can be viewed from one of the documents of the International Monetary Fund (IMF), where it directs member countries as

"a member should intervene in the exchange market if necessary to counter disorderly conditions, which may be characterized inter alia by disruptive short-term movements in the exchange value of its currency".

Researchers differ in opinion regarding the effectiveness of intervention to curb unwanted currency volatility. A number of studies indicated the adverse effect of intervention on exchange rate volatility. Baillie and P. Osterberg (1997), found the evidence that intervention increases the volatility in DM/USD and Yen/USD markets. Beine and Laurent (2003), used the FIGARCH framework to estimate major currency pairs against the USD, which were subject to interventions. The study concluded that irrespective of its nature, the intervention causes a jump and hence increases volatility. Fratzscher (2006), stated that actual interventions mostly increase both historical and implied exchange rate volatility. H. Edison, Cashin, and Liang (2006) studied the effects of the Australian central bank’s intervention policies on exchange rate volatility over the floating rate period. The investigation concluded, "The intervention operations tend to be associated with an increase in exchange rate volatility, which suggests that official intervention may have added to market uncertainty". Hillebrand and Schnabl (2003) used the EGARCH framework to examine the impact of Japanese foreign exchange intervention on the volatility of the Yen/Dollar exchange rate. The study remained mainly inconclusive about the impact of foreign exchange intervention on the Yen/Dollar volatility. However, for a sub sample starting from 1991 up to the end of 1990s, the intervention proved to have increased the volatility of the Yen/Dollar exchange rate. Fatum (2008) in his study for the Bank of Canada’s intervention concluded that intervention was not successful in reducing the volatility of the CAD/USD exchange rate.

Literature also has a number of studies indicating the positive role of intervention in tackling exchange rate volatility. Fatum and King (2005), used official high frequency data for the Bank of Canada’s intervention for the Canadian Dollar against the US dollar over the period January 1995 to September 1998. The study found evidence that intervention is associated with a reduction of exchange rate volatility. Kim, Kortian, and Sheen (2000), studied the features of foreign exchange intervention by the Reserve Bank of Australia in the period 1983–1997. They concluded with the argument that “sustained
and large interventions have a stabilizing influence in the foreign exchange market in terms of direction and volatility”. Behera, Narasimhan, and Murty (2008), examined the relationship of intervention and volatility in India and found that the intervention of the Reserve Bank of India was effective in reducing volatility in the Indian foreign exchange market. Sahoo (2003), also targeted the Indian market and observed the effectiveness of intervention in curtailting the exchange rate volatility, however; the degree of effectiveness did not prove to be strong. Dom aç and Mendoza (2004), found the effectiveness of intervention for volatility in Mexico and Turkey.

Among those who found only week or partial effect of intervention on exchange rate volatility include, Abenoja (2003) who examined the Philippines central bank intervention using daily data from 1992 to 2003. His study concluded that although the intervention reduced volatility in a shorter span but persistent operations actually increased volatility. This implies that successive interventions lead to greater market doubts. Aguilar and Nydahl (2000), focused on the intervention effects of the Riksbank (the central bank of Sweden) on the level and the volatility of the USD/SEK and DEM/SEK exchange rates between 1993 and 1996. With regard to the currency volatility, the findings of the study were in line with the findings for many other earlier studies. There was hardly any empirical support for the hypothesis that central bank intervention steadily decreased exchange rate volatility. Guimarães and Karacadag (2004) also focused on Mexico and Turkey exchange rate markets. The paper analyzed the effects of intervention on the level and volatility of the exchange rate for these two emerging countries with floating exchange rate regimes. Mixed sort of results were obtained in terms of volatility for both central bank’s operations. In Mexico, foreign exchange intervention appeared to raise short-term volatility, while in the case of Turkey intervention reduced short-term volatility of the exchange rate. The Colombian experience of option based foreign exchange intervention revealed that those central bank operations were only moderately successful in reducing exchange rate volatility. Furthermore, these effects were not quite lasting, even after a 10-day lag; intervention did not appear to be significantly affective to curb exchange rate volatility (Mandeng, 2003). Beckmann et al (2015) examined the coordinated intervention for the dollar–yen exchange rate and concluded that coordinated interventions has a long run stabilization affect.

HOW INTERVENTION AFFECT THE LEVEL OF EXCHANGE RATE

Talking about the impact of intervention on the level of exchange rate, literature reveals that in comparison to volatility the official intervention is less effective for the level of exchange rate (Disyatat & Galati, 2005). Some of those researches, who have the results in line with this statement, include Sangmanee (2003), who focused on Thailand’s fixed exchange rate regime before the crises of 1997. He used a methodology of option-implied probability density and examined the role of intervention to influence market expectations. The study suggested that spot interventions did not have a statistically significant contemporaneous impact on exchange rate levels. Sahoo (2003), used monthly data for the intervention of the Reserve Bank of India and concluded that interventions of the Reserve Bank of India had not significant perceivable influence on exchange rate levels. Using Granger causality tests for the same Indian market, Sahadevan (2002), could not find any causality among monetary variables and level of exchange rate. Intervention in the foreign exchange markets of Mexico and Turkey also proved weakly effective for the level of the exchange rate. However, most of the intervention in Mexico, during the sample period studied by, Guimarães and Karacadag (2004), was with the objective of reserve accumulation so it cannot be termed as completely ineffective. Similarly, in the case of the Turkey, majority of official interventions were conducted through preannounced foreign exchange auctions, where mostly the market participants were already aware of timing and amounts. Therefore, the potential impact of interventions might have operated through the signaling channel well in advance of actual interventions themselves.

On the other hand, those who believe that official intervention is strongly effective for the level of exchange rate include (Tapia, Tokman, Landerretche, & Rigobón, 2004) who examined the effects of
exchange rate interventions using daily and intraday data for Chile, from 1998 to 2003. The study found the evidence of small and, generally non-significant impact of individual intervention but public announcements appeared to have positive impact on the exchange rate level and trend. The market players adjusted their expectations to the information revealed through these announcements, with the exchange rate responding accordingly.

Similarly, Ramaswamy and Samiei (2000) confirmed that interventions conducted during late nineties remained useful in changing the path of the yen-dollar rate in the desired direction. The results obtained further indicated that the Bank of Japan (BoJ) intervened in the market both in the cases of excessive appreciation and depreciation of the yen; moreover, this intervention was observed in clusters. In the context of the UK, Kearney and MacDonald (1986) have examined the potency of sterilized intervention using a portfolio balance model over the period 1973 to 1983. The results obtained indicated that sterilized intervention had been effective on British pound-US$ exchange rates. Domac and Mendoza (2004) (we have already discussed their study for volatility prospective) investigated the effectiveness of official interventions for the central banks of Mexico and Turkey. The study concluded that the supply of currency by the central bank compared to purchase generally remained effective in influencing the exchange rate in both countries. Rhee (1999), studied the Korean central bank’s case and exchange rate policy during the pre-crisis period (i.e. before 1997). They found that sterilized intervention had a significant short-run effect on the exchange rate level that lasted for a short span of about one week. Similarly, Ryu (2003) also focused on the Korean market and observed that the central bank was successful in moving the exchange rate in the desired direction using physical intervention.

**MORAL SUASION: USE OF COMMUNICATION TO THE MARKET AS A TOOL OF INTERVENTION**

With global access to market information the communication tool has received importance in international financial industry. Historically, central banks relied heavily on actual (physical) intervention to show their intent and control markets, nowadays they communicate to the market more often to influence exchange rate. There is ample evidence from recent literature [for example see, Kearney and MacDonald (1986) for the UK (Humpage (1999)) and Sweeney (2000) for the US, Rhee (1999) for Korea, Ramaswamy and Samiei (2000) and Beine and Bernal (2007) for Japan, Domac and Mendoza (2004) for Mexico and Turkey, Behera et al. (2008) for India] that central banks have gradually shifted their strategy from actual intervention to communication in the second half of 1990s. Leading central banks like the Federal Reserve and European Central Bank have almost abandon physical intervention in favor of market communication since 1995.

Jansen and De Haan (2005), and Fratzscher (2008) found significant impact of central banks communications on exchange rates. Similarly, Blinder (2009) reports evidence that central banks communications are more effective in moving financial markets by enhance predictability of monetary policy decisions. Therefore central banks during the last two decade have witnessed a change from “a very secretive, inbound policy regime” to “a more transparent, market oriented and result based policy regime”.

Bernanke (2004) stated communication as a powerful tool for monetary authorities, which influence financial markets and provide the participants with relevant private information.

About the effectiveness of communication strategy it is argued that oral intervention had a short-term influence on bilateral exchange rate of major currencies,[Fratzcher (2008)]. Further, the success of communication channel is found orthogonal to the actual market intervention and the monetary policy stance... The communication channel is found more effective during high volatility periods and in pursuit of “leaning against the wind” strategy, and importantly it is found that these methods reduce volatility.
whereas actual intervention mostly increases it. Fratzscher (2005) concluded that communication is an effective tool to implement monetary policy through exchange rate channel irrespective of monetary policy stance. Similarly, the study concluded that oral intervention affects exchange rates even independent of the occurrence of physical interventions. Therefore, the author suggested that the mechanism through which communication policies by world prominent authorities had affected exchange rates could not be termed as the signalling channel. This channel not only affect contemporaneous exchange rate but also influence forward exchange rates up to 6-months period in the desired direction.

Jansen and De Haan (2007) discussed the role of communication channel as a policy tool used by Euro area central bankers during the early years of the European Union. The main focus was on the linkage between oral intervention and the level and volatility of the euro–dollar exchange rate. The study concluded that, in general, the effects of verbal interventions were small and short-lived. Furthermore, the oral intervention events captured in the news report headlines were considered more effective. The intervention events overlapping with the release of some macroeconomic data were not equally effective in altering the exchange rate direction.

Communications made by the officials about the course of actual interventions have a significant signaling effect on exchange rate level as well as exchange rate volatility in the developed financial markets [Beine, Janssen, and Lecourt (2009)]. Bernal and Gnabo (2009) used Japanese data for the period 1991 to 2004 in an ordered-probit model to evaluate the reaction functions of the central bank’s foreign exchange interventions. They generalize the model to include oral interventions alongside actual ones. Their model estimated the occurrence of each type of interventions and evaluated the extent to which oral and actual interventions were substitutes or complements. The results obtained suggested that monetary authorities conducted oral intervention in coordination with actual intervention only in the cases of extreme desperation. The authors also used the event study approach to investigate the effectiveness of interventions. Overall, intervention operations were found to be moderately successful in correcting unwanted exchange-rate volatility.

Beine et al. (2009) investigated the effectiveness of official statements made contemporary to the actual foreign exchange intervention events. The study used newswire service releases, to collect and classify the daily statements made by officials of the Bundesbank/ECB, BoJ and the Federal Reserve Bank. The sample periods selected were from 1989 to 2003 for the EUR/USD and 1991 to 2003 for YEN/USD exchange rates. The study tested whether the impact of reported central bank interventions (that were followed by a statement) differs from the impact of those with no subsequent statement by monetary authority. The results indicated that the intervention events accompanied by statements, had more impact on the exchange rate level. Moreover, issuing official statements, which accompany the central bank actual interventions, appear to reduce the traditional increase in exchange rate volatility.

In an interesting study, Dominguez and Panthaki (2007) discuss about unrequited interventions, these are the intervention operations that the market expects but do not materialize. The paper observed the effects of various types of intervention news on intra-day exchange rate movements. The study concluded with the comments that the unrequited interventions have a statistically significant influence on returns, volatility and order flow, suggesting that the expectation of intervention, even when authorities do not intervene, can affect currency values. As we have already discussed, Tapia et al. (2004) examined the effects of exchange rate interventions using daily and intraday data for the Chilean foreign exchange market. There were evidences of generally non-significant and small impact of individual actual intervention events but public announcements appeared to have a positive impact on the exchange rate level and trend.

Goyal and Arora (2012) examined the impact of Central Bank communication on exchange rate volatility along with other conventional monetary policy measures, including interest rates, intervention and other quantitative measures. The study used daily and monthly data sets. With regard to official
communication, the authors concluded that the central bank communication had large potential impacts but the monetary authority did not effectively use it.

The question arises, why major developed countries have stopped conducting actual intervention and started using an oral intervention strategy. In the light of available literature, Fratzscher has attempted to answer this question. According to him, the uncertainty of the effectiveness and the time consistency problem of actual interventions are the probable causes of this regime shift. The study stated that, a number of researches in the past found very little evidence of effectiveness of actual intervention. Even the studies like, Baillie and P Osterberg (1997) stated that actual market interventions were counterproductive and gave rise to uncertainty and volatility. Moreover, actual interventions prove to be more successful if these are coordinated and publically announced. However, the time consistency problem states that announced actual interventions may cause speculative attacks in the market, which in turn can make the intervention counterproductive.

Another group of studies discuss the impact of (other markets) and economic news on exchange rate movements. These include, Evans and Lyons (2005) who reviewed whether macro news arrivals affect currency markets over time and concluded that these effects remain significant for days. Andersen, Bollerslev, Diebold, and Vega (2002), focused on macroeconomic news and found that announcement surprises (news) produce conditional mean jumps and the market reacts to news in an asymmetric fashion, whereas, bad news has greater impact than good news.

Among some other empirical work on the effectiveness of the communication strategy of central banks, there are studies of Guthrie and Wright (2000) for New Zealand and (Kohn and Sack (2003)) for the United States. Although these two studies have conducted the analysis of communications about interest rate, in essence, they conclude that communication can indeed be a rather effective monetary policy instrument in these economies.

REFERENCES


All of the footnotes and the remainder of the references cited in this paper are omitted due to space considerations. Interested parties are invited to contact the author for a complete copy of the paper.
Muslim Consumers’ Perception on Halal Branding: An Exploratory Qualitative Study

**Keywords:** Islamic Branding, Halal Branding, Muslim Consumer Perception, Religiosity, Halal Consumption.

**INTRODUCTION**

Muslim market shows enormous promise as the fastest growing market in the world and the consequences of marginalising this market segment by any business organisation could be a significant loss of its global competitiveness (El-Bassiouny, 2014). The rising Muslim population of nearly 2.08 billion around the world signals the marketer to strongly implement their strategies within the boundaries of Islamic Principles (World Muslim Population, 2014). This market has placed influential pressures on businesses to market Halal products and services to satisfy Muslim consumers’ demand for religious expectations (Cheng, 2008). Religion has become the essence of many organisations’ operations to avoid contradiction (Wilson & Liu, 2010). In the phase of fast changing trade due to globalization, advancement in science and technology, and the ongoing initiatives to clarify and simplify the manufacturing process, it is crucial for global marketers to comprehensively understand the concept of halal in marketing (Shafie & Othman, 2006). The concept of Halal relates to the compliance of Shariah law in the process of production and delivery of goods and services targeted to Muslim markets. According to Ahmed & Ali (2012), Muslims are required to develop daily consumption habits as recommended by their faith but the extent of awareness and adaptation varies across the global Muslim markets. There are a number of research questions that require empirical evidence to answer clearly.

First, Malaysia clinches its name as the leader in the halal food benchmarking and is recognised as the world’s classic example for maintaining halal food operation within the guidelines of the Geneva based UN Codex Alimentarius Commission for the term Halal (Boharin, Hin & Faud, 2013). Consequently the introduction of Halal logo by Malaysian Department of Islamic Development (JAKIM) in Malaysia has generated high awareness among Muslims and non-Muslims in the country where production and marketing of Halal products and services is a general norm. Halal awareness has increased substantially among Muslims all over the World though unlike Malaysia, Halal certification is rarely a state supported practice even in countries with Muslim majority. The growing popularity of Halal labelling as a tool for Muslim consumers’ decision-making and brand relation (Jamal and Sharifuddin, 2014) has encouraged the development of Halal certification by private business and religious organisations in most countries with Muslim majority and Muslim minority. This has also encouraged some global marketers such as Nestle and Unilever targeting the Muslim market with ‘Shariah compliant’ products and services. Nonetheless, despite these apparent positive notes on popularisation of Halal products and services, there are Muslim markets where either the Halal certification is not formally organised or products and services
with Halal labelling is not widely available (Zyl, Mokonenyane, Kebatile and Ali, 2013; Jamal and Sharifuddin, 2014). Moreover, Muslim consumers’ reaction towards Halal product is still not clearly explained in any Islamic marketing study (Alserhan, 2010a). Limited research shows that Muslim consumers in non-Muslim western countries mainly use ingredient list to make final purchase decision though Halal labelling works as an important information cue in Muslim consumers’ purchase decision-making (Ali, 2014; Jamal and Sharifuddin, 2014; Jamal, 2003; Peattie, Peattie & Jamal, 2006; Razzaque & Chawdhury, 2013). This may suggest if Muslim consumers’ perception vary by their country of residence.

Second, Alserhan in his editorial note in the Islamic Journal of Marketing (Alserhan, 2010b) made an attempt to conceptualise three categories of Halal branding but not many studies empirically examined Muslim consumers’ perception toward those alternative. This may suggest if Muslim consumers’ perception vary for different categories of Halal branding by their country of residence.

Third, while Halal food and Islamic banking and financial services industries are generally popular Halal sectors, Power and Abdullah (2009) indicate the rising trend of using luxury products and services such as clothing, cosmetics, pharmaceuticals, and tourism and hospitality services by Muslims all over the World with increasing disposable income and access to information super highway. Muslim consumer perception on these growth markets are not readily documented as a consumer choice in many studies.

Finally, the fast growing Muslim markets around the World encourages many global brands to adopt Halal labelling and several market constraints simply allow them to adopt Muslim friendly strategy rather than full shariah compliant strategy. How Muslim consumers react to that strategy is not well documented in the literature. Therefore, this needs answer to the question: how Muslim consumers react to this alternative strategy?

This exploratory qualitative research made an attempt to address these research questions to facilitate marketers’ understanding of Muslim consumers’ perception to tap the growing market with appropriate strategies. Therefore, this report makes an attempt to contribute to the literature for theory building on Halal labelling, role of country-of-origin of consumers as well as brands, and acceptability of alternative to Halal labelling. This paper reports the literature background of the research and methodology followed by findings and discussion; and concludes with contributions, limitation and suggestion for future research.

LITERATURE BACKGROUND

Qur’an repeatedly reminds humankind to eat from His bounties that are “Halalan Tayeban” (e.g., Al-Qur’an, 5, 88). Halal in Qur’an means “permitted” and “Tayyeb” means “pure and wholesome” that is not hazardous to health and wellbeing. Qur’an prohibits only alcohol, animals slaughter in the name of God other than Allah, flesh of a dead animal, blood and swine. In a primitive human society these boundaries are relatively clear cut and Muslims can easily avoid these haram elements from their consumption list. However, the advancement of technology and globalisation of the trade of food and food ingredients have contributed to the complex environment of production, distribution and consumption of food for Muslims around the World. An imported food ingredient may contain inputs from one or more of the Haram elements either as an active agent in the production process, taste enhancer, preservative or cleaning agent in the production and distribution process. Halal as a labelling stands for the whole process of operation including supply chain that meets Shariah requirements under the supervision of a qualified body that certify with a seal of approval for Muslim consumers. However, this certification is not unique across the World for variation of interpretations of Shariah principles by Islamic schools of thought, lack of sincerity and expertise of certifying bodies and country market environment where the need for and/or facilities of certification are different. Therefore, Muslim consumers’ level of awareness and perceptions toward Halal
consumption and labelling may vary. Besides food, Halal cosmetics, skin care products, pharmaceutical products and food supplements are also gaining popularity among Muslims but studies on these product categories are still scarce (Ali, 2014).

Schiffman and Kanuk (1997, p. 446) posit that members of religious groups are likely to make purchase according to their religious identity. Halal labelling in this sense provides value expressive benefits (Seth, Newman and Gross, 1991) to Muslim consumers through perceived fulfilment of religious duty (as Alserhan (2010b) coined it as “good deed”) as well as “self-expression and connecting with others” (Jamal and Sharifuddin, 2014: 3). While subjective norm in the theory of planned behaviour (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) may explain the consumers’ adoption of Halal labelling in a country like Malaysia where the Halal environment put social pressure on individual’s purchase decision, perceived behavioural control in the theory of planned behaviour (Ajzen, 1991) is likely to explain such choice of Muslim consumers from countries where the Halal environment is not a general norm. In this context religiosity could be more prominent as a deciding factor because their need for religious identity and connecting with others in the same faith is paramount.

As discussed earlier, Halal certification and Halal labelling is not practiced in every country even with Muslim majority though the concept of Halal food is widely practiced there. Similarly, Halal certification is widely practiced by business organisations in many non-Muslim countries that target Muslim consumers at home and in overseas markets. International trade make processed food products and food ingredients of one country available to consumers in other countries but Muslim consumers’ perception towards these varied natures of Halal labelling are not empirically documented. Alserhan (2010b) identified country of origin of the brand, target market and certification of Shariah compliance as three major criteria to categorize Islamic Branding. Using these criteria he categorized brands into four discrete groups – true Islamic brands, traditional Islamic brands, inbound Islamic brands and outbound Islamic brands. True Islamic brands are produced in Islamic countries, are targeted to Muslims market, and are certified as Shariah compliant. Traditional Islamic brands are from Islamic countries and target Muslim consumers but are not certified as Shariah compliant. Alserhan (2010b) coined these as “Assumed Halal brands” (Alserhan, 2010b). Alserhan’s third category of Islamic brands target Muslim market and are certified as Shariah compliant but originate from non-Muslim countries. Alserhan used the term “Inbound Islamic brand” for non-Muslim country of origin. The outbound brands are produced in Muslim countries but are not target Muslim market, let alone Halal certification.

Certainly, Halal certification is the key to differentiate between true and traditional Islamic brands whereas country of origin is the factor that would separate true and inbound Islamic brands. This sum up that Muslim consumer’s perception towards Halal branding is ambivalent and would be expressed differently in different situation. In this instance, some Muslims might perceive traditional Islamic brands are acceptable whereas some might still find it questionable. Generally, the criteria of Muslim consumer adaptation of such Islamic brands are subjective, and will vary from person to person due to difference in personal experience, cultural differences and degree of religiosity (Jamal & Sharifuddin, 2014).

Muslim consumers in non-Muslim countries face severe challenges in their consumption decision-making process because products with Halal labelling is not widely available and in certain countries Halal certification faces severe backlash from the mainstream consumer lobbies. Limited studies in non-Muslim country contexts reveal that word-of-mouth and in-group recommendations are highly valued in Muslim consumers buying decision process (Jamal, 2003) and sometimes rely on ingredient list to make purchase decision (Ali, 2014; Peattie et.al, 2006).

Pricing is another important factor in the adoption of Halal labelled products and services for some Muslim consumers and contribute to the awareness of Halal labelled product (Dali, et al., 2009). It is often questioned if Halal certified products are more expensive than products that are not Halal certified.
Abraham Natural Produce (n.d.) claims that Halal meat is just the same as organic meat but it is expensive because it takes more time, less chemical, extra physical work of labour and financially expensive for processing the meat in a Halal operation. This study intends to explore Muslim consumers’ perception towards price as an inhibiting factor to adopt Halal labelled products.

**METHODODOLOGY**

This exploratory study used Focus Group interviews for data collection to understand Muslim consumers’ awareness and perception towards different Halal labelled products and services. Focus Group interview has added advantage over one-on-one interview to gather broad and deep insight into the subject matter as it encourages exchanging anecdotes and to examine the source of their thinking pattern (Kitzinger, 1995). Furthermore, the interactive nature of the investigation allowed understanding the important non-verbal cues of the respondents such as facial emotions, gestures, body language, and to identify possible response bias from such non-verbal cues (Morgan, 1997).

Comparing and contrasting Muslim consumers’ perception on the basis of their country of origin was one of the prime objectives of this research. To achieve this objective in a most cost effective way, the study was conducted in a branch campus of a foreign university in Malaysia that homes approximately two thousand international students from different parts of the globe. A judgmental sample of 18 Muslim students was recruited for three Focus Group sessions that represented nations such as Bangladesh, Canada, India, Malaysia Pakistan, Saudi Arabia and Sri Lanka. The University Human Research Ethics Committee (MUHREC) approved Focus Group study was conducted in specially equipped Focus Group Discussion room at the campus to facilitate discussion in a homely atmosphere with HD Video recording facilities. Prior to each session participants read an explanatory statement containing a brief overview of the study, its anonymity, volunteering nature of participation, recording and anonymous reporting of findings. They also signed a consent form to participate and allow recording of the session; and completed a short questionnaire for the measurement of participants’ degree of religiosity and necessary demographic information to facilitate data analysis. Each session was moderated by the principal investigator who played the role of recapitulating the research purpose, need for open discussion with tolerance to others’ opinion, and ensuring every participant’s chance to participate. Each interview session lasted for approximately 90 minutes. Audio and video recorded information were converted into transcript and documented for further processing and analysis (Patton, 1990). Focus Group sessions were Alpha coded (A, B and C) and participants in each session were assigned numeric code (1 – 6) for analysis of data and presentation of findings.

Demographics characteristics the sample included participants’ age (modal age group 20-23 years), education (all enrolled in various undergraduate Business, Engineering, Social Science and Medical degree courses. Participants’ average reported religiosity score ranged between 3.5 and 4.8 on a 5 point Likert scale (1 = low and 5 = high).

**RESEARCH FINDINGS**

Findings of the study are reported in 8 specific sub-sections in this section.

**Halal Products & Services**

The focus group studies revealed that the respondents possessed a fair idea regarding the availability of amenities of life that are Halal to demonstrate their ability to differentiate what is permissible from prohibited for Muslim consumers as prescribed in the Qur’an and Sunnah. In a response to an inquiry respondents also demonstrated their consensus to different categories of products and services that could be considered Halal including Islamic Banking, clothing, cosmetics, medical facilities and pharmaceutical
products. This shows that there are many choices of halal brands that may compete for shelf space in order to get the attention of their target consumers (Shafie & Othman, 2008). However, for the majority of the respondents, the paradigm of Halal was confined to only oral consumption products. Moderator had to extract the answers of Halal Clothing and Halal Leather Goods from the respondents of the second study (B), when respondent B4 claimed that it is deemed only for the extremely conservative Muslims. Furthermore, respondent C4 along with A2 and A6 went to the extent of expressing that they can’t think of anything else that can be Halal apart from Food and Beverages to which other respondents from the respective studies have also agreed.

Respondents indicated various methods to identify whether a product is Halal though a majority of the respondents from the second study indicated that they would rely upon the Halal Logo to identify Halal products, supporting that Halal Logo informs and reassures the target audience that a product is Halal and Shariah-Compliant in nature (Shafie & Othman, 2008). On a contrary, responses from the first and third study gave rise to varying results. Respondent C2 mentioned that it is difficult for him to purchase Halal certified products in Canada; therefore, he incorporates common sense before making a purchasing decision and restricts the shopping radius to a few Muslims stores nearby his residence as they’re perceived to sell Halal products. The comment supports that the traditional Islamic Brands are assumed to be Halal though they may not possess the certificate (Alserhan, 2010) as well as use of word-of-mouth to make purchase decision (Jamal, 2003). Respondent A3, A4, C5, and C6 suggested that they go through the ingredients list when a product is not Halal, which confirms similar Muslim consumer behaviour in UK (Peattie et.al, 2006). Brand recognition turned out to be very important for respondent A4 as she restrains herself from purchasing any product she isn’t familiar with and respondent A3 relies upon country of origin of the products before making her purchasing decision. Respondent C6 further mentioned that when she is in doubt, she prefers enquiring from the salesperson and makes a judgment call. Respondent C4 mentioned that he avoid any restaurants that sell alcoholic beverages. The outstanding response came from respondent C3, who stated that the capability to identify Halal products is generally attached to upbringing of an individual. Since he grew up in Saudia Arabia, he never felt the need to check for any identification, hence lacking the knowledge on how to identify a Halal product. Therefore, he will only purchase products containing Halal Logo.

An overall positive response was found when participants were asked if they check Halal logo before making consumption decision. Most respondents from all three sessions assigned very high importance to Halal Logo for product identification. The exception was respondent C4, who preferred not to judge solely on the basis of Halal logo. He preferred making a judgment call. However, there seemed to be weaker association between product identification and Halal certification as only one in three respondents placed emphasis upon checking the certification.

When respondent were asked to identify the logos they’re familiar with from a set of Halal logos from different countries, only 3 – 5 logos out of total 26 were identified. Two respondents (A3 and C2) were familiar with most of the logos. Upon further enquiry to identify the JAKIM Logo, most of the respondents were able to identify the JAKIM logo.

In response to an enquiry of participants’ preference on Halal certifying body, most participants unanimously agreed that they don’t mind purchasing a product with Halal logo from any certifying body as long as they aren’t under scrutiny. However, respondent C1 indicated that Halal certifying body is very important to him and will only purchase halal products with JAKIM logo within the geographical boundaries of Malaysia. Two respondents (B5 and B6) agreed to accept any Halal logo, either for lack of knowledge to judge issuing bodies or no to over-speculative on Halal products. It can be concluded that most respondents have little knowledge about Islamic Authorities in other countries.
Halal/Islamic Branding
This segment of the findings draws attention to the extent of awareness of the respondents towards various types of Halal branding. It further probes into details such as, whether perception of the respondents will influence their purchase decision. We found mixed results when respondents were asked if they would purchase any product for consumption that not certified Halal by any certifying body. All respondents from session B and most respondents from session C categorically denied consuming a product unless Halal certified. However, majority of the respondents from session A didn’t mind purchasing a product without Halal certification if originated from a Muslim country or greater proportion of the population is practicing Muslims. A respondent from session C indicated that he would buy because Halal certification is not the only criteria in his rational judgment where he rely on scanning ingredients or inquiring with salespersons rather than making decisions on a mere certificate.

True Islamic Brands: Participants were asked for their impression on imported products from Muslim countries that are certified Halal by local Islamic authorities of that country (True Islamic Brands). Majority agreed that they would buy without hesitation as there was no need to question the validity since the products were certified halal by a certifying body of a Muslim country. This lends support to “perceived value” of Halal labelling hypothesis of Jamal and Sharifuddin (2014) in an extended sample of international and Malaysian students. However one respondent claimed that he might be slightly hesitant in purchasing food products even if they are certified Halal as it depended on his perception of the Muslim country. Though deviation is very small minority (one out of 18), it may suggest that perception towards a particular country could be a determining factor for some Muslim consumers that support the country of origin in purchasing decisions of Halal food products.

Assumed Islamic Brands: Participants were asked if they would be willing to purchase products imported from a Muslim country but products were not certified Halal by any certifying body of the country. Findings reveal that most respondents would outright reject such a product without a halal logo. However, some participants would purchase the product if manufactured in country with high percentage of practicing Muslim population and general positive perception prevails among Muslims towards the country. A few participants (e.g., B2) would scan the ingredients rather than using country of origin to make a decision. In contrast, participant A5 placed emphasis upon familiarity with the product and her gut feeling to make the decision. However, the most liberal minded respondent (e.g., C4) restated his conviction of not pay attention to Halal logos only or the country of origin. He questioned “how a product like cookies can be Non-Halal where the ingredients are simply eggs, butter, flour, and sugar unless there are rumours about a particular imported product that is not pure?”

At this point an experiment was conducted by showing a package of food product manufactured in a Muslim country without a Halal label. The brand was a familiar Indonesian brand with Halal labelling from Ulama Majlis Indonesia but the product in the experiment was manufactured under license in the Kingdom of Saudi Arabia (this country of origin was hid for the experiment). Participants were asked if they would purchase the product for own and family consumption. Most participants recognised the brand as very common product and would buy without hesitation. However, one participant (B6) alleged that she would not buy because she had a bad experience of buying a packet of noodles imported from a Muslim country but later discovered the presence of a few Non-Halal ingredients in it. When asked if participants had any reservation on any Muslim country as a source of reliable supply of Halal products, one participant indicated “any Muslim country with low faith ratio” and another participant stated that he wouldn’t have confidence on a Muslim country that also export wine or pork. At the end of the experiment when an original package of the product was revealed, all participants intended to buy the product because they perceived Saudi Arabia having strict Shariah laws that ensure manufacture of Halal products. The experiment conveyed the message that Alserhan’s “Assumed Islamic Brand” cannot be generalized on the basis of Muslim majority status only unless it has build-up a reputation of Halal.
integrity based on adherence to the Islamic faith and ethical trade practices and support country of origin hypothesis.

**Inbound Islamic Brands:** The investigation progressed further to understand participants’ perception towards Inbound Islamic brands (products originating from Non-Muslim country but certified Shariah complied). Findings are mixed – while some would not buy a food product at all despite the Halal labelling, some participants indicated scepticism about the product, but some would purchase without hesitation. Some participants would purchase only after cross-checking the ingredient or if satisfied with the credibility of the Halal certifying authority. However, participants didn’t show any scepticism for any non-food products. Such mixed responses indicate lack of general acceptance of the ‘Inbound Islamic Brands’ by Muslim consumers for food and drinks that refutes Alserhan’s (2010b) theoretical expectation. The country context of the respondents didn’t turn out to be a determining factor.

**Perception toward Western Multinational Brands**

The study made an attempt to understand participants’ general perception toward western Multinational Corporations’ (MNCs) products that are not Halal certified but contain mandatory ingredient list. Participants were asked if they would purchase MNCs’ food products if any non-halal ingredient is in the list. Most participants indicated their disapproval to such product and would go for the Halal labelled alternative. In the event of a situation where Halal food is not available, they would rather chose vegetarian products. However, a few from session B indicated that they normally avoid MNCs' meat products but not so sceptical about non meat products. For example, B4 perceived “MNC brands are renowned” and he would purchase though the product may contains an insignificant amount of non-halal elements in it. When participants were ask about their opinion on the presence of animal fat based emulsifier, thickening and stabilizing ingredients in the MNC products, C1 and C3 indicated their acceptance of products like Galaxy and Cadbury, which they consumed from their childhood, and C4 also indicated his liberal attitude toward such “ingredients in renowned brands for personal use but not for people who would generally pay attention to such intricate details”. These liberal attitudes toward animal based ingredients found to be related with their low degree of religiosity and upbringing in a country environment where the Halal certification is almost non-existent for domestic market.

When participants were asked about their perception towards non-food products containing non-Halal ingredients, most participants from session B indicated their liberal attitude toward insignificant amount of alcohol in cosmetics and personal care products but would avoid such products with animal fat based ingredients. However, B5 indicated her intention not to use lipsticks containing alcohol to avoid risks of swallowing rather than religious reason. Similarly, most participants from session C indicated their lack attention to such details in personal care products. Participant C3 even justified spraying perfumes containing alcohol on clothes because “alcohol is impure only if it touches the body). In response to a further probing on cosmetics and personal care products, whilst most participants agreed to purchase renowned MNC brands without non-Halal ingredients, some participants emphasized that just using Halal ingredients does not guarantee Shariah compliance unless the production process is also Shariah compliant. When participants were given a choice between a Halal certified SME brand of cosmetics/personal care product and a globally renowned non-certified cosmetics/personal care brand, majority of participants opted for the globally renowned brand. These findings lend support to a recent study in Pakistan where the concept of Halal cosmetics and personal care products was found least known (Ansari, 2014).

In this context participants were asked about their perception towards cosmetics product of the companies that promote purity and eco-friendliness of their operation. Body Shop was the most mentioned company in this context and most participants indicated their positive intention to buy those products. Some participants expressed their positive brand relationship and “purchase products without further inspection
of the ingredients” (C1) and for “psychological satisfaction” (C3 and C4) both stated that producing such products would be psychologically satisfying.

**Premium Pricing for Halal Products**

The study also explored Muslim consumers’ perception of paying higher price for Halal labelled products and services. Participants of this study never felt that they were paying a premium price to consume Halal labelled products. However, to a hypothetical situation of charging Premium Pricing for Halal labelling, most participants indicated Halal consumption is important to them and they wouldn’t mind paying a higher price, which support similar findings of a study by Wilson (2012). However a few participants raised the purchasing power and affordability issue that may strongly influence purchase high priced Halal labelled products thon they wouldn’t mind paying s slightly higher price compared to hon-Halal alternatives. In response to perceived reason for higher price, two participants felt additional costs of producing and supplying Halal products as a reason for charging higher price. However, while “reasonable” higher price for higher operational expenditure is acceptable for most, one participant felt it was unfair to charge a premium price to exploit consumers’ need for fulfilling religious obligation. He went on to add that “exploitation is banned in Islam” (C1) as observed by Arham (2010).

**LIMITATIONS AND FUTURE RESEARCH**

The study has some limitations, which restricts generalizability of the research findings. First, an exploratory research with 18 samples is the major limitation to generalize findings. However, main objective of the research was to understand Muslim consumers’ perception on different aspects of Halal labelling rather than generalizing its findings. Drawing on the findings of this study future research could be designed to develop and test theories on Muslim consumers’ perception on Halal labelling. Second, information collected for this study mostly biased on young “generation Y’ and students, which limits generalizing the findings on other generations of Muslim consumer’s perspective on Halal branding or products. Though it provides a picture of future mainstream Muslim, a larger sample covering different demographics and generation should be considered in future study for a better understanding of the perception of the overall Muslim market.

Third, social desirability bias is another limitation of the study where consumers’ own belief, opinion and personality might have impacted the research. It could have been difficult for some participants to share their real feelings in public towards different sensitive topic. Eventually, although there were limitations, the main objective of the study are largely met and helped to understand consumer perception as summarized in the finding section. Future research should look at some of these limitations, especially on a larger sample representing cross-section of Muslim consumers from Muslim and Non-Muslim countries to have a better understanding on the choice and perception of the Muslim market towards Halal labelling of goods and services.

**SUMMARY, IMPLICATIONS AND CONCLUSION**

Drawing on the findings of the study most Muslim students demonstrated their high level of awareness on Halal labelled products and services. However, their knowledge is rather limited on Halal logos and certifying bodies beyond Malaysian JAKIM and its logo as revealed in their inability to recognise several halal logos. It may mean that most people only concentrate on the Halal logo rather than further details. It was also revealed that while most participants expressed positive attitude towards Halal labelled products form Muslim countries, high proportion of participants were sceptical about the products from Muslim countries that are not certified as Shariah compliant as well as products from non-Muslim countries though certified as Shariah compliant. In both situations ingredients of the product were considered more worthy than country of origin and Halal labelling of the products. Some participants were found liberal in accepting renowned MNC brands despite the presence of some animal based ingredients such as
emulsifier and thickening agents in food and non-food products. It was understood from the focus group study that most respondents were willing to pay a higher price for halal products because consumption of Halal products is Ibadah (*worship to Allah*) but considered that exploiting Muslim consumers’ religious feelings to maximize profit is a branch of ethical standards.

These findings of the exploratory study have theoretical and managerial implications. Findings will contribute to the on-going research to fill the huge research gaps in the literature on Islamic marketing. Findings will contribute to the much needed theorization for Muslim consumers’ consumption behaviour in different country contexts with different level of Halal trade and consumption. Managers can find most of these findings very useful to design their marketing strategies. Marketeer from Muslim countries who are targeting Muslim markets must consider using Halal certification from a reliable Halal certification bodies to win Muslim consumers’ heart and share their purse. Marketers of the Shariah compliant brands from non-Muslim countries should build their brand more carefully to build trust among Muslim consumers. Any form of transgression can be very fatal for such brands and it is hard to win back consumer trust because such an act could be considered a mockery with Islamic faith. Marketer of the non-Shariah compliant brands from non-Muslim countries should consider building trusting relationship with Muslim market at home and global market Muslim-friendly product and communication strategies may convince Muslim consumers to safely use their brands.

In conclusion, apart from some apparent limitations, this study provides an insightful analysis on the thoughts, motives, attitudes and perceptions of the present generation Muslim consumers towards the purchase of Halal goods and services. Future researchers and managers can benefit from these findings for furthering our knowledge on Muslim consumers and formulate appropriate business strategies to facilitate Halal consumption of the Muslim ummah.

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Muslim Consumers’ Halal Consumption: The Role of Emotional and Religiosity Factors in Buying Intention

**Keywords:** Islamic Branding, Halal Branding, Muslim Consumer Perception, Religiosity, Halal Consumption

**INTRODUCTION**

The Pew Forum has estimated approximately 1.6 billion Muslim population in 2010 (23% of the world population) and its potential to grow even faster than any other major religions which is projected to be 35% of the world population by 2050. The income growth in many emerging countries with sizeable Muslim population has contributed to the attractive size of Muslim markets around the world. Increased literacy and access to communication networks has contributed to the spread of knowledge of Halal labelling amongst Muslims and their awareness of Halal labelled products. One estimate suggests that the Halal food market alone constitutes around 16% of the global food industry (approximately $632 billion a year) in addition to other non-food Halal products such as cosmetics and personal care products, travelling services, banking and financial services (The US Halal Association, n.d).

The emergence of Muslim markets around the globe and its special dietary restrictions attracted managerial and scholarly attention in recent years. Among many other aspects of the Muslim market, scholarly study on Muslim consumers’ consumption behaviour in Muslim majority and minority country contexts are still very scarce to theorize behavioural pattern of the Muslim market. A recent study by Jamal and Sharifuddin (2014) reports that while religiosity, perceived usefulness and perceived value has significant positive relationship with British Muslim consumers’ intention to buy halal brand foods, only religiosity and perceived usefulness has significant impact of intention to buy. However, their finding cannot be generalized without being verified in other market context. This study fills this gap with further empirical evidence.

Alserhan (2010a, 2010b; 2011) conceptualised three concepts of Islamic branding (True Islamic brand, Assumed Islamic brand and Inbound Islamic brand) based on Muslim and non-Muslim country of origin, target market and Shari’ah compliance of the brands. Although Alserhan’s concepts of Islamic branding are pioneering ideas, their acceptance is still not tested with empirical evidence. The exceptions being a series of exploratory qualitative studies by Ali (2014) and Ali et.al 2013) that reported that acceptance of the brands has apparent association religiosity and country of origin of the participants. However, findings of the studies cannot be generalised unless verified in a quantitative study.

Drawing on the above backgrounds, key objectives to achieve in this study are (1) to provide empirical verification of finding reported in Jamal and Sharifuddin (2014) in a Muslim-majority country context;
and (2) to test the acceptance of Alserhan’s concepts of Islamic branding of products. Background of this study is provided in the literature review to develop hypotheses tested followed by methodology used. Findings of the study are discussed and concluded in the last two sections with research, managerial and policy implications as well as limitations of the study.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

This section provides a brief background of the study with an aim to highlight on consumer brand acceptance behaviour and potential emotional, social and rational drivers that influence consumers’ brand adaptation behaviour in general and Halal labelled product by Muslim consumers in particular. Theory of reasoned Action (Aizen & Fishbein, 1980; Fishbein & Aizen, 1975) and Theory of Planned Behaviour (Ajzen, 1985) are widely used theories in the study consumer intention to buy (e.g., Vermeir & Verbeke, 2008) but their limitations are also widely discussed in the consumer research community in recent years for its failure to predict purchase in different research contexts and extended the model with additional variables for better prediction of behaviour (Bagozzi, Gopinath & Nyer, 1999; Kim & Chung, 2011). In a recent study Jamal and Sharifuddin (2014) studied the role of perceived usefulness, emotional value, perceived value, social and religious value and the role of religiosity in predicting British Muslim consumers’ intention to buy and purchase Halal branded food products. Their exploratory research findings need further verification in a different market context to facilitate generalisation. Section 2.1 reviews the relevant literature on those variables and develops hypotheses to be tested in this study.

A number of scholars have conceptualised Halal consumptions and types of Islamic branding (Alserhan, 2010a, 2010b, 2011; Temporal, 2011; Wilson & Liu (2010). Alserhan (2010a) conceptualised three categories of Islamic brands – ‘true Islamic’, ‘traditional or assumed Islamic’ and ‘inbound Islamic’ brands but Muslim consumers’ acceptance of these brands has not been empirically examined. Ali and his research associates (Ali, 2014; Ali et al, 2013) reported findings of their exploratory phase of the research to examine intention to buy these categories of Islamic brand by Australian and Malaysian Muslim consumers. They also examined Muslim consumers’ acceptance of other brands outside the three Islamic brands and found that religiosity and the country of origin of the brands as well as that of the participants likely to determine intention to buy these brands. This study verifies these findings. The next section reviews available literature and develop hypotheses for testing in this study.

Part 1: Literature and Hypotheses Development

Emotional Value and Intention to Buy. Emotion is a cognitive element that drives consumers brand behaviour (Bagozzi et al, 2002). They defined “emotion is a mental state of readiness that arises from cognitive appraisals has a phenomenological tone, is accompanied by physiological processes and may result in specific actions”. Soscia (2013) further mentioned that the literatures of marketing had proved how. Identifying the relevance of the affective component is crucial because emotions and moods play a critical role in the cognitive processes of consumers and it may have a strong impact on marketing decisions (Soscia, 2013). Positive emotions such as satisfaction, happiness, pride, self-assurance establish tie between consumer and the brand and enhance brand loyalty. When it comes to purchasing Halal products, Muslim consumers are likely to feel a sense of satisfaction, self-assurance and security in consuming Halal labelled products and may feel obedience to Allah’s command. Hence, the hypothesis to be tested is:

Hypothesis1: There is a significant positive relationship between perceived emotional value towards Halal food products and Intention to Buy Halal food products.

Social Value and Intention to Buy. Social identity is an individual’s knowledge of membership in social groups along with the emotions and values attached to it (Tajfel and Turner 1986, as cited in, Verkuyten & Yildiz, 2009). Individuals would seek to belong in a group that provides security and positive social
identity. Consumer would behave in a certain way to gain reward or avoid sanction from others to satisfy social norms (Quester et al., 2007). Scholars posit that conformity tends to be inspired by norms (Deutsch & Gerard 1965; Sinclair, 2012; Suhay, Calfano & Dawe, 2015). Consumers often seek social approval through in-group conformity that provides cues on what is appropriate behaviour and attitude for an individual. In a Muslim society social norms are mostly shaped by Islamic culture, all Muslims are encouraged to subscribe to that norm for identify and consistently conform to it. Alam and Sayuti (2011) argue that if purchasing Halal food is a social behavioural norm that is considered socially desirable, individuals in their Halal purchase decision tend reflect on ‘what others think’ to conform to the social norm. In other word, a Muslim individual will consume Halal labelled products partly to avoid negative impression of the in-group Muslims community. Non-compliance to such norm by voluntarily consuming non-halal by a Muslim could be considered blasphemed to Allah and fellow religious mates. Therefore, the following hypothesis can be tested:

**Hypothesis 2:** There is a significant positive relationship between social value towards Halal food products and Intention to Buy Halal food products.

**Religious Value and Intention to Buy.** Religiosity or religious commitment refers to the degree of adherence of an individual with his or her religious values, beliefs, and practices in daily lifestyle (Worthington et al., 2003; Jamal & Sharifuddin, 2014). Halal label is not just a packaging element, for Muslim consumers it actually represents a part of their belief system and conform a moral code of conduct that is essential in the devotion of their daily lifestyle. It is an assertion of their Islamic identity and recognition of spiritual purity (El-Bassiouny, 2013) by demonstrating relationship with God through consuming Shari’ah compliant products. Scholars found that Muslim consumers in non-Muslim country context relate Halal food labels to the assurance about what goes inside the package as well as about processing and handling of ingredients based on the Islamic law (Ali, 2014; Jamal & Sharifuddin, 2015; Verbeke et al., 2013). Halal label can promote self-expressive benefits that may inspire religious Muslim consumers’ brand loyalty. Following this discussion the hypothesis to be tested is:

**Hypothesis 3:** There is a significant positive relationship between religious value towards Halal food products and Intention to Buy Halal food products.

**Perceived Value of Halal Label and Intention to Buy:** Zeitham (1988) defines perceived value as “an overall assessment of the utility of a product or service based on perceptions of what is received and what is given” (p.14). Zeithaml (1988) argues that perceived value is consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given. However, perceived value differs from consumer to consumer because one may prefer quality over price and the other may prefer time over effort. For the Halal logo, such label may also provide value-expressive benefits to the Muslim consumers by providing opportunities for self-expression and to connect with others. For example, after purchasing a Halal product, a Muslim consumer may feel that he or she is a responsible buyer while fulfilling religious and market related roles at the same time. Drawing on the cue utilization theory, Dodds & College (1995) posit that consumers makes decision assisted by using cues for information and the Muslims in Britain consider Halal logo as a relevant information cue to enhance their perceived value of Halal label. In Malaysia, Malaysian Muslims perceive higher value of the Halal logo issued by the Department of Islamic Development (JAKIM) compared to other Halal label because they place high trust and relies heavily on JAKIM for it strictly executed Shari’ah compliance policy at the national level (Mohayidin & Kamarulzaman, 2014). Jamal & Sharifuddin (2014) found that while perceived value of Halal label has no direct impact on intention to buy, its has significant impact on Muslim consumers intention to patronise Halal stores. Therefore, the following hypothesis will be tested to verify their finding:
Hypothesis 4: There is a significant positive relationship between perceived value of Halal logo and Intention to Buy Halal food products.

Monetary Value and Intention to Buy. Price of the Halal labelled products is perceived higher than general brands without Halal label, especially in countries with Muslim minority. For example, Nestorovic (2013) reported that the French Muslim consumers pay higher price for Halal meat compared to non-halal meat in supermarkets and butcher shops. Ali (2014) also found that Australian Muslim consumers perceived to pay higher price for imported food products with Halal label and even locally produced meat and other consumer products compared the non-halal alternatives. Therefore monetary sacrifice by paying higher price for Halal labelled products may indicate higher commitment of Muslim consumers. Mohayidin & Kamarulzaman (2014) argue that apart from the Halal certificate, other attributes such as brand, price, promotion, and safety assurance can influence purchase decision of Muslim consumer in Malaysia. They found price as the second most important driver after Halal labelling in Malaysian Muslim consumers purchase decision. This may suggest that Muslim consumers in Malaysia consider price as value for money over the quality or brand of any Halal product (Krauss et al., 2006). Though Jamal and Sharifuddin (2014) measured monetary value in their study but did not include in the model. Thus, the following hypothesis will be tested for exploratory purpose:

Hypothesis 5: There is a significant positive relationship between perceived monetary value of Halal labelled food products and Intention to Buy Halal food products.

Religiosity and Intention to Buy. Religion acts as a platform on which humans construct their attitudes as well as behaviour (Esso & Dibb, 2004). Religious duties and beliefs act as a guide for the attitude and feelings that individuals hold toward a range of products (Jamal, 2003; Esso and Dibb, 2004; Mullen et al., 2000; Mukhtar & Mohsin Butt, 2012). Muslims’ consumption behaviour is guided by the Quranic ruling of what is Halal (permissible) and what is Haram (not permissible) (Berry, 2000; Eliasi and Dwyer, 2002; Mukhtar & Mohsin Butt, 2012). However, the interpretation of these sources and how they are applied varies across Muslims subscribing to different school of thoughts (Jafari & Sandikci, 2015; Liu & Wilson, 2010). This will inevitably produce different views of what is Halal and Haram. One should also consider that practice of religion varies among individuals based on their level of religiousness and devotion to religious rules and values. A recent study across ten predominantly Muslim countries identified five value segments (religious conservatives, new-age Muslims, pragmatic strivers, liberals and social conformists) based on values and attitudes of Muslim consumers (Vohra, Bhalla, Chowdhury, 2009). Individuals in these value segments are likely to demonstrate different level of religiousness in their daily life activities and consumption decisions. Hence, an argument can be made that the intensity of influence of religion (religiosity) will differ from one Muslim consumer to the next (Mukhtar & Mohsin Butt, 2012). Scholars found a relationship between religiosity and Muslim consumers purchase behaviour, especially in relation food. Jamal and Sharifuddin (2014) also reported that British Muslims’ religiosity positively influence their intention to purchase Halal branded products and patronise Halal stores. Based on these findings, the following hypothesis is constructed:

Hypothesis 6: There is a significant positive relationship between the level of religiosity and Intention to Buy Halal food products.

Part 2: Relationship between Religiosity and Definition of Halal Branding, Acceptance True Halal, Assumed Halal, Inbound Halal, General Brands
This part of the study is exploratory in nature where a number of proposed relationships are tested using quantitative research approach. In Islam, Muslims are judged by their intentions where consumption of Halal product is considered as a good deed that pleases Allah (Alserhan, 2010a). Muslim consumers’ consumption behaviour is guided by the Quranic ruling of what is Halal (permissible) and what is Haram (not permissible) (Mukhtar & Mohsin Butt, 2012). As we discussed earlier, level of religiosity of Muslim consumers influence their intention to purchase Halal labelled products either as guided by the notion of
“good deed” to please the God or avoid sinful act by disobedience to God’s command of consuming Halal and avoid Haram. In this part of the research we review relevant literature to develop proposed relationship between religiosity and definition of Halal branding, acceptance of Alserhan’s (2010a, 2010b, 2011) three categories of Islamic brands as well as general brands.

Religiosity and Definition of Halal Branding. The term Islamic Branding does not have a clear definition (Alserhan, 2010a; Copinath, 2007). Scholars have yet to come to a consensus of the concept of “Islamic” and “Halal” branding (Ali, Kebatile, Mokonenyne, Lian & Zyl, 2013). However, Alserhan (2010a) proposed three components that constitute an Islamic brand – the brand has to be compliant to Shariah principles, the brand emerges from a Muslim country, and the brand is targeted to the Muslim consumers. Alserhan (2010a, 2010b) elaborated on this concept further and stated that a brand is considered true Islamic brand if it meets all of the three components stated above. If an Islamic brand is not Shariah compliant (no certification from religious authority), then it is assumed Halal if it targets Muslims and originates from a Muslim country. For brands that target Muslims and are Shariah compliant but come from a country with Muslim minority or non-Muslim countries, he used the term inbound Islamic brands.

Muslims view branding as something that is inseparable from their Islamic faith, which commends that the divine should be reason for all actions. Even one hates and loves is because his feelings are synchronized with Allah’s instructions, not because of humanly desires (Alserhan, 2010a). In Islamic branding, manufacturers are perceived as producers of righteousness rather than objects; sellers are perceived as people who invite other into a righteous life; and buyers are engaging in worship (Alserhan, 2010a). Hence, Halal plays an imperative role in Muslims’ lives by signalling them to purchase as well as consume products that are deemed permissible (Rajagopal et al. 2011; Shafie & Othman, 2006; Borzoei & Asgari, 2013). Highly religious Muslim consumers are likely to be very careful in making their purchase decision to avoid sinful act by consuming something Haram. To satisfy that religious conviction, his/her selection of Halal product tends to follow strict rules of looking at Halal logo, its authenticity and credibility of the certifying body and producer of the product to avoid possible mistake. Therefore, we shall explore the following proposition:

Proposition 1: There is a positive relationship between the definition of Halal branding and the level of religiosity of the Muslim consumers.

Assumed Halal and Religiosity. Ali (2014) conducted an exploratory study in two major Australian cities and found conflicting results on the acceptability of assumed Halal branded products. One participant stated that as long you are in a Muslim country, it is considered Halal even without a Halal logo. Another participant had an opposite view where the Halal logo plays a very important role in determining whether a brand is permissible or not even the brand comes from a Muslim country. A further investigation revealed that while the first participant represented a number of other participants with relatively low religiosity score compared to the representative of the participant with high level of religiosity. Therefore, only country of origin of the product does not provide some Muslim consumers with the confidence to determine the Halal status of a product, since the perception of degree of Islamic-ness of the country is important to them. Ali et.al (2013) stated that this concept is not applicable generally to all Muslim countries since the degree of faith of the country and nature of the product is important as well (Alserhan, 2010b). This clearly negates Alserhan’s concept of assumed Halal brand products (Ali, 2014). Hence, the following proposition is made:

Proposition 2: There is a negative relationship between Assumed Halal Islamic brand and the level of religiosity of the Muslim consumers.
**True Halal and Religiosity.** Ali and his associates (Ali et al, 2013) found conflicting results in their research about *true Islamic brand* products. Majority of participants in their study agreed to buy imported products that are certified Halal by the countries’ local Islamic authorities though a small minority raised doubts on the Halal certification by local bodies in some countries. Ali (2014) suggested this to be attributed to a Muslim country’s support for Halal system that could be viewed as reliable source for authenticating reliable products. Ali (2014) also discovered distrust on Halal certification of certain certification authorities in fulfilling eligibility requirements for granting Halal certificates. The overall findings provide support to Alserhan’s (2010a, 2010b) concept of *true halal* brand products despite some disapproval by small minority. Building on these findings, the following proposition is constructed:

*Proposition 3: There is a positive relationship between the levels of religiosity of the Muslim consumers’ acceptance of True Halal Islamic brand.*

**Inbound Halal and Religiosity:** Ali and his associates (Ali et. al., 2013) found that most respondents would buy imported product from non-Muslim countries that are certified Halal by local Islamic bodies in the country but only after checking the ingredients list of those products. However, conflicting response was found as some participants indicated scepticism towards the origin of the product’s country. (Ali, 2014) contends that participants highlighted the adherence to Shariah law in Halal certification that contribute to trustworthiness. Thus, Halal products certified and originating from non-Muslim countries are welcomed as long as a clean image is maintained. Ali (2014) also found that some participants in the research consulted their religious leaders about *inbound Halal* products. This poses a problem due to different adherence to school of thoughts with regards to interpretation of Quran and Hadith in different countries, which affects the religiosity of the participants. With this in mind, the following proposition is made:

*Proposition 4: There is a positive relationship between inbound Halal food products and the level of religiosity of the Muslim consumers.*

**General Brand and Religiosity:** In a research conducted by Ali et.al (2013) found that most participants in their study were willing to buy well-known global brands (General brands) if meat or any form of derivatives from animal is absent (vegetarian). However, some participants are sceptical and indicated that they would only buy general brands if natural and organic non-meat or animal derivatives constitute the ingredients. Ali (2014) pointed out that these participants have a liberal attitude. Some participants were unwilling to purchase food products that contained any trace of haram ingredient for consumption unless it is a life-saving medicine. All the participants had negative reaction towards multinational brands that put emphasis on “purity and humanity” but without Halal certification from any Islamic authority for their products. They argued that a Halal certificate has greater importance over ingredients list. Some felt suspicious toward their products due to the possibility of presence of Haram ingredients. However, Ali (2014) found in a separate study that some ingredient lists in certain countries are more reliable and can be trusted to tell if a product is Halal for consumption. Building on these findings, a proposition is put forth:

*Proposition 5: There is a positive relationship between General brand food products and the level of religiosity of the Muslim consumers.*

**METHODOLOGY**

Quantitative research approach was used to test the hypotheses developed for this study to facilitate comparison of findings with other published studies in this area of research, especially that by Jamal and Sharifuddin (2014). Quantification of the research phenomenon facilitate statistical analyses to summarize, data reduction of further parametric statistical tests, finding relationship between variables.
and causal relationship that are appropriate for this study. Population of the study was Muslim consumers to understand their intention to buy Halal labelled products and factors that may explain such intention.

**Measurement of Variables**

For the measurement of the variables under study, most items for the measurement of variables in the first part of this study were adopted from the study conducted by Jamal and Sharifuddin (2015) to facilitate validation of their finding. Using a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree), 14 items were used to measure the general perception on halal (social, religious and emotional value). They adapted some of the items from Sweeney and Soutar (2001) while some were newly created to test the new variables. The perceived value had 3 items based on Saade and Bahli (2005) to measure perceived value of the Halal logo. Three items from Sweeney and Soutar (2001) measure the monetary value and 3 items from Ajzen and Fishbein (1980) measure the intention to buy. Lastly, 10 items adopted from Worthington, et al. (2003) to measure religiosity.

The second part of the study was to provide quantitative evidence on conceptualization of three concepts of Islamic branding (Alserhan, 2010). Similar to the first part, a 7-point Likert scale was used to measure the importance of halal logo and intention to buy four categories of products. All the 22 items were created based on qualitative studies conducted by the lead researcher (Ali, 2014) to measure attitude responses to the questions. Measurement items were used to design a self-administered survey instrument and the instrument was pretested among students and slightly modified before start of the survey.

**Sample and Data Collection**

This study was conducted in Malaysia using a convenience sampling for time and resources constraints. This research utilized a single cross-sectional design employing self-administered questionnaires distributed physically to respondents at a private university campus as well as some neighbourhoods in Selangor, Malaysia as well as throughout Malaysia via Google forms where participants were chosen through links to the community of the researchers and the snowballing technique (McCracken, 1988). These mix methods facilitated 146 responses. There were about 26 questionnaires with some missing values where the mean score of the particular question was used to substitute the missing values. Summary of the demographic data shows that males (49.3%) and females (50%) represented equally. Majority of them aged between 18 – 24 years (61.6%), followed by 25-34 years age group (26.7%) and above 34 years of age (11.7%). Almost half of the respondents were students (47.9%), followed by full-time employees (39.7%) and self-employed (11.6%). In terms of education, half of the respondents reported graduate degree (49.7%), followed by diploma or certificate (32.9%) and Secondary School education (19.2%). By nationality, vast majority of the respondents were Malaysian (87%) and remaining 18 participants represent other Southeast Asian region (5), South Asia (6), Middle East (5) and Africa (2).

**DATA ANALYSIS**

**Test of Reliability and Calculation of Index for Variables**

SPSS was used for analysing the data. Analysis for this study started with reliability test followed by calculation of index for each variable using arithmetic mean of the items that measured the variables after reliability test. Test of scale reliability for two parts of the study are presented below.

Initial scale reliability tests for part 1 revealed that all items for the measurement of Emotional Value, Social Value, Religious Value, Perceived Value of Halal Brands, Monetary Value, Religiosity and Intention to Buy Halal branded products are internally consistent with moderate to high inter-item positive correlation between items. No item was found to affect Cronbach Alpha. Therefore, no item was excluded from analysis and Cronbach Alpha for all six Independent and the Dependent Variable falls within the range of .832 and .966 (mostly high end of acceptability) indicating internal consistency of the
measurement item for each variable (see Table 2). Arithmetic Average of the items for each variable was save as an index for further analysis of relationships between the variables to test the hypotheses H1 – H6 that are presented and discussed in the section to follow.

Since part 2 of the study is exploratory and measurement for the variables were designed based on the lead researcher’s qualitative phase of the study, a number of statement items (B7, C5 and C7) were negatively worded to ensure nonbiased responses in answering the questions and facilitate respondents to provide sincere and fair opinions on the statements. Hence, the items were reverse coded before conducting reliability test. Initial test of scale reliability revealed that three statement items affected reliability for low inter-item correlation. Therefore items were excluded and the internal consistency improved substantially. The reliability score from 0.752 to 0.887 proved satisfactory. Table 3 shows the reliability scores and measurement items for the variables in part 2 of the research that is designed to explore the relationships between the religiosity and definition of halal.

**Table 2: Reliability Analysis for Part 1**

<table>
<thead>
<tr>
<th>Measurement Items used</th>
<th>Emotional value (Cronbach’s Alpha: .941)</th>
<th>Social value (Cronbach’s Alpha: .938)</th>
<th>Religious value (Cronbach’s Alpha: .858)</th>
<th>Perceived value (Cronbach’s Alpha: .832)</th>
<th>Monetary value (Cronbach’s Alpha: .966)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consumption of Halal food products is completely my personal choice</td>
<td>Consumption of Halal food products makes me feel accepted by my family and friends</td>
<td>Consumption of Halal food products is commanded by Allah and it is sinful not to obey</td>
<td>Halal logo on a pack of food product helps me decide which brand/pack to buy</td>
<td>Most Halal labelled food products in the market are reasonably priced</td>
</tr>
<tr>
<td></td>
<td>Consumption of Halal food products makes me feel good and healthy</td>
<td>Consumption of Halal food products improves the way I am perceived in the society</td>
<td>Consumption of Halal food products is a religious obligation for me as a Muslim</td>
<td>Halal logo on a pack of food product helps me reduce my shopping time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumption of Halal food products is highly enjoyable experience for me</td>
<td>Consumption of Halal food products makes a good impression on other people</td>
<td>Consumption of Halal food products is a good deed to please Allah for His reward</td>
<td>Halal logo on a pack of food product reduces the anxiety when I shop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Halal meat product tastes better than non-Halal meat products</td>
<td>Consumption of Halal food products gives me social approval</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I feel Halal food product is a sign of high quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumption of Halal food products gives me pleasure in eating consistent quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumption of Halal food products makes me feel relaxed and enjoy eating</td>
<td></td>
<td></td>
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AGBA 12th World Congress
Page 539 of 1173
Most Halal labelled food products in the market are good value for money
Most Halal labelled food products in the market are good choice for the price paid

**Intention to buy (Cronbach’s Alpha: .965)**
My intention to buy packaged food products with Halal logo on them in the future:
Definitely will not to definitely will
Very uncertain to very certain
Very unlikely to very likely

**Religiosity (Cronbach’s Alpha: .919)**
I enjoy spending time with others of my religious affiliation
I often read books and magazines about my religion
It is important for me to spend periods of time in private religious thoughts and prayer
Religious beliefs influence all my dealings in life
I spend time to improve understanding of my religion
My religious beliefs lie behind my whole approach to life
I enjoy participating in the activities of my religious organization
I make financial contributions to my religious organization
I keep well informed about my local religious group and have influence in its decisions
Religion is important to me because it answers many questions about the meaning of life

Logo as well as acceptance of assumed Halal, true Halal, inbound Halal, and general brands. Arithmetic average of the items was saved as an index for analyses of the relationships.

<table>
<thead>
<tr>
<th>Variables and Measurement Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Halal branding (Cronbach’s Alpha: .752)</strong></td>
</tr>
<tr>
<td>A Halal Logo from a reliable certification body and no Haram ingredient in it</td>
</tr>
<tr>
<td>A Halal Logo on the pack from a reliable certification body</td>
</tr>
<tr>
<td>A Halal Logo on the pack from any certification body</td>
</tr>
<tr>
<td>If there is no Haram ingredient(s) in the product</td>
</tr>
<tr>
<td>If I feel the product is good for health without checking a Halal logo or presence of Haram ingredient in it</td>
</tr>
</tbody>
</table>

| **Assumed Halal (Cronbach’s Alpha: .887)** |
| I would purchase the products (even without a Halal Logo) because these are produced and consumed in Muslim country environment. |
| I would purchase the products (even without Halal Logo) because these are produced and consumed in Muslim country where Islamic norms and values are strictly followed. |
| I would purchase the products (even without Halal Logo) if all ingredients listed on the package are Halal. |

| **True Halal (Cronbach’s Alpha: .807)** |
| I would purchase the products if certified Halal by any local Halal certifying body in that country |
I would purchase the products if certified Halal by a reputed local Halal certifying body in that country.
I would purchase if it is Halal certified and does not contains any Haram ingredient.

**Inbound Halal (Cronbach’s Alpha: .828)**
I would purchase these food products because their Sharia’h compliance is certified by a local Islamic body.
I would purchase these food products if their Sharia’h compliance is certified by reputable Islamic bodies.
I would purchase these Sharia’h compliant food products only after checking ingredients.
I would purchase these Sharia’h compliant food products if confirmed by our own Halal certifying body (JAKIM)

**General brand (Cronbach’s Alpha: .786)**
I would purchase the food products after checking ingredients on the package.
I would purchase the food products even an insignificant percentage of Haram ingredients are listed on the package.
I would purchase the food products even some Haram ingredients are listed on the package as minor element of the product such as preservatives or taste enhancers.
I would purchase any well-known brand of food products without checking their ingredient listed on the package.

**FINDINGS AND DISCUSSION**

**Part 1: Relationship between Intention to buy Halal products and other variables**
Pearson Correlation coefficients are used to test the hypothesized relationships in this part of the study. Results of the bi-variate correlation between intention to buy Halal products and six other variables (emotional value, social value, religious value, perceived value, monetary value and religiosity) are presented in Table 4.

<table>
<thead>
<tr>
<th>Variables</th>
<th>EV</th>
<th>SV</th>
<th>RV</th>
<th>PV</th>
<th>MV</th>
<th>R</th>
<th>IB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Value (EV)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Value (SV)</td>
<td>.610**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious Value (RV)</td>
<td>.834**</td>
<td>.600**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Value (PV)</td>
<td>.582**</td>
<td>.511**</td>
<td>.616**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monetary Value (MV)</td>
<td>.484**</td>
<td>.455**</td>
<td>.424**</td>
<td>.490**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religiosity (R)</td>
<td>.715**</td>
<td>.530**</td>
<td>.675**</td>
<td>.568**</td>
<td>.459**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Intention to Buy (IB)</td>
<td>.629**</td>
<td>.403**</td>
<td>.679**</td>
<td>.617**</td>
<td>.475**</td>
<td>.570**</td>
<td>1</td>
</tr>
</tbody>
</table>

Significance Level of Correlation Coefficients: ** = 0.01 level; * = 0.05 (2-tailed).

Findings provide significant correlation to support all six hypotheses (from H1 to H6) of the study and lend support to similar findings reported by Jamal and Sharifuddin (2014). Significant positive relationship between three emotional values (emotional/quality, social and religious) towards Halal branded food products and the intention to buy clearly indicate that Muslim consumers in Malaysia are driven by these three emotional triggers in their consumption behavioural intention. A high correlation (0.834) between the emotional/quality and religious value suggests that their emotional/quality value may
be influenced by high level of religious attachment to JAKIM certification of shari’ah complied food products that ultimately influence intention to buy Halal labelled products. Similarly emotional/quality value and religiosity are also highly correlated (0.715) supporting the same argument that highly religious Malaysian Muslims perceive high emotional and quality value of Halal labelled food products. It may also indicate that both variables play a significant role in the buying decision of Halal labelled products. Perceived value of the Halal labelled product is positively related to the intention to buy the products (6.17). With the significant positive relationship between perceived value and religiosity (0.568) indicate a strong possibility that the religiosity influence Malaysian Muslim’s perceived value towards a Halal labelled product. In contrast, relatively low bivariate relationships between perceived monetary value and other variables including IB seems to indicate that price has relatively less impact on emotional value building and intention to buy Halal labelled products.

**Part 2: Role of Religiosity on acceptance of Halal logo and Different Halal and Non-Halal Brands**

Results of the quantitative analysis of the role of religiosity and acceptance of Halal logo as a cue for Shari’ah complied product, Assumed Halal, True Halal, Inbound Halal and non-Halal general brand are presented in Table 5.

<table>
<thead>
<tr>
<th>Variables</th>
<th>HL</th>
<th>AH</th>
<th>TH</th>
<th>IH</th>
<th>GB</th>
<th>RG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Halal Logo (HL)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumed Halal (AH)</td>
<td>.140</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>True Halal (TH)</td>
<td>.262*</td>
<td>.314*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inbound Halal (IH)</td>
<td>.344**</td>
<td>.086</td>
<td>.366**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Brand (GB)</td>
<td>.142</td>
<td>.367**</td>
<td>.013</td>
<td>.183*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Religiosity (RG)</td>
<td>.486**</td>
<td>-.104</td>
<td>.194*</td>
<td>.341**</td>
<td>-.092</td>
<td>1</td>
</tr>
</tbody>
</table>

**Significance Level (2-tailed):**

| **Proposition 1 expected a positive relationship between religiosity and acceptance of Halal logo as a cue for Shari’ah complied product and the finding provides support to that proposed significant positive relationship between the variables (0.486, significant at 0.01). This indicates that highly religious Malaysian tends to accept Halal logo from a reliable certification body. Proposition 4 also expected positive relation between religiosity and inbound Halal (Shari’ah complied brands from non-Muslim countries that are certified by local Islamic bodies. Result shows a significant positive correlation (0.341) that provides support to the proposition. This result certainly confirms support for accepting Halal logo as a cue for Shari’ah compliant product. Proposition 2 expected a negative correlation between religiosity and acceptance of Assumed Halal products (products from a Muslim country but not Shari’ah compliant with Halal certification). Result presented in Table 5 shows a negative but non-significant relationship (-0.104) to reject the proposition. However, the negative result again provides some confirmation that Malaysian Muslim consumers have high regards for Halal certification rather than relying on country of origin of the product. In other words, Halal logo is a better self-assured cue for Shari’ah compliance regardless of the country of origin of the product. Thus, the propositions 1, 2 and 4 are accepted.

Proposition 3 is rejected because result show that True Halal Islamic brand has a significant positive relationship (0.194) with the religiosity rather than expected negative relationship. This again indicates
Malaysian Muslim consumers’ high regards for the certification of Halal logo on the product as self-assurance of Shariah compliance indicating that a brand originated in a Muslim majority country and Shariah compliance certificate from a local authority is acceptable to Muslim consumers with high level of religiosity. Proposition 5 is also rejected. While significant positive correlation between Inbound Halal products and religiosity clearly indicates that Halal certification of a product at the non-Muslim country of origin is acceptable, a general brand without such certification have a negative relationship with the religiosity of Muslim consumers. Although the brands are well-known, the absence of Halal logo contributes to non-acceptance of the product because there is no assurance given to the consumers that their non-animal based ingredients are acceptable alternatives to Halal certified products.

IMPLICATION, LIMITATION AND CONCLUSION

In regards to Part 1 of the study, it is deemed that the emotional, social, religious, monetary, perceived values and religiosity had a positive relationship with the intention to buy Halal labelled products. In addition, the emotional, religious, perceived value and religiosity played a significant role in the intention to buy Halal labelled products. This could suggest that the level of religiosity affects the emotional value and perceived value when Halal branded products are purchased. Hence, this connects to Part 2 in which the study of the level of religiosity affects the acceptance of Halal branding, true Halal, assumed Halal, inbound Halal and general brands. Religiosity affects the perception of the products which does not have a Halal logo on it. This would mean that Muslim consumers in a Muslim-majority country highly focus on the Halal logo when purchasing the products. This would bring great understanding to eateries and restaurants that having the ‘pork-free’ or ‘lard-free’ template posted at the front of their restaurant would not bring in Muslim consumers to buy their products. However, if the religiosity of Muslim consumers is low, the country of origin, Shariah compliance and Islamic branded products targeting consumers are accepted by these Muslim consumers. They are likely to accept brands that are permissible to be purchased for consumption or use for their liberal attitude and less likely regards for religious rule in leading their daily lifestyle.

Several limitations of the study should be taken into consideration when interpreting the findings. A small sample due to the time constraint of the researchers is certainly a limitation that affected more rigorous analysis of the data. Thus, future study should consider acceptable large sample for better stability of measures and use of higher level of statistical analyses for better conclusion. Besides that, the respondents were scattered throughout Malaysia and there was a high concentration of respondents in Selangor and Kuala Lumpur because the physical self-administered questionnaires were distributed in that region of city-dwellers and urbanites. Google forms that were shared to friends and their friends were not unknown and had no knowledge of their presence whether in or out of Malaysia. Further studies should be conducted in other Muslim-majority countries such as Indonesia because of the different Halal certificate issuing authorities.

In conclusion, religious, perceived and emotional value plays the biggest roles in the consumption behaviour of a Halal branded product and the level of religiosity reflects on the importance of Halal logo on the product regardless of its country of issuance of the Halal logo.

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INTRODUCTION

As educational technology has improved, the effective use of simulations has greatly increased to the point where simulations should be considered a valuable, mainstream pedagogical tool. Lecturers often express the challenges involved in educating students from the millennium generation. It can be said that the teaching needs of this generation are more experientially focused. Simulations, in concert with other experiential teaching tools, allow lecturers to facilitate learning more effectively. Additionally, in this era of ongoing (some say never-ending) assessment, simulations offer a rich resource for objective measurement and comparisons. Simulation is not just another in the long line of passing fads (or short-term opportunities) in educational technology. It is, rather, a real key to helping our students understand the world. It is a way for students to acquire experience about how things and systems in the world behave and react, without actually touching them. In short it is about interactive pretending (Prensky, 2007). Simulation is all about representing the real world which includes grasping the complex issues and solving intricate problems.

Malaysian companies would continually increase their capabilities in the logistics services in the near future through the implementation of activities such as warehousing management, inventory replenishment and order fulfilment (Sohail & Sohail, 2003). In today’s competitive business environment which many companies are strategizing to gain and share the global markets, companies are actively taking advantage of higher production and sourcing efficiency. Keys to that success are determined by the role of the logistics function in ensuring the smooth flow of materials, products and information throughout a company’s supply chains (Sum et al., 2001). Due to the ever increasing importance of the logistics and transportation industry, it has resulted to the expansion of the international trade as well as an active endorsement of the company’s and business’s globalization strategy (Rosena et al., 2008), as cited by Saifudin (2012).

The main objective of this approach is to expose the students to the experience of working in the related fields. This is done during the period of student studying in the university. Besides reducing the time and cost of sending the students to work for a limited period of time (internship) in the industry, it add more experience to what the students has learnt in the university.

The methodology of accomplishing this fact-finding research is through coming together and scheduling an interview or appointment with the industry players for clear and vivid understanding of the whole logistics and transportation business. During these process, a generic work flow will be developed and documented.
The work flow will be an integrated one that can pictures the whole industry. Then the documented process will be simulated through a system platform provider (for example, Malaysia Practice Enterprise Corporation or MyPEC and others) which will link to other business simulation process applications. As a result, students can embark in the simulation practice to achieve a hands on experience on the reality of the industry that associates to logistics and transportation through out their study in the university. The whole process will enhanced the students’ skill and not just receiving knowledge but practising and experiencing knowledge. It will also enrich students’ employability experience so that they will be always ready to serve and work in the necessitating the field of logistics and transportation after graduation.

**OBJECTIVE**

To establish a generic work flow with challenges inputs (opportunities and threats)

**LITERATURE REVIEW**

Logistics and transportation is a significant and strategic industry to developing countries like Malaysia. As the volume of trade increases, the needs for efficient, integrated and optimal logistics and transportation system is essential for the movement of goods and people.

Overall issues on logistics management are not extensively studied, not until after the globalization of business process took place (Rosena, Harlina & Sabariah, 2008; Jusoh & Kamis, 2009; Ismail, Hashim, Ghani, Zulkifli, Kamilah & Rahman, 2009) as cited by Saifudin (2012). Tomkins and Smith (1998), described that logistics and transportation effectiveness has now become essentially strategic that many companies realized to increase their positions.

Logistics is part of Supply Chain Management (SCM) which plans, implements and controls the proper flow of goods throughout the supply chain. Logistics stands as the transportation of goods with the use of different modes of transportation. Logistics also involves the flow of materials from different part of suppliers into an organization, its movement within the organization over diverse operations, and delivery to customers which is purpose of logistics (Waters, 2003).

The flow of materials is categorized as inward or inbound logistics, the management of materials and outward or outbound logistics. Inward or inbound logistics delivers material into an organization from suppliers. Material management is the movement of materials within the organization and outward or outbound logistics is where products or materials move out from the organization to the customers.

Logistics is an essential element for any organization in today's economy. Competitive advantage against its competitors is by designing a system which delivers a much better and faster services to the customer. A good characteristic of logistics system is its complexity; that was carefully designed which cannot be easily duplicated ensure firm’s competitiveness advantage.

It is important when dealing with the flow of material the sharing of information among customers and clients. Trust from customer can be gain through sharing of information through step by step process visible to them and helps to reduce communication issues, for example, dates of delivery, shipping address, product quantity, and so on.

Logistics plays a vital role in cost-effectiveness of an organization because of the incorporation between logistics and marketing. For instance, if products and services are available, high customer services can be achieved. The availability of products will depend on the strategy of delivery, i.e. from an organization to
a customer and/or from suppliers to an organization. It comprises the investments into the costs of transportation through sea, land and air (Raza, 2012).

In the world today, employers are looking for not just technical skills but also people who are capable of handling various roles, tasks and with vast experiences. Whilst employers provides employees with opportunities and self-development in building their career will receives trainings on the job either formally or informally in organization. Some are allowed to perform different tasks due to job functions rotation and promotions. All these opportunities are expected to increase the skills and job experiences to the employees (Juhdi et al., 2010).

Theory of human capital proposes that investment in employee training and education would result in higher internal mobility whilst it reduces the external mobility (Groot and Maseen, 2000). The theory suggests that when employees partake in training and development programs, they would be able to acquire new skills and able to perform multiple tasks. Employees are likely to be more devoted with the employer and therefore may lowered the rate of turnover.

PROPOSED FRAMEWORK

![Figure 1: Proposed Framework](image-url)
Figure 2: Simulation Loop on Teaching and Learning Process
Step 1: **Education** - Education through simulation in logistics and transportation is essential because it makes the students to focus up to the level of their employability after the completion of their studies.

Step 2: **Literature review** - Literature review helps to guide the students to gather information and opinions as to establish the problem statements. This could contribute to develop the simulation education in logistics and transportation fields.

Step 3: **Industry Visit and Familiarization of Work Process and Documentation** - Industry visit and familiarization of work process and documentation are important to exercise their actual learning capabilities in then logistics and transportation field.

Step 4: **Diagnosis and Analysis of the Work Process** – At this stage the analysis of the whole work process are done before simulation will take place.
Step 5: Development of Generic Work Process. Industry and Scholar Validation Achievement: The development of a generic work process and trial run at this stage in which the industry and scholar validation achieved.

Step 6: Intellectual Property Development: Any innovation or discovery conceived or developed using the university resources, is a partnership between the university, faculty and students who make the discoveries.

Step 7: Identification and Selection of a System Provider Platform: The identification and selection of a system provider platform will be carried out to help the simulation.

Step 8: Simulation Launch: This is the stage where the simulation software is launched and ready to apply in practice.

Step 9: Student’s Pre-Condition Evaluation - Here the student’s will evaluate the whole process effectively and to determine the results of the simulation performance.

Step 10: Student’s Hands-On Experience on the Industry Work Process - Students’ hand on experience at the industry to be tested where the experience of the students to be applied to determine whether the simulation works for them.

Step 11: Student’s Post Condition Evaluation – This is the stage in which student’s post condition are being evaluated and assessed to know the feedback from the simulation.

Step 12: Student’s Employability Experience Enrich – The final stage will contribute the student’s employability experience to be enriched.

METHODOLOGY

This research methodology is to capture generic processes in running a logistics and transportation business in Malaysia. The duration of the research covers visits, interviews, identifying the application system commonly used and collecting documents from the participants. Format used is a guided interview with the authorized personnel. The selected practicing manufacturing companies in Northern Malaysia are as follows:

Multi-National Companies:
- Toyo Memory Technology Sdn Bhd (Kulim)
- Silterra Malaysia Sdn Bhd (Kulim)
- NGK Spark Plugs Sdn Bhd (Butterworth)
- Sumi Rubber Sdn Bhd (Sg Petani)

Local Companies:
- Hong Soon Leon Sdn Bhd (Butterworth)
- NPK Fertilizer Sdn Bhd (Gurun)
- SYM Sdn Bhd (Bukit Mertjam)
- Shorubber Sdn Bhd (Jawi)
- Thong Guan Plastics and Papers (Sungai Petani)
- DXN Sdn Bhd (Jitra)
- Ever Lantern Sdn Bhd (Sungai Petani)
- Tan Eng Hong Sdn Bhd (Jitra)
The selected government enforcement agency is Royal Custom and Excise Department (State of Penang, Malaysia).

The processes of interviewing and site visits were conducted over a duration of six months from November 2013 until April 2014. From these interviews, site visits and documentations were collected, including a generic process and information identified. These processes and documentations identified can be used as generic processes and documentations (Baron and Kenny, 1986) required in running a Logistics and Transportation business simulation as in the objectives of this research.

Out of these generic processes and documentations identified, some will be selected based on suitability, practicality and agreed to be used in a classroom simulation environment. These selected processes and documentations are very much suitable for students or related participants for learning the basic process in logistics and transportation companies in Malaysia.

The generic processes and documentations will be selected based on the following criteria based on Malaysia Practice Enterprise Corporation (MyPEC).

- A stable process and documentation (which does not change much over the years).
- Frequently used processes and documentations in most logistics and transportation business in Malaysia.
- Relevant for learning the basic process of logistics and transportation business in Malaysia.

**FINDINGS**

The application systems in the process of outbound and inbound that are commonly used are System Application Products (SAP) and Material Requirement Planning (MRP). It was discovered in the study that there were only 4 companies using the Enterprise Resource Planning (ERP) besides the Electronic Data Interchange (EDI) as part of the Suppliers Own Inventories (SOI) networking. This is the result of globalized business between one country to another.

In spite of that, the documentations processes that are involved in the outbound and inbound, including the customs clearance forms and procedures, are mainly using the customs form clearance as in Custom Act 1967. For example the forms are CJ5, Exemption, Form D, Bond and Tax are mainly used in the process of outbound and inbound which are applied in the Licensee Manufacturing Warehouse (LMW) and General Purpose Warehouse (GPW).

The costing and pricing involved in the processes are confidential among the companies and will be revealed after being taxed by the Royal Custom and Excise Department. Resources involved in the outbound and inbound processes are computerized documentations during the process; internet or email, telephones and fax are used with well trained staff handling these processes in computer systems and handling of suppliers and customers. The outcome and reasons being used related to the systems, documentations, costing, pricing and resources are mainly meant for upgrading and efficiency to
eliminate discrepancies, time management, manpower skills and management controls. Based on such efficiency, the costing and expenditures are reduced and at minimal cost, price quotations are usually ‘manageable, adaptable and acceptable’ by customers. The company could easily negotiate the prices with the suppliers effectively.

The work flow of industry players, which the findings further explain the management staff and workers involved in the outbound and inbound processes. The categories are well trained, experienced and fresh staff. The Person-in-Charge (PIC) is a senior staff of the warehouse operations and inventory management department of the company. The job is usually given to receiving section managers or executives, who have experiences in dealing with the delivery and shipping of materials, transportation (containerization, lorries and hauliers), knowledgeable about Royal Customs and Excise Department documentation process and Customs Act 1967.
Figure 1.1 Actual practice of inbound and outbound process flow in manufacturing or logistics company
### Table 1: Description to the Actual Process Flow

<table>
<thead>
<tr>
<th>ACTUAL PRACTICE OF INBOUND AND OUTBOUND PROCESS FLOW IN A MANUFACTURING OR LOGISTICS COMPANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Business Planning</td>
</tr>
<tr>
<td>b. Procurement</td>
</tr>
<tr>
<td>c. Warehouse Receiving (Inbound)</td>
</tr>
<tr>
<td>d. Product Quality Assurance (PQA)</td>
</tr>
<tr>
<td>e. Warehouse Putaway Area</td>
</tr>
<tr>
<td>f. Warehouse Storage Area</td>
</tr>
<tr>
<td>g. Production Staging Area</td>
</tr>
<tr>
<td>h. Production Floor and Area</td>
</tr>
<tr>
<td>i. Production Packaging Area</td>
</tr>
<tr>
<td>j. Quality Control (QC)</td>
</tr>
<tr>
<td>k. Warehouse Shipping (Outbound)</td>
</tr>
</tbody>
</table>
The outbound materials to be shipped out are:

- Finished Goods (FG). Example complete sets of products like motorbikes.
- Semi-Finished Goods (SFG). Example computer components.
- Raw Material (RM): Example plastics or metal parts.

The process would involve the company PO, DO and Invoice. If the area is in a Free Trade Zone (FTZ) area, then the Royal Customs and Excise Department documentations must be attached as a reference for tax or tax exemption. The shipment could either be made by company own transports or contract transportations and suppliers or customers transportations. All the documentations are data entry in the shipping office that is transmitted to the customers for their reference and documentation process. The most important purpose of the shipping area is to ensure that all the shipment of the goods is 100 percent delivered or exported to the respective customers on time.

**CONCLUSION**

Based on the research findings, it can be concluded that the information gathered are fundamentally adequate as the focus of the research is education through simulation in logistics and transportation. This suggests that there are concrete evidence of the enrichment of student’s employability experience through simulation in the logistics and transportation industry. The evidence from the generic documented process flow from the participants’ suggested that simulation in the content development as learning process is effective in this area of study. This is proven based from the companies HCM development to train their respective staff to be skillful in operating the documentation process efficiently. By inculcating an artificial opportunities and threats along the content flow it will further enhance the learning experience of the students and will also enhance their employability chances.

**REFERENCES**


Intellectual Capital in Small and Medium Enterprises: Case study of Malaysian Manufacturing SMEs

Keywords: Intellectual capital, Human capital, Customer capital, Structural capital, Organizational Performance, Malaysia

INTRODUCTION

If in the past, labor force was the key factor for the performance of the firms; recently, knowledge in forms of intellectual capital is the most important motive. Knowledge and technological advancement has importantly stimulated firms performance in the modern economy and its more known as knowledge based economy. In this regard, intellectual capital has emerged to be the prominent to increase organizational performance and ensure competitive advantages as well as survival in competitive market economy. Sumedrea (2013) emphasized on the importance of intellectual capital and believes that companies can achieve a higher performance if they have individuals who possess knowledge on the changes and learning. Other scholars also studied the importance of Intellectual Capital as the most fitting strategy in business because of its credibility in driving firms to create value (Edvinsson & Malone, 1997).

Intellectual Capital has been identified as intangible assets and knowledge capital. In this regard, each process of intangible values should be evaluated as company’s strategy. In this study, we try to explore the kind of Intellectual Capital that the entrepreneur adapts as a factor of good performance since IC consist three structures namely human capital, structural capital and customer capital. We also examine the relationship between Intellectual Capital and organizational performance among SMEs manufacturing companies as key elements of company’s productivity. Intellectual capital is defined as an employment commitment towards the task given and they’re competent to finish each works through their intelligence thinking. It also considers how an organization creates policies and system to ensure the operations going smoothly (Ulrich & Dave, 1998). The value evaluation process of intangible resources or intellectual capital is necessary in a company's strategy implementation. Hence, the findings of this study will be helpful business organizations to ratify the implementation of Intellectual Capital in performing enhanced brilliance decision with customer, business partner, supplier and competitor.

Definitions of SME

SMEs definition could be different from one place to another. Since this study is about Malaysia, so its important to define the term in Malaysian perspective. According to SMEs Corporation of Malaysia, SMEs could be any business entities registered with one of these bodies (i) Companies Commission of Malaysia (SSM); or (ii) Corresponding authorities or constituency offices in Sabah and Sarawak; or (iii) Corresponding constitutional bodies. Beginning of 1 January 2014, SMEs received new reviewed of SMEs definition in order to get full support from programs and workshops organize by government. For manufacturing sector, the SME sales turnover should not exceed RM50 million or full-time employees not more than 200 workers. Meanwhile, the sales turnover should not exceed RM20 million or full-time employees of no more than 75 workers for services and other sectors.
SME Productivity
The SMEs have been seen as a good catalyst in the development of Malaysian economy through their contribution to the economic sectors (Abd.Aziz & Mahmood, 2011). SMEs are renowned as primary sources of employment, substance of economy, paradigm in innovation and virtuous competition among SMEs entrepreneurs. In fact, SMEs in Malaysia are not so effective in terms of their contribution to the Malaysian economic development and sustainability as compared to other countries including neighboring Singapore. For instance, the productivity of SMEs in Malaysia is lower than other countries with average productivity at MYR 50,498 per employee (SME Corporation Malaysia, 2012a).

In addition, SMEs in Malaysia are lack of educated and skilled workers in which impacted on the whole process. This drawback was lead to unproductivity compared to the larger firms. Here, there is a serious issue with workers knowledge and skills that negatively correlated to the productivity of SMEs in Malaysia. Workers commonly leaving their career in Malaysia into the second country in order to get better salary and even better opportunity to perform. This is usually known as transformation of human capital which workers take the knowledge and experience they have into other firms inside the country or the second countries (HCLI, 2012). Further, workers who are working in SMEs business are lack of training due to weakness of SMEs and lack of their interest to train in their staffs and workers human capital (ACCIM, 2012). This issue could also cause by deficiency of suitable courses (SME Corporation Malaysia, 2012b). Obviously, Malaysian SMEs should invest more in human capital and develop their workers knowledge through training and practical courses. To do so, they have sufficient resources provided by the government. Developing SMEs intellectual capital is due to its importance that becomes a primary resource in driving national economy and sustainability (Paul & Edward, 1999). Thus, SME Master plan 2012-2020 is a platform for SMEs entrepreneur access to finance, innovation and technology thoroughly perform their intellectual capital.

LITERATURE REVIEW

Intellectual Capital considered as one of the valuable assets for company during new products development to guarantee a greater return on investment. Chung et al., (2014) defined intellectual capital as the standpoint and the capacity of the firm to expand new product. In the knowledge based economy, intellectual capital (IC) is crucial strategic asset for the firms to expand their businesses. Also, IC remained as the main motive to stay competitive through distinguished, exploitation and usage of their intellectual capital (Khalique et.al, 2011). Moreover, Edvinsson and Malone, (2001) defined intellectual capital as an assets, copyrights, trademarks, brand, patents or other forms of intellectual property that form a value to company. IC also considered as the power of human brains that engender skills in production and technology. Such skills have been discovered and exploited in order for the firms to be able to foster value creation and growth. Furthermore, Nahapiet and Ghoshal, (1998) described IC as an assembly of knowledge resources. According to Dewi and Saudah, (2012) intellectual capital recognized as importance elements amongst internal audit of Malaysian PLC specifically in IC management system for the ultimate job and business performance. Intellectual capital has been studied by using different elements. This study emphasizes three key elements of intellectual capital namely human capital, external capital also known as customer capital and structural capital.

The first element of IC that widely used by the firms is human capital(HC) that expounds the ability of the firm to use knowledge and technology. Human Capital is indispensable since it is core of innovation and important factors for implementation of strategies specifically derives from brainstorming, fantasizing, reducing the fragmentation of work, redesign core processes, increasing skills of personal or emerging new-fangled sales leads (Bontis, 1996). The significance of HC could be noted mainly in the first stage of the firms operation in market economy as discussed by Hormiga et al., (2010). Moreover,
Youndt and Snell (2004), Kuan and Chao (2014) emphasized on the importance of human capital which significantly impacts the revolutionary innovation orientation that stimulates market innovation stay ahead of the competition.

External capital is a consumer oriented or relational capital in which defines the relationship between organization and customer. Bontis (1996) argues that the firms through utilization of external capital may increase their profit. For instance, Sherrill (1998) acknowledged that because Coca-Cola has good external capital and widely accepted by customers, the firm is now worth at least US$39 billion. Sveiby (1998) also realized that customer loyalty and their satisfaction is very vital and can bring more sustainable profit to their firms. Thus, successful organization will promotes networks and channels with market and suppliers. Furthermore, Akpinar and Akdamir (1999), highlighted that understanding consumer needs will make it better for business leader to promote and enhance their production level. For that organization must understand the psychology of their customer and makes their decision based on their demands as a measurable instrument of intellectual capital.

Apart from the relationship, external capital also possesses business reputation, brand name and trademark. Obviously, many large companies have survived and emerged to be more successful due to the use of brand names and their reputation in market economy. Once business organization reached to that level, customers put their trust and even protect them from any competitive challenges. Daniel (1999) classified external capital into five categories including supplier capital, alliance capital, community capital, regulatory capital, and competitor capital. Supplier capital refers to the commitment, creativity and mutual trust of suppliers. Alliance capital means that the business partner is reliable and useful to make profit. Moreover, community suppliers could mainly refer to the reputation and capabilities of organization in the community where they operate. Regulatory capital on the other hands denotes information that organization possess in relation to laws, regulations, contacts, and lobbying consumers. Therefore, competitor capital that helps organization to understand their competitors.

The third element of IC is structural capital. Structural capital is different from external capital because this one is mainly concentrates on the internal structure of organization and more to employees’ relationship. It encompasses the range of concepts, models, patents and system that are created by employees (Akpinar & Akdamir, 1999). However, these capital is owned by the organization and could be received or transferred to another firm when they change their career or location. This capital could be purchased from outside of organization but will be used within the firm. The structural capital also includes culture and spirit in which changes elsewhere. Different organization following different or particular culture to better understand market requirements. Moreover, Buren and Yardstick (1999) accentuated that structural capital includes both innovation capital and process capital. The first one refers to the capacity of the firm to produce and innovate new product and services; later means the techniques, system and methods that has been utilized by the organization to achieve its goals. The internal capital in any organization should possess of four elements namely system, structure, strategy, and culture (Daniel, 1999). The system is the way that organization communicating policies and information to formulate decisions over certain products and services. Structural capital is way to promote relationship between members of the organization and defines the type of that relationship, positions and responsibilities. Strategy on the other hand is the plan and objectives that organization tries to achieve by using new technologies, networks, system and any other way that possibly help to obtain them. Culture as discussed previously, refers to the sharing values, norms, views, and opinion between members of the organization.

Akpinar and Akdamir (1999) examined the relationship between culture and strategy and found a strong association between the two factors. They further explained that organizational culture function effectively to filter business environment. Then, it influences on the business strategy that will be adopted by the firm. However, as they discussed such strategy can not be implemented if they do not pass through
cultural filters. Despite the significance of culture on developing organizational structure, but the authors argue that it is usually ignored by the firms due to the lack of knowledge on how to conduct cultural changes as bases to structural change. In the absence of such changes, they maintained that organizational changes will not be realized. To do so, they need to encourage cultural changes that take works into challenges so as to learn to try again and again even if they fail. In such cases organizational performance and objectives of the organization could be achieved.

Several studies have been conducted to examine the impacts of IC elements on the performance of business organizations. Bontis et al., (1996) studied the influence of intellectual capital over the performance of manufacturing sector in Malaysia. In this study, the authors have used structural capital, human capital as well as external capital as main dimensions of intellectual capital. The author here tried to compare which dimension is more contributes in the performance of the firms and more favored by manufacturing companies. The finding of this study indicated that human capital is more significant compare to other two dimensions. Surprisingly, they found positive correlation between structural capital and customer capital. In the other words, the more customer capital organization possess, the more efficient the structure will be and the more structure capital they possess, the more performance could be achieved.

Another study on the elements of IC was conducted by Kehelwalatenna and Gunaratne (2010) in Sri Lanka’s manufacturing and financial organization. The authors have excluded external capital, but he used Human capital and structural capital to examine the relationship. The findings showed that intellectual capital dimensions significantly impacts on the performance of manufacturing and financial firms as well as investor respondents. The opposite study was conducted by Wang (2011) who studied Taiwanese manufacturing firms in terms of intellectual capital and their performance. The study demonstrated that intellectual capital elements mainly human capital, external capital, and structural capital in Taiwanese firms is avoided and that left negative influence on the performance of the firms.

On the other hands, Jalilian et al., (2013) conducted a study to examine the effects of intellectual capital in the cement company in Kermanshah, a Kurdish city in Iran. In their study they used three variables of HC, SC and relational capital as independent variable. They discovered all three variables interrelated in one hand, and significantly correlates to the financial performance as well as leaning capability of the organization. Furthermore, structural capital here more referred to the leadership strategy which believed to be a good motive toward firms’ performance. However, Kharal and Zia-ur-Rehman (2014) found firms that are pursuing differentiation, product diversity and segmentation strategy are more likely to perform that firms pursuing cost leadership strategy.

In other study by Roohollah et al., (2014) it has been demonstrated that human capital, structural capital and relational capital have significant impact on the performance of firms. Also, Housel and Bell (2001), point out workers that imply IC, contributes radically a firm the authority and flexibility to place new knowledge and engender new product line production. Therefore, firms which capitalize profoundly in increasing resilient and dedicated relationship, reflect a robust IC.

**METHODOLOGY**

According to SMEs Corporation of Malaysia, there roughly 400 registered food and beverages SMEs manufacturing sector in Kuala Lumpur. This study deployed quantitative research method and predominantly relied on the survey. The convenience sampling technique was utilized for data collection whereby 80 out of 196 questionnaires were returned from SMEs firms in Kuala Lumpur. The feedback rate was 40%, which was relatively acceptable. The survey questionnaires distributed to food and beverages SMEs which personally circulate to SMEs owner, manager or top level management and answer attained directly from respondents. Respondents were asked to answer the survey, which
comprises of 6 questions; Also, the questionnaire encompassed 3 statements focused on the sorts of intellectual capital in SMEs in Malaysia which required the respondent to answer on every statement using scale one to five (1-5) as Likert scale by choosing a score of 1 to 5 (1 means “strongly disagree” and 5 means “strongly agree”)

The first questions demonstrated the demography of the respondents. Most of the respondents ranged their ages between 26-40 years with the ratio of 47.5% and about 32.50% of the respondents were ranging between 35-44 years old. Age between 45-65 resulted about 20%. Male respondent dominated by 66.25% and female, 33.75% in term of gender dissemination. Highest level education classified with eight categories and the respondent given the chance to choose their educational level accurately. According to the result, 45% of the respondents hold Bachelor certificate, 20% hold Master, 18.75% Diploma, 7.50% holds secondary school, 5% hold PhD/DBA and only 3.75% hold a Professional Certificate.

FINDINGS

The findings of the study derived from primary data that are generated through survey questionnaires. The statements of questionnaires identify the type of intellectual capital that has commonly practiced by food and beverages SMEs manufacturing in Malaysia. In his questionnaire, Likert scale as used and respondents were asked to choose their preferences that was ranged between 1 as strongly disagree to 5 as strongly agree.

Table 1 designates that 47.50% of the respondents is agreed that the company take an effort in developing employees’ knowledge and skills, while 11.25% chose to be neutral and 28.75% strongly agreed with the statement. The percentage of respondents who disagreed with the statement was very low, but not the lowest with only 12.5%. Accordingly, the respondents satisfied with the statement since the mean value for this statement was 3.92. Thus, this questionnaire intensely reflects the human capital adoption in SMES that focus on knowledge assets for ultimate growth.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>(No label)</td>
<td>0</td>
<td>10</td>
<td>9</td>
<td>38</td>
<td>23</td>
<td>80</td>
</tr>
</tbody>
</table>

Meanwhile, table 2 illustrates that around 42.5% of the respondents agreed with the statement “intellectual property is a key intellectual asset for top management which is considered for value creation” and none of the respondent strongly disagreed with the statement. Still, 31.25% were strongly agreed with this statement. However, the low percentage of respondents disagreed with percentage of 7.5%. The mean value of this statement was 3.98 that means respondents almost greed with the statement.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>(No label)</td>
<td>0</td>
<td>6</td>
<td>15</td>
<td>34</td>
<td>25</td>
<td>80</td>
</tr>
</tbody>
</table>
Finally, table 3 explain 38.75% agreed that company’s relationship with customer and supplier affect company’s productivity. Furthermore, 48.75% strongly supported the company’s relationship with customer and supplier, but 10% were rated neutral. The percentage of respondents who disagreed was very low which comprised 2.50%. The finding as shown in table 3. Indicates that respondents agree with the statement, whereby the weighted average for this question was 4.34.

| Table 3. Company’s relationship with customer and supplier affect company’s productivity. |
|---|---|---|---|---|---|---|
| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Total |
| (No label) | 0 | 2 | 8 | 31 | 39 | 80 |
| Weighted Average | | | | | | 4.34 |

**CONCLUSION AND RECOMMENDATIONS**

This study highlight how high levels of Intellectual Capital result in developing the food and beverages SMEs performance in Malaysia. Intellectual capital encompassed human capital, structural capital and relational capital. The execution of IC in SMEs manufacturing company has become an imperative mechanism for the enhancement of SMEs performance by implementing entrepreneurial strategic bearing. The results of this study, develop our comprehension of the role of intellectual capital in food & beverages SMEs running in the manufacturing sector. Furthermore, this study has accorded new path to owner of the business or manager to understand their business to further develop their firms. This magnificent research finding also generated beneficial information regarding the intellectual capital adoption amongst SMEs in Malaysia. The three elements of IC proved that in this knowledge-based economy, the awareness of intangible assets which include knowledge, skills, intellectual property, and customer relation are momentous these days as new sources of prosperity in business. The IC also focuses on information and knowledge diffusion as an apparatus for SMES manufacturing to succeed in business. Therefore, IC should be considered when establishing the EO-performance relationship. The adoption of IC increased productivity and cope the problem faced by SMEs through advance tactics. Besides, the component of IC like human capital, structural capital, and customer capital has created value to the organization as they upsurge the knowledge in economic expansion through knowledge transfer. IC impacts the firm performance because entrepreneurs are involved in strategy formulation which consisted firm knowledge, innovation, technical know-how, communication, market manifestation and society influence. This strategy is important fundamentals in this millennium, century impacting SMEs firms to performance.

**REFERENCES**


INTRODUCTION

Organizations can gain competitive advantage from lean production practices. Such practices enable the organization to get superior performance through reduction of wastes and other related costs (Ohno, 2008). Industries are nowadays facing a problem of broad production in their organizations thus resulting to lots of wastage. This has seen many companies experience problems of waste along the supply chain and the liability to make the right products for customer satisfaction. Procurement managers are bound to embrace the essence of adopting lean production which is a business initiative to reduce waste in manufacture production. To this extent therefore, this initiative leverage companies to achieve long term competitive advantages by putting in place the proper production systems and technologies particularly with regard to product quality, shortening product design time, the reducing of wastage improving end customer satisfaction and inventory management (Womack & Jones).

Organizations must anticipate and respond to environmental changes to ensure competitiveness and, ultimately, survival. One of the basic assumptions underlying much of the strategic management literature is that successful firms change their strategies to attain a better fit with the environment (Audia et al., 2000). Change is to do something different or new. In today’s uncertain economic climate, many organizations are forced to make changes in order to survive. They need to respond quickly to the global revolution while at a local and national level have to keep up with new technology and competition if they want to stay ahead of the game (Edmonds, 2011). Regardless of the size of a business, change is going to happen at some point, but as no two organizations are the same, there is never going to be a template to meet everyone’s needs. In reality, change cannot be wholly managed; it will emerge naturally once a strategy for change exists.

For the Government Linked Companies (GLCs), becoming lean is extremely important due the enormous size of the companies. Their organizational performance depends on how well they manage their resources. Efficiently managed GLCs, and well formulated and implemented strategies are critical for the success of business organizations (Singh & Ang, 1999). GLCs in Malaysia are mainly the major providers of utilities, postal services, airlines, airports, public transport, water and sewerage, banking and financial services, automotive, plantation, and construction industries. These companies hire an estimated 5 percent (about 400,000 employees) of the national workforce, and accounts for approximately 36 percent of the Malaysian Stock Exchange market capitalization and 54 percent of the Kuala Lumpur Composite Index (Abdullah, 2005). With regard to the performance, lean practices are deemed to be able to improve organizational performance in terms of efficiency as well as effectiveness (Chen & Tan, 2011).
The purpose of this paper is to investigate the adoption level of management of change and lean practices among the GLCs in Malaysia and also examine the effect of management of change and lean practices to the performance of these GLCs. Although this relationship has been studied by previous researchers (Agus & Hajinoor, 2012), the current study specifically focuses on the GLCs as no such setting has been investigated before.

**LITERATURE REVIEW**

**Lean practice and firm performance**

Customers demand quality products, implying the need for various actions undertaken by the company involving production as, for example, deliveries in small lots within short deadlines (Christopher, 1999). To meet these demands, manufacturers have adopted initiatives aimed at reducing the setup time of equipment, making manufacturing cell manufacturing more flexible and improving quality. The production of small lots, for instance, requires frequent adjustments in the equipment and thereby reducing the setup time allows improvement of competitiveness by diminishing costs. Moreover, companies with mass production generally have over-aged equipment in terms of market competitiveness (Fullerton & Wempe, 2009).

Following the RBV theory, organizational performance is determined by its unique internal resources or capabilities. Lean practices, one of the quality management approach, are the capabilities that would enable companies to achieve superior performance through cost saving and productivity improvement (Singh, Garg, Sharma, & Grewal, 2010). The main purpose of lean approach is to eliminate wastes while at the same time attempt to reduce or minimize supplier, customer, and internal variability (Shah & Ward, 2007). To name a few, those wastes include overproduction, inventory, waiting, motion, transportation, rework, and over processing. The concept is not new because Krafcik has started to introduce the lean concept into the academic world in 1988 and Womack through his book entitled “The Machine That Changed the World” has made the concept becomes well known today. In a simple term, lean can be viewed as a mix of JIT elements and techniques and tools of total quality management (TQM) (Shah & Ward, 2007).

JIT companies have a better alignment between organizational goals and objectives and their core competencies. Management factors such as transforming organizational culture, enhancing internal and external communication, improving employee morale, encouraging teamwork, and improving supplier relationships higher than the non JIT companies. In addition, they also give more emphasis on the element of time based competition and customization, eliminating wastes, improving quality, reducing inventory, and improving efficiency by reducing costs and increasing capacity utilization (Meybodi, 2009). Hence, JIT implementation can effectively improve performance (Chen & Tan, 2011). Among the benefits of JIT include inventory reduction, good relationship with suppliers, and high quality or zero defects (Moreira & Alves, 2008).

Consequently, many companies seek the flexibility and efficiency resulting from cell manufacturing. In this context, lean manufacturing mechanisms provide reduced costs of quality failures. It should be noted, however, that lean methods involve not only benefits but also costs. The effect of these methods on business performance is an open question, given the differences of empirical studies. Results of previous studies vary. Some works have identified that the adoption of just-in-time tools or the use of models based on total quality management do not improve profitability (Hudson & Nanda, 1995; Ittner & Larcker, 1995). In contrast, other studies suggest a positive association between modern manufacturing practices and financial performance (Kinney & Wempe, 2002; Fullerton et al., 2003). Considering the divergence of empirical findings, this paper seeks to examine the direct effects of lean production practices on performance, establishing the following hypothesis:
**H1: Lean practice (LM) has significant positive relationship with performance**

Management of Change and firm performance

According to Zink (2008), many concepts of change towards organizational excellence have put greater emphasis on employees. Many other studies found the invention, innovation and diffusion of technology or processes lead to greater organizational performance (Jaffe, Newell & Stavins, 2002). Jing and Avery (2011) stressed on an innovative approach that the leader must have in order to increase the chances of the organizational performance and success. A visionary leader is necessary in managing change (O'Reilly et. al, 2010), and Cameron and Green (2012) acknowledged that the right person who brings the organization to the right direction, in the creation of a better environment to achieve the organizational objectives, goals and mission (Oreg & Berson, 2011). Karouni (2009) stated that when the departure of the beliefs, norms, attitude and practices of the people or in the organization, the positive results may occur. This is supported by North (2005) argued that it is a shift in the values, norms, beliefs and practices of the people or organization are necessary. Therefore, it is important to know that for any change to be effective, the effective management of change is required as it to warrant the teamwork.

Concerns have also been raised regarding the way GLCs evaluate and reward employees (Abdullah, 2004; Nor Mohamed, 2004). There is a weak linkage between employees’ performance and the reward scheme in GLCs. For example, bonuses are paid regardless of individual performance because performance is not tied to the compensation system.

**H2: Management of Change (MOC) has significant positive relationship with performance**

**METHODOLOGY**

This is a quantitative study. Questionnaire method was used for data collection. These questionnaires were given to the GLCs companies in Malaysia. Government linked Companies or GLCs are defined as the companies with primary commercial objective and in which the Malaysian Government has a direct controlling stake. In this context, controlling stake would refer to the Government’s ability (not just percentage ownership) to appoint Board of Directors members, senior management, make major decisions (e.g. contract award, strategy, restructuring and financing, acquisitions and divestments etc.) for GLCs either directly or through Government linked Investment Companies or GLICs. The GLICs are companies that hold shares in the GLCs such as Khazanah Nasional Berhad, Pension Trust Funds, Employees Provident Fund, and Permodalan Nasional Berhad. The respondents in this study were the employees from various hierarchical levels, including the top level, middle level and operational level. It is based on the authority of making decisions of each level. Each respondent received a copy of the questionnaire personally (face to face), hence to ensure the highest possible response rate (Zickmund, 2003). The cover letter explained the purpose of the study and more importantly assured the respondent anonymity. The data were collected from those firms that met the criteria of the GLCs throughout the country.

The sampling frame utilized the GLCs under Khazanah Nasional Berhad which included 13 sectors; agriculture, automotive, financial institutions, healthcare, infrastructure and construction, leisure and tourism, media and communication, property, technology and biotech, transportation and logistics, utilities and sustainable development. A total of 26 listed companies was included in the sampling frame of this research. The respondents in the study were the executives of the companies. These executives were considered as the most likely key informants, as he or she was the person who would be involved in strategic decision at the respective levels.
FINDINGS

Descriptive Analysis
The means and standard deviations of all items of management of change are shown in Table 1. All the items were measured on a five point scale. The mean scores for MOC ranged from 3.7464 to 4.0712 giving an overall mean of 3.8912. This shows that the degree of management of change among the GLCs was relatively high.

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Top management is convinced that management of change brings essential</td>
<td>4.0712</td>
<td>.6829</td>
</tr>
<tr>
<td></td>
<td>benefits to our organization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Top management allocates adequate resources and time for the management</td>
<td>3.9431</td>
<td>.7297</td>
</tr>
<tr>
<td></td>
<td>of change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>There is an emphasis placed on skills development and training related</td>
<td>3.9893</td>
<td>.6627</td>
</tr>
<tr>
<td></td>
<td>to the management of change in the organization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The organization prepares a project plan for management of change,</td>
<td>3.8861</td>
<td>.7567</td>
</tr>
<tr>
<td></td>
<td>development and implementation with clear scope, purpose and criteria</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Management of change team is led by a qualified and strong project</td>
<td>3.8000</td>
<td>.8094</td>
</tr>
<tr>
<td></td>
<td>manager</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Managers at different levels are held accountable for the change results</td>
<td>3.8612</td>
<td>.7454</td>
</tr>
<tr>
<td>7</td>
<td>The organization has an effective system to communicate strategy and</td>
<td>3.7464</td>
<td>.7964</td>
</tr>
<tr>
<td></td>
<td>performance on change information internally and externally</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Senior managers invest in and allocate adequate resources and time for</td>
<td>3.7580</td>
<td>.8895</td>
</tr>
<tr>
<td></td>
<td>the management of the change project</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Dedicated resources are defined and made available for the designing,</td>
<td>3.8399</td>
<td>.7787</td>
</tr>
<tr>
<td></td>
<td>implementation, and maintenance of the management of change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Top management creates a sense of urgency for the change</td>
<td>3.9004</td>
<td>.7910</td>
</tr>
<tr>
<td>11</td>
<td>The objective of the management of change in our organization is not to</td>
<td>4.0000</td>
<td>.8062</td>
</tr>
<tr>
<td></td>
<td>punish or blame individuals, but rather to provide information that</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>helps organization to improve services and operations</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The means and standard deviations of all items of lean practice are shown in Table 2. All the items were measured on a five point scale. The mean scores for LM ranged from 3.6192 to 4.1744 giving an overall mean of 3.9130. This shows that the degree of lean practice among the GLCs was relatively high.

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wastes are eliminated in production/</td>
<td>3.8221</td>
<td>.8304</td>
</tr>
<tr>
<td></td>
<td>services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Continuous improvement is implemented</td>
<td>4.1744</td>
<td>.6337</td>
</tr>
<tr>
<td></td>
<td>in our organization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>organization</td>
<td>3.8648</td>
<td>.8678</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Zero defects approach is implemented in our organization.
Just-in-time (JIT) is used in production/services.
Pull instead of push system is applied in our organization.
Our organization has multifunctional teams.
Our organization practices decentralized responsibilities.
Our organization utilizes integrated functions.
Vertical information system is implemented in our organization.
All major department heads within our planned work to encourage lean manufacturing.

The means and standard deviations of all items for firm performance are shown in Table 3 below. All items were measured on a five-point scale. The mean scores for performance ranged from 3.79 to 4.08, giving an overall mean of 3.94. This shows that the performance of the banks was relatively high for the past three years.

<table>
<thead>
<tr>
<th>No</th>
<th>Statement</th>
<th>Importance</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>1</td>
<td>Return on investment</td>
<td>4.4892</td>
<td>.754</td>
</tr>
<tr>
<td>2</td>
<td>Net profit</td>
<td>4.5396</td>
<td>.8262</td>
</tr>
<tr>
<td>3</td>
<td>Control of operational expenses</td>
<td>4.446</td>
<td>.7664</td>
</tr>
<tr>
<td>4</td>
<td>Market share</td>
<td>4.2336</td>
<td>.8366</td>
</tr>
<tr>
<td>5</td>
<td>Product/service cycle time</td>
<td>4.2873</td>
<td>.7744</td>
</tr>
<tr>
<td>6</td>
<td>Customer service level</td>
<td>4.5</td>
<td>.7683</td>
</tr>
<tr>
<td>7</td>
<td>Inventory levels</td>
<td>4.1691</td>
<td>.8646</td>
</tr>
<tr>
<td>8</td>
<td>Resource utilization</td>
<td>4.2996</td>
<td>.86</td>
</tr>
<tr>
<td>9</td>
<td>Sales growth</td>
<td>4.4604</td>
<td>.7625</td>
</tr>
<tr>
<td>10</td>
<td>Sales volume</td>
<td>4.4712</td>
<td>.739</td>
</tr>
</tbody>
</table>

Based on the regression in table 5, the result shows that all the variables were positively significant. Multiple regression analysis can also determine which one among the predictor variables that has the most influence on firm performance. As shown in 5, (LM) showed the biggest beta value of 0.290, which it was significant at .001 levels. This means that LM plays the most important role in predicting firm performance. The next predictor YMOC is having a beta of 0.147 as shown in the table 5 at a significance level of .000.
a. Dependent Variable: P

DISCUSSION AND CONCLUSION

Overall, the purpose of this study is to investigate the effect of lean management, management of change and the GLCs performance. Managing change can play an important role of enhancing the organization performance in either way. In this study, management of change was examined its effect on the GLCs performance. The hypothesis stated that management of change has a significant effect on GLCs performance. The finding showed that management of change was significantly related to GLCs performance, which that confirmed the hypotheses. Due to its importance of determining the level of organization successfulness, most of the organizations are forced to construct changes, which were known as MOC (Management of Change) in order to survive for a longer period. They are required to respond rapidly to the local, national and global uprising of new technology and competition, if they want to survive. Everyone knows that change is not going to take at once. In fact, few organizations meet their stated objectives (Anderson, 2011). Lack of leadership concentration on the complexity of change, poorly developed strategy and structures, finally, yet importantly attention towards people behavior towards change make the process of change management ineffective (Ajmal, Farooq, Sajid, & Awan, 2013). Major changes in the organization simply do not happen. Changing involves the development of a true complex process, where forces that exert pressure for change and forces opposing change are facing. This process has several stages; awareness of the need for change and raising interest in initiating change among the organization’s managers, the diagnosis of the situation based on information gathered and analyzed by the actual change, the application of the version selected using all appropriate measures and strengthening of new values that support behavioral changes (Chirimbu, 2011).

In the same way of taking lean practice was proposed as a key factor in improving the company’s performance. In this study, lean practice was hypothesized as significantly related to performance. In result of that, lean practice was founded significantly related to GLCs performance. That confirms the claim of Lean management, which it pays attention to customer product preferences through increased flexibility and employee wants through higher involvement management practices. It also emphasizes on efficiency, quality, and speed (Bowen & Youngdahl, 1998). A study has found the JIT companies had a better alignment between organizational goals and objectives and their core competencies. Another study by Chen and Tan (2011) found that JIT implementation can effectively improve operations performance. They also found that JIT could be achieved in small or large firms. Among operational performance benefits of JIT include inventory reduction, good relationship with suppliers, and high quality or zero defects (Moreira & Alves, 2008). The positive relationships between all variables with GLC’s performance were confirmed, based on the previous scholar’s researches.

In conclusion, our study reinforces the belief of management of change and lean practices in the Malaysian GLCs, and the role they play towards performance relationship. We hope the findings can be used for further investigation in future research to add knowledge in the area of management of change, lean practices and organizational performance.

REFERENCES


The Effect of Corporate Governance on Performance of Private Companies

Keywords: Corporate Governance, Strategic Improvisation, Firm Performance and Government Linked Companies (GLCs)

INTRODUCTION

Corporate governance has received much attention in recent years. At the culmination of every financial crisis, academicians, regulators, governments tend to focus on the corporate governance more vigorously in order to enhance investors’ confidence that would attract investments. The corporate governance framework should promote transparent and efficient markets, be consistent with the rule of law and clearly state the division of responsibilities among different supervisory, regulatory and enforcement authorities. The Malaysian Code of Corporate Governance referred to corporate governance as the processes and structure used to direct and control the business and affairs of the company in order to enhance long-term shareholder value through enhancing business prosperity and corporate accountability, whilst taking into account the interests of other stakeholders (CCG, 2004).

Likewise improvisational activity in recent years has emerged as being critically important in the business arena. Improvisation enables managers to continually learn while working and act spontaneously and creatively to consistently move products and services out of the door (Brown & Eisenhardt, 1997). It can potentially generate value to the company in terms of prudent change management, adjustability to adopt best practices as well as adding flexibility and innovation (Leybourne, 2006). By practicing improvisation, organizations could gain a better understanding on how individual and groups in organizations cope with and coordinate the conflicting demands of existing time perspectives (Crossan, Pina e Cunha, Vera, & Cunha, 2005); learn and adapt under time pressures (Vera & Crossan, 2005); and remain flexible under turbulent environments (Cunha, Cunha, & Kamoche, 1999).

The Malaysian Government has acquired a large shareholding in several Malaysian companies to meet national aspirations, social concerns and global challenges (Beh, 2007; Tselichtchev, 2007; Vietor, 2007). Known as ‘Government-Linked Companies’ or GLCs (Ang & Ding, 2006), they play a vital role in the country’s economy. GLCs are defined as companies that have a primary commercial objective and in which the Malaysian Government has a direct controlling stake. Controlling stake refers to the Government’s ability (not just percentage ownership) to appoint Board of Director members, senior management, make major decisions (e.g. Contract award, strategy, restructuring and financing, acquisitions, divestments etc.) for GLCs either directly or through Government-Linked Investment Companies or GLICs (Ting & Lean, 2011). The move is equally important to the New Economic Model (NEM), Economic Transformation Plan (ETP), and particularly the Government Transformation Plan (GTP). Therefore, the GLCs should support the execution of those national agenda into a realization. However, despite the government’s intervention, a number of them continued to underperform as reflected by key financial and operational indicators, and became a financial burden to the government.
Musa, 2007). As such the study will examines how corporate governance and strategic improvisation of GLCs's top management team can affect firm performance.

LITERATURE REVIEW

Firm Performance
Superior performance is usually based on developing a competitively distinct set of resources and deploying them in a well-conceived strategy (Fahy, 2000). Indeed, strategists who embrace the Resource-Based View (RBV) also point out that competitive advantage comes from aligning skills, motives, etc. with organizational systems, structures and processes that achieve capabilities at the organizational level (Salaman et al., 2005). Firms with a bundle of resources that are valuable, rare, inimitable and non-substitutable can implement value-creating strategies that are not easily duplicated by other firms (Barney, 1991). However, it is quite difficult to find a resource, which satisfies the entire VRIO or Valuable, Rarity, Imitability, and Organization criterion (Barney, 1991), except in a monopolistic type of company. VRIO concept is important in a company for identifying the valuable resources and the performances of RBV in a company (Andersén, 2011). VRIO is a superior financial performance that are valuable, rare, and hard to imitate and have an organizational orientation that is attributed by RBV theory (Barney, 2002). VRIO was being studied to analyze competitive advantage (O'Sullivan and Bella, 2007; Andersén, 2011) and to discover the hidden capabilities and resources within the firm performance (Lin et al., 2012).

Firm performance using RBV can be classified into financial (accounting-based measures such as cash in hand at bank, profitability, sales growth, etc.) and non-financial (market share, new product introduction, product quality, marketing effectiveness or manufacturing value-added) (Kapelko, 2006). Profitability and sales growth is the most common measure of performance but an effective firm performance measurement system ought to cover more than just financial measures (O'Regan & Ghobadian, 2004). Recently, researchers have introduced several non-financial determinants of firm performance and the relative positioning of the firms against the leading competitor (Alegre et al., 2006). This type of measurement is becoming popular to overcome the limitation of financial measurements, such as a high probability of low response rate due to confidential data etc.

Corporate governance
A study by Young and Thyil (2008) indicate that good corporate governance framework typically comprises elements of internal and macro perspectives across legal, regulatory, sociological, ethical, human resources management, behavioral and corporate strategic. Corporate governance plays the main role in firm performance because it assists to control the board’s performance in business operations. Numerous studies have examined the effect of corporate governance mechanism (ownership structure, board composition, board and CEO ownership, CEO compensation and tenure) on the firm’s performance. Chitnomrath et. al., (2011) found that the key corporate governance mechanisms, which is monitoring and incentive mechanisms are significant determinants of a firm’s post-bankruptcy performance in Thailand. The key monitoring mechanism is ownership concentration, measured by shares held by the largest shareholder, whereas the critical incentive mechanisms are cash compensation and percentage of common shares held by the plan administrator. This perception is also supported by the Daily and Dalton (1994) who found that the likelihood of bankruptcy is related to poor corporate governance characteristics.

Moreover, Rhoades et al. (2001) conducted a meta-analysis of 22 samples and found a weak but significant relationship between leadership structure and firm performance. They found that firms with a separated structure had higher accounting, returns compared to companies with CEO duality. A more recent study by Ramli and Rashid (2010) also found a positive influence of corporate governance on the firm’s performance from the market and accounting perspectives. Stronger internal and external corporate
governance mechanisms are able to mitigate agency costs arising from conflicts of interest between managers and shareholders and debt holders. Agency costs of equity and debt are partly mitigated through the power of corporate governance to lower firm risk.

On the other hand, Okeahalam and Akinboade (2003) reviewed the issues and challenges of corporate governance in Africa. The result indicated that many of the non-financial corporation has failed in the United States and in Asia due to the non-efficient corporate governance. In conclusion, they pointed out 4 effects of good corporate governance towards firm performance: (1) promote efficient and effective use of limited resources, (2) attract investors both local and foreign and assure them that their investments will be secure and efficiently managed, and in a transparent and accountable process, (3) enhance the accountability and performance of those entrusted to manage corporations, and (4) create competitive and efficient companies and business enterprises.

Similar results by USAID (2009) that had listed eleven (11) impact of corporate governance brings stability to the market, strengthens competitiveness, improve risk mitigation, promotes investment, lowers cost of capital, weaken corruption, promotes reform of state-owned enterprises, and strengthens lending. Furthermore, in Asia, it has been shown that both before (Kamoche et al., 2003) and after the Asian financial crisis in 1997, firms that paid heed to good corporate governance practices fared better and provided greater protection to shareholders, especially the minority shareholders. Lawrence, (2004) also argued that the firms, which practice the corporate governance, are more profitable and prosperous. Not only they earned more profit, but these firms also pay more to their shareholders. According to the author, good governance is concerned with the executives and the directors.

**H1: Corporate Governance (CG) has significant positive relationship with performance**

**Strategic improvisation**

Prior research has paid considerable attention on the centrality of improvisation in individual and group outcomes (Kamoche et al., 2003) to the detriment of focus on organizational outcomes (firm performance). For instance, Moorman and Miner (1998) and Vera and Crossan (2005) study new product development as an improvisational outcome; Leybourne and Sadler-Smith (2006) investigates internal and external project outcomes; Souchon and Hughes (2007) focus on export performance as an outcome of export improvisation; while Hmieleski and Corbett (2008) examine venture performance as an outcome of entrepreneurial improvisational behavior. This relationship between improvisation and organizational outcomes has appeared to be dubious in extant research and lacks empirical examination (see Vera & Crossan, 2005; Hmieleski & Corbett, 2008). Interestingly, no study has sought to trace and prove the association between organizational improvisation and firm performance in GLCs, although many previous researchers tend to assume that improvisation may lead to superior performance through the secondary benefits of contingent factors such as flexibility (Crossan et al., 2005), self-efficacy (Hmieleski & Corbett, 2008), and management of environmental turbulence. By noting this deficiency in the investigation of strategic improvisation in GLCs, this research seeks to provide additional contributions to existing theory and practitioners.

**H2: Strategic Improvisation (SI) has significant positive relationship with performance**

**METHODS**

The sample includes all of the twenty six (26) public listed companies of the GLCs in Malaysia. The present study uses a structured questionnaires to collect the data from the respondents and in constructing the instrument items of the questionnaires, an attempt was made to include questions only if they were necessary in achieving the research objectives. The measurement used for the variables in this study was adapted from the previous studies as stated in table 1. The respondents in this study were the employees.
from various hierarchical levels, including the top level, middle level and operational level. It is based on the authority of making decisions of each level. Each respondent received a copy of the questionnaire personally (face to face), hence to ensure the highest possible response rate (Zikmund, 2003). The cover letter gave a clear explanation of the purpose behind the research, assuring the respondent anonymity, and an offer to send a copy of a summary of the findings to those who are interested. The questionnaire used a letter head that stated any information provided will be treated with strictest confidential and would be used only for academic purposes.

**Factor Analysis**

Factor analysis was used to check construct validity of all of the scales. The results would be used to primarily determine the dimensionality of constructs. The results of the factor analysis were based on two measures. The first is the Kaiser-Meyer-Olkin (KMO) measure. The KMO measures the sampling adequacy.

The suitability of the data for factor analysis for corporate governance was assessed. The Kaiser-Meyer-Olkin (KMO) index of sampling adequacy and Bartlett’s test of sphericity were examined. The KMO test of sampling adequacy of above 0.80 and Bartlett’s test of sphericity at $p<0.001$ were measured. The results of these tests assessed the data factorable, and thus the factor analysis was performed.

<table>
<thead>
<tr>
<th>Table 1: KMO and Bartlett’s Test (Corporate Governance)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity</td>
</tr>
<tr>
<td>Df</td>
</tr>
<tr>
<td>Sig.</td>
</tr>
</tbody>
</table>

The varimax rotated principal component exploratory factor analysis employed for the corporate governance scale revealed a one-factor structure that explained 66.117 per cent of the variance. Only factor loadings of at least 0.30 were included in the factor. Thus, no item was deleted. The twelve items were all loaded on the single factor, and can be seen in Table 2.

<table>
<thead>
<tr>
<th>Table 2: Factor Analysis for Corporate Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Minority shareholders’ rights are protected</td>
</tr>
<tr>
<td>All shareholders have the same rights to select/remove members of the board</td>
</tr>
<tr>
<td>Rules and procedures for transactions are in place</td>
</tr>
<tr>
<td>Commercial laws, stock market listing rules and regulations are in place</td>
</tr>
<tr>
<td>Inspectors investigate non-compliance with statutory requirements</td>
</tr>
<tr>
<td>Actions are taken against auditors’ failure to report improper financial records</td>
</tr>
<tr>
<td>Preferential treatment is often given to large shareholders</td>
</tr>
<tr>
<td>Insider trading is effectively prohibited</td>
</tr>
<tr>
<td>All shareholders have equal access to information</td>
</tr>
<tr>
<td>Board of directors reviews and guides corporate strategy</td>
</tr>
<tr>
<td>Board of directors reviews key executives and board compensation</td>
</tr>
<tr>
<td>Board of directors monitors the effectiveness of the governance practices</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Eigen Value</td>
</tr>
<tr>
<td>Percentage of Variance Explained</td>
</tr>
</tbody>
</table>
The suitability of the data for factor analysis for strategic improvisation was assessed. The Kaiser-Meyer-Olkin (KMO) index of sampling adequacy and Bartlett’s test of sphericity were examined. The KMO test of sampling adequacy of above 0.80 and Bartlett’s test of sphericity at p< 0.001 were measured. The results of these tests assessed the data factorable, and thus the factor analysis was performed. See Table 3.

### Table 3: KMO and Bartlett’s Test (Strategic Improvisation)

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | .891 |
| Bartlett’s Test of Sphericity | Approx. Chi-Square | 1112.434 |
| Df | 21 |
| Sig. | .000 |

The varimax rotated principal component exploratory factor analysis employed for the strategic improvisation scale revealed a one-factor structure that explained 57.558 per cent of the variance. Only factor loadings of at least 0.30 were included in the factor. Thus, no item was deleted. The seven items were all loaded on the single factor, and can be seen in Table 4.

### Table 4: Factor Analysis for Strategic Improvisation

| Item | Factor Loading |
| Top management responds in the moment to unexpected problems | .798 |
| Top management identifies opportunities for new work process | .705 |
| Top management explores a wide variety of approaches to a problem | |
| Top management creates multiple courses of action during planning | .778 |
| Top management maintains productivity in challenging circumstances | |
| A top management team adopts the company strategy adequately to changes in the organization’s business environment | .801 |
| Top management believes that their initial impressions of situations are almost always right | .754 |

Eigenvalue for the single was greater than 1.0. All the ten items loaded on the single factor, and is displayed in Table 6.

The firm performance data were assessed as factorial via the KMO tests of sampling adequacy with a value of 0.912 and Bartlett’s test of sphericity with p< 0.001. The results of these tests assessed the data factorable and the factor analysis was performed. See Table 5 below.

### Table 5: KMO and Bartlett’s Test (Firm Performance)

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | .912 |
| Bartlett’s Test of Sphericity | Approx. Chi-Square | 2684.234 |
| Df | 45 |
| Sig. | .000 |

The varimax rotated principal components exploratory factor analysis employed for the performance scale revealed a one-factor structure that explained 68.26 per cent of the variance. Only factor loading of at least 0.30 were included in the factor.

Eigenvalue for the single was greater than 1.0. All the ten items loaded on the single factor, and is displayed in Table 6.
Table 6: Factor Analysis of Firm Performance

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on investment</td>
<td>.838</td>
</tr>
<tr>
<td>Net profit</td>
<td>.806</td>
</tr>
<tr>
<td>Control of operational expenses</td>
<td>.839</td>
</tr>
<tr>
<td>Market share</td>
<td>.802</td>
</tr>
<tr>
<td>Product/service cycle time</td>
<td>.778</td>
</tr>
<tr>
<td>Customer service levels</td>
<td>.810</td>
</tr>
<tr>
<td>Inventory levels</td>
<td>.809</td>
</tr>
<tr>
<td>Resource utilization</td>
<td>.790</td>
</tr>
<tr>
<td>Sales growth</td>
<td>.868</td>
</tr>
<tr>
<td>Sales volume</td>
<td>.911</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>7.135</td>
</tr>
<tr>
<td>The percentage of variance explained</td>
<td>68.26</td>
</tr>
</tbody>
</table>

FINDINGS AND DISCUSSION

Descriptive Analysis
The means and standard deviations of all items of corporate governance are shown in Table 7. All the items were measured on a five point scale. The mean scores for CG ranged from 3.6121 to 4.0143 giving an overall mean of 3.8541. This shows that the degree of corporate governance among the GLCs was relatively high.

Table 7: Means of Corporate Governance

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Minority shareholders’ rights are protected</td>
<td>3.7571</td>
<td>.93419</td>
</tr>
<tr>
<td>2</td>
<td>All shareholders have the same rights to select/remove members of the board</td>
<td>3.5907</td>
<td>.95979</td>
</tr>
<tr>
<td>3</td>
<td>Rules and procedures for transactions are in place</td>
<td>4.0142</td>
<td>.81052</td>
</tr>
<tr>
<td>4</td>
<td>Commercial laws, stock market listing rules and regulations are in place</td>
<td>3.9858</td>
<td>.92184</td>
</tr>
<tr>
<td>5</td>
<td>Inspectors investigate non-compliance with statutory requirements</td>
<td>4.0000</td>
<td>.81502</td>
</tr>
<tr>
<td>6</td>
<td>Actions are taken against auditors’ failure to report improper financial records</td>
<td>3.7331</td>
<td>.86805</td>
</tr>
<tr>
<td>7</td>
<td>Preferential treatment is often given to large shareholders</td>
<td>3.6121</td>
<td>.76700</td>
</tr>
<tr>
<td>8</td>
<td>Insider trading is effectively prohibited</td>
<td>3.7286</td>
<td>.83252</td>
</tr>
<tr>
<td>9</td>
<td>All shareholders have equal access to information</td>
<td>3.7357</td>
<td>.88889</td>
</tr>
<tr>
<td>10</td>
<td>Board of directors reviews and guides corporate strategy</td>
<td>4.0143</td>
<td>.86902</td>
</tr>
<tr>
<td>11</td>
<td>Board of directors reviews key executives and board compensation</td>
<td>3.9715</td>
<td>.81891</td>
</tr>
<tr>
<td>12</td>
<td>Board of directors monitors the effectiveness of the governance practices</td>
<td>3.9893</td>
<td>.84297</td>
</tr>
</tbody>
</table>

The means and standard deviations of all items of strategic improvisation are shown in Table 8 below. All the items were measured on a five point scale. The mean scores for SI ranged from 3.7651 to 3.9609.
giving an overall mean of 3.8607. This shows that the degree of strategic improvisation among the GLCs was relatively high.

### Table 8: Means of Strategic Improvisation

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Top management responds in the moment to unexpected problems</td>
<td>3.7758</td>
<td>.75799</td>
</tr>
<tr>
<td>2</td>
<td>Top management identifies opportunities for new work process</td>
<td>3.9181</td>
<td>.78631</td>
</tr>
<tr>
<td>3</td>
<td>Top management explores a wide variety of approaches to a problem</td>
<td>3.8399</td>
<td>.86560</td>
</tr>
<tr>
<td>4</td>
<td>Top management creates multiple courses of action during planning</td>
<td>3.8221</td>
<td>.75381</td>
</tr>
<tr>
<td>5</td>
<td>Top management maintains productivity in challenging circumstances</td>
<td>3.9609</td>
<td>.74299</td>
</tr>
<tr>
<td>6</td>
<td>A top management team adopts the company strategy adequately to changes in the organization’s business environment</td>
<td>3.9431</td>
<td>.75850</td>
</tr>
<tr>
<td>7</td>
<td>Top management believes that their initial impressions of situations are almost always right</td>
<td>3.7651</td>
<td>.70836</td>
</tr>
</tbody>
</table>

The means and standard deviations of all items for firm performance are shown in Table 9 below. All items were measured on a five-point scale. The mean scores for performance ranged from 3.79 to 4.08, giving an overall mean of 3.94. This shows that the performance of the banks was relatively high for the past three years.

### Table 9: Means of Performance

<table>
<thead>
<tr>
<th>No</th>
<th>Statement</th>
<th>Importance</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>1</td>
<td>Return on investment</td>
<td>4.4892</td>
<td>.754</td>
</tr>
<tr>
<td>2</td>
<td>Net profit</td>
<td>4.5396</td>
<td>.8262</td>
</tr>
<tr>
<td>3</td>
<td>Control of operational expenses</td>
<td>4.446</td>
<td>.7664</td>
</tr>
<tr>
<td>4</td>
<td>Market share</td>
<td>4.2336</td>
<td>.8366</td>
</tr>
<tr>
<td>5</td>
<td>Product/service cycle time</td>
<td>4.2873</td>
<td>.7744</td>
</tr>
<tr>
<td>6</td>
<td>Customer service level</td>
<td>4.5</td>
<td>.7683</td>
</tr>
<tr>
<td>7</td>
<td>Inventory levels</td>
<td>4.1691</td>
<td>.8646</td>
</tr>
<tr>
<td>8</td>
<td>Resource utilization</td>
<td>4.2996</td>
<td>.86</td>
</tr>
<tr>
<td>9</td>
<td>Sales growth</td>
<td>4.4604</td>
<td>.7625</td>
</tr>
<tr>
<td>10</td>
<td>Sales volume</td>
<td>4.4712</td>
<td>.739</td>
</tr>
</tbody>
</table>

**Person correlation**

A Pearson correlation test was employed to investigate the relationship between the variables (dependent and independents) and the results are summarised below in Table 10. The findings show that the correlations among the variables are relatively moderate ranging from 0.105 to 0.601 and majority of the relationships are significant at 0.01 percent level. This correlation analysis gives a clear picture of the association, strength and also the nature of the relationship between variables. Multicollinearity is not a threat to this study as indicated by the low pair-wise correlation among the variables.

### Table 10: Correlations for all variables

<table>
<thead>
<tr>
<th></th>
<th>FP</th>
<th>CG</th>
<th>SI</th>
</tr>
</thead>
</table>

AGBA 12th World Congress
Page 579 of 1173
In general, the core objective of this study is to explore the best management practices of GLCs in Malaysia in terms of strategic improvisation and corporate governance and their relationships to firm performance. In deeply, to identify the current state of the above mention best practices among GLCs in Malaysia. The results show that strategic improvisation and corporate governance are significant positive related to GLCs performance as such all hypotheses were confirmed.

The main objective of this study was to determine the relationship of the identified best practices to the organization performance among GLCs companies in Malaysia. The understanding of this result is vital as the result showed an interesting fact, despite of a long and numerous arguments between scholars, which result in mutual agreement on the suggestion of a positive relationship between the entire tested variable with GLC’s performance.

Corporate governance was considered as one of the key players in term of performance. Therefore, it was proposed that corporate governance has a positive relationship with performance among GLCs companies. As for the discussion of CG, even though prior empirical literature is extensive, many studies have thus far failed to establish firm evidence that corporate-governance, devised either by the rating agencies or by researchers, positively affect company performance or value (Daines, Gow, & Larcker, 2008). There are a number of reasons that may explain why this is the case. The relationship may be obscured by econometric problems, such as selection bias, or lack of statistical power. Secondly, there may simply be no relationship either because corporate-governance ratings do not measure what they claim to measure or because a company chooses governance practices based on its characteristics, thereby maximizing shareholder value (Daines, Gow, & Larcker, 2008). However, this particular study found that corporate governance plays an important role of enhancing the organization performance. Thus, this study not standing alone, but it takes place of confirmation about the importance of the impact of corporate governance on performance. In line with that, previous studies in this area have shown that well governed firms have higher organizational performance, such as Herly and Sisnuhadi (2011), Chaghadari (2011), Bebchuk, Cohen & Ferrell (2004). Therefore, it was emphasized by Mc. Kinsey (2003), over 80% of the respondents would pay a premium for well governed companies. It can be seen that he knocks the right door of getting investor interest of their willing to pay premium for good corporate governance.

The second hypotheses stated that strategic improvisation has a positive significant relationship with performance. The finding confirmed that claim and showed it has a relationship with performance. However, the significant positive relationship SI and GLC’s performance is aligned with the result from the previous scholars. Improvisation enables managers to continually learn while working and act spontaneously and creatively to consistently move products and services out of the door (Brown & Eisenhardt, 1997). It can potentially generate value to the company in terms of prudent change management, adjustability to adopt best practices as well as adding flexibility and innovation (Kamoche, Cunha, & Cunha, 2002; Leybourne, 2006). By practicing improvisation, organizations could gain a better understanding on how individual and groups in organizations cope with and coordinate the conflicting demands of existing time perspectives (Crossan, Pina e Cunha, Vera, & Cunha, 2005); learn and adapt under time pressures (Vera & Crossan, 2005); and remain flexible under turbulent environments (Cunha, Cunha, & Kamoche, 1999).
CONCLUSION

The study explored on the relationship among the identified best practices and the performance of the GLCs. The outcomes of the study identified variables that are important in explaining the achievement of performance in the GLCs. The main objective of this study is to understand the best management practices of GLCs in Malaysia in terms of talent management and management of change and their relationships to firm performance.

The study improves upon the existing theoretical framework from the literature of best practices on performance and the new knowledge generated from this study could assist theory building efforts particularly in the strategic and best practice management field. Furthermore, the findings of the study supported the RBV theories. The RBV on inimitable resources and dynamic capabilities suggest that organizational should have their own competence according to knowledge resources. These competencies must be rare and unique. Moreover, researchers also found many of resources and capabilities on which competitive advantage is based reside in the operations function (Coates & McDermott, 2002; Lucas & Kirillova, 2011). On the managerial implication of the study, the study finds several statistically significant relationships with practical applications. Therefore GLCs should give the right priority to the implementation of the best practices to ensure favorable results.

REFERENCE LIST


Indigenous Knowledge, Entrepreneurial Orientation, Grassroots Innovations and Indigenous Entrepreneurship: The Moderating Role of Mindfulness

Keywords: Mindfulness, Indigenous Knowledge, Entrepreneurial Orientation, Grassroots Innovations, Indigenous Entrepreneurship, New Entry, New Venture Creation.

INTRODUCTION

Entrepreneurship and innovation are two strongly interconnected constructs that continue to draw considerable attention and interest from practitioners and researchers. Recently, Ndubisi (2014a) schematized the “triadic connect” between entrepreneurial orientation, innovation and entrepreneurship/new entry (see Figure 1). In the analysis the author argues for the presence of a cyclical effect where EO leads to innovation which leads to new venture creation, and when the new venture adopts EO, further innovations and new ventures result.

As mainstream high-tech innovations continue to meet market acceptance especially in high-income societies, one of the unfavorable consequences is the limited (if at all) attention paid to indigenous knowledge driven innovations and entrepreneurship. Yet over half of the world is made up of indigenous markets. Indigenous knowledge (IK), through its role in creating indigenous innovations and indigenous entrepreneurship can change the present and create the future of indigenous markets. Some indigenous
innovations and products have also proven successful in non-indigenous markets where the rate of diffusion has challenged that of many non-indigenous innovations.

Furthermore, because indigenous peoples tend to have a deeper knowledge of the ecosystems and use natural resources in a sustainable way, IK may be used to transform mainstream patterns of production and consumption to give rise to more eco-friendly production and consumption patterns and propel the attainment of sustainable development in developing countries (Capel, 2014). Considering the overall benefits to be derived from IK, this study thus seeks to provide a deeper understanding of the concept, its link with innovation and entrepreneurship.

Entrepreneurial orientation (henceforth EO) on the hand has important implications for innovation and new entry. Define as the processes, practices, and decision-making activities that lead to new entry (Lumpkin & Dess, 1996), or an organizational culture of enhancing wealth through innovation and exploitation of opportunities (Ndubisi, Capel & Ndubisi, 2015), EO dimensions (namely innovativeness, risk-taking, autonomy, and proactiveness) have important implications for grassroots innovations and indigenous entrepreneurship through their facilitating roles. For example, firms that are innovative, proactive, takes risks and grant autonomy to innovators tend to create more innovations and new ventures than those which are not. Such reasoning mirrors Miller’s (1983) famous quote:

“In general, theorists would not call a firm entrepreneurial if it changed its technology or product line simply by directly imitating competitors while refusing to take any risks. Some proactiveness would be essential as well. By the same token, risk-taking firms that are highly leveraged financially are not necessarily entrepreneurial. They must also engage in product market or technological innovation.” (p. 780).

Regarding grassroots innovations and indigenous entrepreneurship, EO dimensions are apt to play similar roles as in conventional high-tech innovations and new ventures.

The paper also shows how mindfulness—a cognitive state of alertness and proactive awareness (Langer, 1989; Ndubisi, 2012) facilitates indigenous knowledge, and acts as a contingency factor in the relationship between IK, EO, Innovation and new venture creation.

**THE CONCEPTS OF ‘INDIGENOUS’ AND ‘INDIGENOUS PEOPLE/MARKET’**

The term indigenous is frequently used to refer to aboriginal people. However, as a result of centuries of migrations and cultural assimilations, the term has gradually broadened to refer to “people permanently occupying a territory at the point of colonial intervention” (Purcell, 1998: 259). Extant definitions of the term indigenous however depend on whether the focus or perspective in question is geographical, political or cultural (Capel, 2014; Peredo et al., 2004; Purcell, 1998). Three core elements characterize the various definitions of the term, namely: (1) the descent from populations inhabiting a region prior to later inhabitants; (2) geographical, political and/or economic domination by later inhabitants or immigrants; and (3) maintenance of some distinctive social-cultural norms and institutions (Peredo et al., 2004). In this paper we use the terms people and markets interchangeably since in both marketing and management fields a market denotes a group of people-actual and potential customers.

Indigenous people can thus be defined as the original owners of a country’s resources or the descendants of such persons, who know themselves to be indigenous and are accepted by the community in which they live as indigenous (Lindsay, 2005). The total population estimate of indigenous people ranges from 300-500 million and they represent 80% of the cultural diversity worldwide (Peredo et al., 2004), speak the world’s estimated 7,000 languages, and are the stewards of some of the most biologically diverse areas accumulating an immeasurable amount of traditional knowledge about their ecosystems (Capel,
Indigenous Knowledge (IK) also known as traditional knowledge, is understood as “a systematic body of knowledge acquired by local people through the accumulation of experiences, informal experiments and an intimate understanding of the environment in a given culture” (Warren & Rajasekaran, 1993). It can thus be considered as unique to particular cultures or societies—knowledge that is unique to a given culture or societies (Grenier, 1998; Warren & Rajasekaran, 1993). Though all members of a community, may possess IK, the quality and quantity of this knowledge varies among members of a community depending on factors such as age, education, gender, social and economic status, daily experiences, outside influences, roles and responsibilities in the home and community, profession, aptitude and intellectual capability, level of curiosity, observation skills, ability to travel and degree of autonomy and control over natural resources (Grenier, 1998).

IK is made up of the skills, experiences and insights of people and is applied to maintain or improve their livelihood (Subba Rao, 2006). Although, mainstream science involve experimentation through trial and error, IK mainly originates from trial and error rather than theory and tends to be retained within particular communities because it is deeply embedded in the culture of the community in which it originates (Sen, 2005). IK is acquired by oral tradition and transmitted from one generation to the next through stories, informed experiences, practical examples and idioms with concepts that are not easily captured in writing or ways that are easily understood by scientists (Sillitoe, 1998). Indigenous knowledge tends to be rooted in the communities in which they originate and are hardly diffused among communities such that they can learn from the experiences of each other (Gupta, 1995; Sen, 2005). The restrictions of a literate intellectual tradition poses a challenge for outsiders like scientists to understand and pass on information about IK (Sillitoe, 1998).

There is a consensus that in spite of lacking formal education, indigenous populations have continuously found solutions to their needs and a means of survival without having recourse to modern means which tend to be unaffordable for them. Understanding some of the solutions or innovations used by indigenous populations could provide ingenious ways of solving contemporary problems. Subba Rao (2006) notes that a fundamental component of any country’s knowledge system is its indigenous knowledge and a number of authors have pointed out that more sustainable and effective solutions are generated by building on the existing knowledge base (Monaghan, 2009; Subba Rao, 2006). This underscores the need for mainstream scholars and scientists to pay attention to innovations arising from the indigenous knowledge.

UP- AND DOWN-SIDES OF INDIGENOUS KNOWLEDGE SYSTEMS

Indigenous knowledge systems (IKS) are transmitted orally and represent an accumulation of several years of experience based on observations, experiences and adaptive skills of several generations of people in a community, that have been transmitted orally (Capel, 2014; Grenier, 1998; Warren and Rajasekaran, 1993). IKS thus provide a basis for local experimentation and innovation as well as a foundation for making decisions which are implemented through indigenous organizations (Warren and Rajasekaran, 1993).

IKS has its own unique challenges, which have contributed to its poor recognition by researchers and industry practitioners. Consider that modern scientific knowledge tends to be written and neutral, while IKS are orally transmitted and strongly conditioned by the culture in which it resides.
However, IKS tend to be dynamic and not separated from the rest of society as it is constantly experiencing internal changes resulting from experimentation and creativity and impacted on by external systems, such that aspects of modern knowledge are incorporated into traditional ways of solving problems (Sen, 2005; Sillitoe, 1998). Thus while some indigenous communities have remained intact over decades, others have been significantly influenced by the socio-economic environment (Peredo et al., 2004). This dynamic nature of IK gives rise to innovations (Ganguli, 2000; Sen, 2005; Subba Rao, 2006) and indigenous entrepreneurship which are further discussed in the following sections.

ENTREPRENEURIAL ORIENTATION

Entrepreneurial orientation (EO) refers to a firm-level strategic orientation which captures an organization's strategy-making practices, managerial philosophies, and firm behaviors that are entrepreneurial in nature (Anderson et al, 2009). Entrepreneurial orientation has become one of the most established and researched constructs in the entrepreneurship literature (Ndubisi et al 2015). EO is commonly conceptualized to include the initial three dimensions namely, innovativeness, proactiveness, and risk-taking (Miller, 1983; Covin & Slevin, 1989), and subsequent two dimensions by Lumpkin & Dess, (1996) namely autonomy and competitive aggressiveness.

Reviews of the EO literature indicate that Miller’s three dimension perspective of EO is more popular among researchers. However, Lumpkin and Dess’ five dimensions provide a more comprehensive insight. Lumpkin and Dess (1996) offer an alternative view of EO as the combination of five dimensions, including the three by Miller (1983) and Covin and Slevin (1989) as well as competitive aggressiveness and autonomy, and further suggest investigating the dimensions independently in order to gain additional insights. As a core firm strategic orientation, research on EO continues to expand as the concept is adopted to understand the effects of being entrepreneurial across an increasing number of research contexts, such as indigenous entrepreneurship as in the present paper.

INNOVATION AND GRASSROOTS INNOVATIONS

Innovation has been defined or described in a number of ways ranging from, the creation of and first successful application of a new product or process (Cumming, 1998); and the creation of a new idea (McAdam et al. 1998; Urabe et al. 1988). The term has also been used to refer to a form of knowledge (Chaharbaghi & Newman, 1996); and a new way of delivering quality or better value (Knox, 2002). Damanpour (1991) defines organizational innovation as the adoption of an idea or behaviour new to the adopting organization, which involves all dimensions of organizational activities, such as a new product or service, a new production process technology, a new structure or administrative system, and a new plan or program within the organization. Innovation research falls into two main streams-the technological aspect and the human aspect. Studies by the technological school (e.g. Leblanc et al, 1997; Napolitano, 1991; Ndubisi et al. 2005) emphasize the salience of technology and research and development, whereas the human school (e.g. Cooper and Kleinschmidt, 1995; Ndubisi, 2005; Zien and Buckler, 1997) argues that people and organisational context are the main determinants of successful innovation.

Innovation research has theorized that innovation within organisations is a function of individual efforts and institutionalised mechanisms to facilitate creativity (Cohen and Levinthal, 1990; Glynn, 1996). Innovation literature focusing on the role of individuals in creating innovations has considered factors like intelligence, motivation to innovate, and creativity skills (Amabile, 1997; Sternberg et al. 1997). Whereas intelligence can be considered as an innate attribute, motivation to innovate and creativity skills can be influenced by external factors. Innovation literature shows that innovation in an organisation is significantly influenced by the extent of creativity-relevant skills possessed by people within the
organisation (Amabile, 1997), and that such skills can be developed, sustained, and improved through formal and informal means such as training and education.

Three forms of innovation are recorded in the literature: product innovation {i.e. new products or services introduced to meet an external user or market needs, (Damanpour, 1991)}; process innovation {a new element which is introduced into an organization's production or service operations, (Damanpour, 1991)}; and administrative innovation {changes in the methods of operating a business that make more effective use of changes in organization structure, policies, work methods, and procedures (Hine & Ryan, 1999)}. Innovations by indigenous people are commonly referred to as grassroots innovations and can also take the form of product-service, process and administrative.

Grassroots innovations give rise to indigenous entrepreneurship. Most grassroots innovators operate in the informal sector of the economy and in rural communities and are inspired by the unresolved problems in their communities whose solutions are either inexistent, unaffordable or unsuitable for solving their needs (Gupta et al., 2003; Srinivas and Sutz, 2008; Verma, Tsephal, and Jose, 2004). They are also driven by an ideological commitment to the preservation of their heritage (Lindsay, 2005).

**INDIGENOUS ENTREPRENEURSHIP**

Indigenous entrepreneurs (IE) are sometimes referred to as grassroots innovators (Gupta et al., 2003; Srinivas and Sutz, 2008). Indigenous entrepreneurship can be defined as enterprise related activities carried out by indigenous people (Capel, 2014; Peredo et al., 2004). More specifically, indigenous entrepreneurship can be understood as the creation, management and development of new ventures by indigenous people for the benefit of indigenous people (Lindsay, 2005) and more open-minded others.

Although indigenous entrepreneurs can be found in both developed and developing countries, they form a more significant proportion of the population in developing countries (Gupta et al., 2003; Subba Rao, 2006). Although indigenous entrepreneurs consider both social and economic goals (Lindsay, 2005), there are suggestions that they are more focused on solving social and environmental needs not met by the market (Monaghan, 2009; Srinivas and Sutz, 2008) than on the commercialization of their creative solutions (Gupta et al., 2003). They usually operate under conditions of scarcity (Gupta et al., 2003; Srinivas and Sutz, 2008), and are motivated by the need for survival (Gupta et al., 2003; Sen, 2005). They can thus be described as necessity-driven entrepreneurs (Bosma et al. 2009) more than opportunity-driven. Although, necessity-driven entrepreneurship is strongly related to economic growth (Frese & Friedrich, 2002), indigenous entrepreneurs are often accorded little value due mainly to mindless stereotype which considers them too traditional. We argue that grassroots entrepreneurs have the potential to contribute significantly to economic development if capital and entrepreneurial support are provided through appropriate institutional support, and if relevant stakeholders are mindful enough to acknowledge their meaningful and novel contributions. Moreover, mindful awareness and recognition that indigenous entrepreneurs are rich in traditional/indigenous knowledge, which facilitates the generation of innovative solutions to their society’s problems, will end the unhealthy parallels often drawn between indigenous and Western-styled innovations. After all, indigenous/grassroots innovations are generated from resources that abound in their environment (Ganguli, 2000; Gupta et al., 2003), and are often targeted at the indigenous markets who see added value in them, no matter how simple or rudimentary (Monaghan, 2009) they may appear to non-indigenous markets.

**INDIGENOUS KNOWLEDGE, ENTREPRENEURIAL ORIENTATION, GRASSROOTS INNOVATIONS AND ENTREPRENEURSHIP**

We theorize and model IK and EO as independent variables with positive direct and indirect effects on grassroots innovations and indigenous entrepreneurship respectively (Figure 2). IK has two dimensions –
indigenous knowledge acquisition (IKA) and indigenous knowledge implementation (IKI). Educate our detail discussion in earlier sections on how IK is acquired, transmitted and used to create effective solutions to the needs of the indigenous market. These solutions are commercialized by economic and/or social benefits seeking entrepreneurs through their new ventures in the form of grassroots innovations. EO in the other hand facilitates grassroots innovations and entrepreneurship by indorsing individual or group innovativeness (INNO), risk-taking (RISK), proactiveness (PROAC), autonomy (AUT) and competitive aggressiveness (CAGR). Each of the five dimensions have a unique contribution of variance to a higher order construct, hence should be treated independently as recommended by Lumpkin and Dess (1996).

Regarding competitive aggressiveness, one main reason why grassroots innovations still survive today despite the rivalry onslaught by their more modern counterparts is competitive aggression within the indigenous markets at least. Indigenous innovators and entrepreneurs often position and market their offerings with benefits proposal strongly tied to their cultural values. Such positioning juxtaposes rational and emotional aspects of consumer aspirations and expectations, thereby making it more difficult for them (indigenous offerings) to be overthrown by alien innovations in the indigenous market at least. Innovativeness, risk taking propensity, proactiveness and autonomy (Covin & Slevin, 1989; Lumpkin & Dess, 1996; Miller, 1983; Ndubisi et al., 2015) facilitate open minded, independent, determined, audacious, empowered and preemptive quest for continuous exploration and discovery of new or latent grassroots innovations leading up to indigenous new entry. The foregoing discussions lead to the following propositions:

Proposition 1: (a) Indigenous knowledge acquisition (IKA) and (b) indigenous knowledge implementation (IKI) are directly associated with grassroots innovations.

Proposition 2: Entrepreneurial orientation dimensions namely (a) innovativeness (INNO), (b) risk taking (RISK), (c) proactiveness (PROAC), (d) autonomy (AUT), and (e) competitive aggressiveness (CAGR) are directly associated with grassroots innovations.

Proposition 3: (a) Indigenous knowledge acquisition and (b) indigenous knowledge implementation are indirectly associated with indigenous entrepreneurship/new venture creation (via grassroots innovations).

Proposition 4: Entrepreneurial orientation dimensions namely (a) innovativeness, (b) risk taking, (c) proactiveness, (d) autonomy, and (e) competitive aggressiveness are indirectly associated with indigenous entrepreneurship/new venture creation (via grassroots innovations).

MINDFULNESS

Mindfulness — a mode of consciousness that commonly signifies presence of mind, has its roots in the word “anya n’ala,” an Ibo/Igbo language term which literally means “eyes to the ground” but more accurately interpreted as “to be observant”. Social psychology research has describe mindfulness as a cognitive state of alertness and proactive awareness (Langer, 1989); a state of conscious awareness characterized by active distinction drawing that leaves the individual open to novelty and sensitive to both context and perspective (Langer, 1992). Brown et al (2007) define the concept as being attentive to and aware of what is taking place in the present. Mindfulness has been approached by scholars from either an individual or collective perspective. Mindfulness-based approaches reason that an individual’s or an organization’s ability to achieve reliable performance in changing environments depends on how they think: how they gather information, how they perceive the world around them, and whether they are able to change their perspective to reflect the situation at hand (Langer, 1989; Ndubisi, 2012). Organisations and individuals who are mindfully engaged in a task are both motivated and able to explore a wider
variety of perspectives, make more relevant and precise distinctions about phenomena in their environments, enabling them to adapt to shifts in those environment (Fiol & O’connor, 2003). Collective mindfulness involves preoccupation with failure, reluctance to simplify, attention to operations, focus on resilience, and the migration of decisions to expertise (Weick & Sutcliffe, 2001).

At the individual-level mindfulness involves: openness to novelty, alertness to distinction, sensitivity to different contexts, awareness of multiple perspectives, and orientation in the present-paying attention to the immediate situation (Langer, 1989; Ndubisi, 2014b). As such mindful individuals and groups are not only apt to recognize and value indigenous knowledge, but also to not treat it as inferior or with disdain. It has been suggested that mindfulness through its high sensitivity or awareness of the environment can bring about increased potential to recognise and exploit opportunities in these environments (Rerup, 2005). Our paper extends past studies by demonstrating that mindfulness’ openness to novelty, alertness to distinction, sensitivity to different contexts, awareness of multiple perspectives, and orientation in the present (i.e. paying attention to the immediate situation) will facilitate recognition and appreciation of indigenous knowledge, and leveraging of its contributions including innovation and new venture creation.

**DIRECT EFFECT OF MINDFULNESS**

Colonial expansion, mindless stereotypes, changing economic circumstances as well as rapid technological advancement have led to marginalization of indigenous knowledge (Capel, 2014; Lalonde, 1993; Peredo et al., 2004). Indigenous knowledge systems were disrupted during the colonial period and replaced by colonial practices which established western ways of learning and teaching as “the” way to advancement, while indigenous knowledge systems were discouraged (Agrawal, 1995; Capel, 2014; Lalonde, 1993; Peredo et al., 2004). Furthermore, development theorists considered traditional knowledge as “inefficient, inferior and an obstacle to development” (Agrawal, 1995; Warren, 1992).

One of the dominant development paradigms in the 1950s which also contributed to the marginalization of IK was the modernization theory (Agrawal, 1995; Capel, 2014; Peredo et al., 2004). The modernization theory was based on the fundamental belief that technological growth which was understood as modernization, was synonymous with development, which all traditional communities were expected to gradually attain (Kuznets, 1973; Peredo et al., 2004). The theory considered traditional social structures, languages and cultures as obstacles to advancement (Agrawal, 1995; Kuznets, 1973; Peredo et al., 2004), focused on monetary income and economic growth as the fundamentals that determine quality of life, and posited that self-interest and rational economic behavior should be the motivating factor for all individuals (Peredo et al., 2004). These categories can be viewed as a mindless approach since it ignores contexts and perspectives, especially when knowledge and information makes more sense when located in context.

Research shows that mindlessness shows up in two ways – repetition and single exposure (Langer, 2000). “If we repeat something over and over, we come to rely on our mindset for how to accomplish the goal” (Langer, 2000, p. 220). Because it has been repeated over and over that IK is inferior and that the way to economic development is through modern technology, IK is often mindlessly treated almost as not useful; and also because this is quite often the initial impression about IK, people hardly question this notion before accepting it mindlessly. But a mindfulness-based approach due to its openness to novelty, alertness to distinction, sensitivity to different contexts, awareness of multiple perspectives, and orientation in the present-paying attention to the immediate situation (Sternberg, 2000) pays attention to the indigenous market environment, and is receptive to indigenous knowledge and its outcomes. This philosophy is captured in the competing theory-the dependency theory.

The dependency theory is at odds with the modernization theory. Dependency theorists oppose the view that all societies needed to advance along a similar development trajectory and further posit that the
unique features and structures of the different countries should determine their distinctive development paths (Capel, 2014; Cardoso & Faletto, 1979). The theory recognizes the unique environment of indigenous markets and the need to apply indigenous knowledge systems that suit the particular market, and for non-indigenous people to update their situational awareness in order to fully appreciate others’ perspectives (Capel, 2014). This is similar to the mindfulness ideology which holds that achieving a reliable or sustainable performance in different or changing environments is dependent on how individuals/markets think, perceive the world around them, and ability to change their perspective to reflect the situation at hand (Langer, 1989; Ndubisi, 2012). According to Capel (2014) mindfulness-based approaches to knowledge and learning posit that all knowledge, learning, information and facts depend on context, and by that recognize the efficacy of IK in the context of indigenous societies/markets at least (p. 70). The following proposition captures the facilitating role of mindfulness in IK recognition, acquisition and implementation.

**Proposition 5a:** Indigenous knowledge recognition and acceptance will increase as mindfulness of indigenous and non-indigenous markets increase

**Proposition 5b:** Indigenous knowledge acquisition will increase as mindfulness of indigenous and non-indigenous markets increase.

**Proposition 5c:** Indigenous knowledge implementation will increase as mindfulness of indigenous and non-indigenous markets increase

**MODERATING ROLE OF MINDFULNESS**

We have earlier shown that IK facilitates grassroots innovations (GI.s) defined in this study as simple, need-oriented innovations generated to address problems faced by indigenous communities and have the potential to provide solutions to contemporary problems (Gupta, 2001). Because grassroots innovations are aimed at solving problems that are yet to be resolved or satisfying needs that are not considered important by the wider market or major institutions (Butkeviciene, 2009; Srinivas & Sutz, 2008), they can be considered as bottom-up social innovations developed by rural communities (Butkeviciene, 2009). They have a social impact because they satisfy human needs and foster social inclusion and empowerment (Butkeviciene, 2009). Yet, innovations commercialized by indigenous entrepreneurs however tend to remain at micro-scale levels because the entrepreneurs lack the funds and/or the commercial knowledge to grow the business beyond micro levels (Gupta et al., 2003). This is partly because of market mindlessness. A mindless market may reject indigenous innovations even when they are as effective as their more modern counterparts, as they often base their innovations judgments mainly on their stereotypes, heuristics or peripheral routes such as community/country of origin. In contrast, mindful consumers base their innovation decisions on rational (intrinsic and extrinsic) innovation cues and will adopt such innovations as long as they can meet the need at hand.

Innovation diffusion rate is a measure of its (innovation) success. Successful innovations gain faster and sustainable market acceptance. At the same time successful innovation diffusion depends on the characteristics, perception and attitude of adopters (Capel, 2014; Davis et al. 1989; Ndubisi et al. 2005). The importance of user perception, attitude, characteristics and behavioural intention on adoption has been captured in the initial reports and replications of Fishbein and Ajzen’s (1975) theory of reasoned action, Mathieson’s (1991) theory of planned behaviour, and the technology acceptance model (Davis et al. 1989; Ndubisi et al. 2005). These theories and their replications suggest that favourable user attitude increases innovation diffusion. Similarly, favourable attitude, open mindedness, receptivity of the target market will facilitate indigenous innovations adoption and acceptance.

Mindful individuals are largely explorers (Ndubisi, 2014b). Lisboa et al. (2011) view exploration as a crucial learning concept that represents a key capability in the innovation process. Exploration involves challenging existing ideas and developing new knowledge about new products, technologies, skills and

*AGBA 12th World Congress*

*Page 590 of 1173*
markets (Menguc & Auh, 2008; Lisboa et al., 2011). Ndubisi (2014b) found that mindful consumers reported more favourable perceptions, satisfaction and sustained patronage of tested and qualified products and suppliers. Furthermore, he posited that they will seek to understand critical product features and exert time and effort to acquire information necessary to make proper judgments about product quality and value, thus they follow the central route persuasion approach of the elaborate likelihood model. The elaboration likelihood model suggests that based on the degree of elaboration, there are two different kinds of persuasion processes that individuals engage in: central route and peripheral route to persuasion. The central route represents the process in which elaboration is relatively high, and involves systematic and extensive thinking, careful examination of the information and close scrutiny of the arguments embedded in the message to determine the merits of the communication (Petty & Cacioppo, 1986; Jae & Delvичchio, 2004). On the other hand, the peripheral route requires the process in which elaboration is relatively low. Therefore, the central route requires individuals to exert a great deal more thought and mental effort. Instead of using heuristics and peripheral route, mindful consumers utilize a central route, by engaging in open minded, elaborate process of cues evaluation. Individuals that use the peripheral route do not engage in elaboration of the message through systematic and extensive cognitive processing of the merits of the communication (Petty & Cacioppo, 1986). Instead, they employ heuristics or simple decision rules and rely on environmental characteristics of the communication (Thakor & Lavack, 2003), categories, stereotypes or labels.

Recall that mindfulness is the quality of individual or collective attention that enables entrepreneurs to see and exploit opportunities that others may not see. Mindfulness also enables them to remain vigilant and able to respond effectively to unexpected events (Rerup, 2005), notice the evolving trends in their environment and respond appropriately. But to grasp the role of mindfulness “it is important to recognize that awareness is more than simply an issue of ‘the way in which scarce attention is allocated’ (March, 1994, p. 10). Mindfulness is as much about the quality of attention as it is about conservation of attention (Rerup, 2005). It is as much about what people do with what they notice as about the activity of noticing itself” (Weick et al. 1999, p. 90). Mindful markets, with their open mindedness and non-automatic information processing (Sims and Gioia, 1986), will not view these grassroots innovations and the indigenous new ventures supporting them stereotypically as inferior, instead they will engage the central route to ascertain their relevance and legitimacy in solving genuine market needs. They will patronize them, when the need arises. When mindful indigenous and non-indigenous markets accept and patronize grassroots innovations, they encourage indigenous entrepreneurship by so doing. As such mindfulness (of indigenous and non-indigenous) becomes a contingency factor in the relationship between IK, EO, grassroots innovation and indigenous entrepreneurship (or new venture creation) as shown in the next propositions and in Figure 2.

Proposition 6: Mindfulness of the market (indigenous and non-indigenous) will positively moderate the impact of (a) indigenous knowledge on grassroots innovations, and (b) grassroots innovation on indigenous entrepreneurship (or new venture creation).

Proposition 7: Mindfulness of the market (indigenous and non-indigenous) will positively moderate the effect of (a) entrepreneurial orientation on grassroots innovations, and (b) grassroots innovation on indigenous entrepreneurship (or new venture creation).
IMPLICATIONS AND CONCLUSIONS

There is a lot more to learn about indigenous knowledge. In spite of the growing recognition of its importance, there is very limited research and consequently poor understanding of the direct and indirect effects of IK. Unfortunately, this poor understanding seemingly may stay for a little while more as there is still very little signs of increased interest in IK as a field of study. This is paradoxical considering the huge impact of IK on grassroots innovations, new venture creation and economic growth of many developing nations.

One of the paper’s aims is to help alleviate the problem of scarcity of IK research and to provide a better understanding of its role in business and society. We approach this aim by discussing the role of mindfulness in the association of indigenous knowledge, entrepreneurial orientation, grassroots innovations and indigenous entrepreneurship (i.e. new entry or new venture creation). As stated earlier, mindfulness involves: openness to novelty (i.e. ability to reason about new kinds of stimuli); alertness to distinction (the ability to compare, contrast, and make judgements about similarities); sensitivity to different contexts (awareness of the characteristics of particular situations and the changes in such situations), awareness of multiple perspectives (seeing things from different points of view); and orientation in the present (paying attention to the immediate situation) (Langer, 1989; Ndubisi, 2014b; Sternberg, 2000). The five sub-processes of mindfulness have important implications for IK, grassroots innovations and indigenous entrepreneurships.
The uses of traditional knowledge and the need for its acquisition and implementation can no longer be denied. Douthwaite (2006) presents evidence that the most successful innovations are those developed with the involvement of potential users - a key strength of grassroots innovations. In fact Douthwaite (2006) showed that innovations generated solely by manufacturers or R&D laboratories usually fail, but grassroots innovations are robust. He substantiated his claims by explaining how grassroots innovation development process in Denmark successfully produced a wind-turbine industry that claimed 55% of a yearly, billion dollar market in 2000, whereas a similar development program executed using a top-down model in the U.S., by the National Aeronautic Space Administration (NASA) failed, after spending over $300 million (Douthwaite, 2006: 98).

In Malaysia, indigenous knowledge and grassroots innovations are clear pacesetters, whose concepts continue to inform modern innovations. For example, traditionally designed and made “batik” has for a long time lead and continues to lead their modern factory produced counterparts in terms of quality, popularity and market acceptance. As observed from Figure 3, “batik” designed by a traditional entrepreneur with grassroots technology, clearly outclasses that of the modern factory. The design captures the values, experiences and needs of the target population, a fit made possible by the designer’s vast knowledge of indigenous Malay fashion aspirations and tastes.

Figure 3: Traditional “Batik” Design with Indigenous Technology. How Beautiful, So Beautiful: A textile worker creates a batik in Kota Bharu. Incomparable with batik designs produced in modern factories.

Indigenous knowledge provides the advantage of aligning innovation outcomes with the values, experiences and needs of the target population (Prahalad & Hart, 2002; Srinivas & Sutz, 2008). The involvement of grassroots innovators allows bottom-up solutions that align with the local interests and values of the indigenous communities involved, and thus achieves more sustainable and successful results (Monaghan, 2009). This suggests that home-grown solutions tend to be more sustainable since they incorporate the cultural value system of the population. Indigenous entrepreneurs thus represent a potent knowledge capital which development strategies can build upon (Gupta et al., 2003), especially through greater mindfulness. As shown earlier, mindfulness creates an unending desire for more knowledge and learning, leading to greater sensitivity or awareness of developments in the environment. The motivation and ability to explore a wider variety of perspectives, and to make more relevant and precise distinctions about developments in the local environment, altogether help to create indigenous knowledge. When
indigenous knowledge translates into solutions (e.g. grassroots innovations), it enables indigenous people to adapt to shifts in the environment. Thus, mindfulness is an important stimulus for IK and grassroots innovations; it also accelerates the link between them.

Furthermore, mindfulness can also assist in the development of appropriate technologies through collaborations between grassroots and mainstream innovators. As demonstrated by global musical instrument giant YAMAHA (in Figure 4), YAMAHA takes pride in positioning its Strings as a unique blend of tradition and technology, and its Guitars and Basses as the perfect combination of traditional craftsmanship and leading edge technology. Little wonder YAMAHA is not only a highly innovative musical instrument provider Worldwide, but also highly successful globally (see Table I for some of the latest performance indicators). In 2014 the company’s net income rose by 456% from the previous year, and ROE rose by 7.3 points during the same period (YAMAHA, 2014). The company lists as its business strength “wealth of core technical expertise based on traditional craftsmanship in acoustics and advanced digital technology” (YAMAHA, 2013 p.11; 2014 p.13). The Yamaha Group has established a global presence, with manufacturing and marketing bases in various parts of the world. Of the Group’s 62 consolidated subsidiaries, 38 are foreign corporations, of which 16 are manufacturing companies, with principal bases of operation in China, Indonesia, and Malaysia (YAMAHA, 2014), countries with large indigenous population and highly competent in creating musical grassroots innovations.

Another example is the Biopharma Industry which undertakes drug development. The biopharma industry was built on the assumption that biotechnology companies drive up R&D productivity by taking on ownership for drug development and the resulting patents. After drug development, licenses were provided to pharmaceutical companies who would then commercialize these drugs. With this nonownership business model, pharmaceutical companies hoped to boost their R&D productivity and rebuild their eroding drug channel. For biopharma industry, a mindful recognition of the potency of alternative/traditional medicine lead to seeking partnership with traditional medicine experts. By engaging indigenous/alternative medicine innovators massive amount of indigenous knowledge of medicinal powers of roots and herbs were gained, and when combined with the industry’s more modern technology resulted in development of more drugs and other healthy (non-drug) foods and drinks. Although there are reports that the biopharma industry has failed to create value from the nonownership arrangements with pharmaceutical companies (although the same cannot be said of their partnership with traditional/indigenous medicine innovators), this failure reportedly stems from other reasons. One particular reason is that the R&D process of drug development is volatile and unanticipated results undermine the logic underlying the non-ownership contractual arrangement. For example there are instances of clinical testing changing the type of treatment the drug is eventually used for, which does not fit the drug portfolio and sales capabilities of the pharmaceutical company. Nonetheless, Biopharma industry-traditional/indigenous medicine innovators partnership is a huge success story.

Clearly, value creating advantages can be derived from collaborations between grassroots innovations/indigenous knowledge and mainstream innovations (Assefa et al, 2008; Ganguli, 2000; Gupta et al., 2003; Monaghan, 2009; Sen, 2005; Srinivas & Sutz, 2008). The collaboration between the indigenous knowledge and modern technology facilitates more productive use of existing indigenous knowledge and generates innovations at a faster pace (Ganguli, 2000: 48). A list of successful innovations in different countries around the world, resulting from the integration of indigenous knowledge and mainstream innovations is provided by Subba Rao (2006). In some instances, award winning innovations have resulted from the integration of grassroots innovation and mainstream technology (Terjesen, 2007). But this can be achieved when collaborators are open to new ideas and are willing to fully and open-mindedly explore both IK and non-IK knowledge sources, as well as the opportunities that reside in both sources and the resulting innovations.
Figure 4: Yamaha Strings: A Unique blend of tradition and technology.

Table 1: YAMAHA’s Key Figures for Year End, March 2014

<table>
<thead>
<tr>
<th></th>
<th>Change from the previous fiscal year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Sales</td>
<td>¥410.3 billion</td>
</tr>
<tr>
<td></td>
<td>+11.8 %</td>
</tr>
<tr>
<td>Operating Income</td>
<td>¥26.0 billion</td>
</tr>
<tr>
<td></td>
<td>182.1 %</td>
</tr>
<tr>
<td>Net Income</td>
<td>¥22.9 billion</td>
</tr>
<tr>
<td></td>
<td>455.5 %</td>
</tr>
<tr>
<td>ROE</td>
<td>9.2 %</td>
</tr>
<tr>
<td></td>
<td>+7.3 points</td>
</tr>
<tr>
<td>Free Cash Flow</td>
<td>¥10.3 billion</td>
</tr>
<tr>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

Just as grassroots low-tech innovations may be scaled-up, high-tech innovations may be simplified by integrating ideas from grassroots innovations and indigenous knowledge. This could lead to simpler, low-cost and more effective appropriate technologies that are more relevant to a wider population, because they address problems more adequately. This opportunity can lead to a successful new entry,
particular in indigenous markets. Prahalad and Hart (2002) point out that radical innovations in technology and business models which re-assess price-performance relationships will be required to win new markets, especially among the economically poor in developing countries. Furthermore, they argue that the real market potential lies with the “aspiring poor who are joining the market economy for the first time”, rather than the wealthy few in the developing world (Prahalad & Hart, 2002: 1). Mindful individuals and organizations see immense potential in these markets, and carefully adapt their strategy in accordance to the nature and demand of the indigenous business landscape, whereas their less mindful counterparts see only threats that cannot be overcome. Thus, mindfulness helps to develop a favorable perception of a market and an outlook that encourages entrepreneurship or new venture creation.

Indigenous and advanced economies may achieve a win-win relationship if innovators in developed economies collaborate with innovators in developing economies to better understand their needs. This could facilitate the generation of more appropriate technologies which may be more readily purchased by developing countries as they are better tailored to their peculiar needs. Such collaboration can lead to successful new joint ventures or partnerships (between indigenous and non-indigenous innovators) that are market-oriented rather than product-oriented, and are tailored to the needs of the potential users. Drucker (1985) refers to this phenomenon as “entrepreneurial judo”, which he describes as a situation in which a competitor takes a significant share of the market from an incumbent organization which fails to use or ignores external information to improve their current offerings. This inability/unwillingness to use external knowledge can be described as lacking absorptive capacity (Cohen & Levinthal, 1990) or having the “not-invented-here syndrome” (Drucker, 1985: 227), and are characteristic of mindless organizations and individuals. This may occur because organizations and/or individuals unmindfully look down on external ideas (Drucker, 1985) for example, the idea of learning from or working with grassroots innovators or entrepreneurs. But mindful entities have the motivation and ability to reason about new kinds of stimuli and to respond accordingly, leading to successful opportunity exploitation through new entry. As such, mindfulness is a key antecedent to entrepreneurship or new venture creation and also doubles up as a moderator of the impact of other external factors such as IK and grassroots innovations on new entry.

Not only with grassroots product service innovations as shown in the mini case examples, also available evidence shows that grassroots process and administrative innovations can be superior to their modern counterparts. Although productivity may not be as high as it is in the mechanized factories or modern organizations, the quality of process and administrative innovations (e.g. division of labor, interactions, communities of practice and supervision) in indigenous ventures are sometimes superior to that of the modern organizations. Cooperation, trust and sharing are often the hallmarks of traditional ventures, whereas competition, suspicion and hoarding characterize many modern organizations.

FUTURE RESEARCH

Indigenous knowledge continues to be overlooked by researchers, yet practical evidence shows that such knowledge helps to create better and sustainable indigenous societies through its facilitating role in grassroots innovations development. Future research should examining empirically the link between indigenous knowledge, grassroots innovations and indigenous entrepreneurship.

Secondly, due to its potential to allow or enable new information acquisition, and quality attention to trends in the environment, mindfulness promotes IK acquisition and implementation and in turn development of grassroots innovations and entrepreneurship. This conceptualization locates mindfulness as both antecedent to IK and a moderator of the relationship between IK, grassroots innovations and entrepreneurship. Future research may test this framework in both indigenous and non-indigenous settings to provide generalizable results or contextual evidence.
Entrepreneurial orientation, a well-researched concept in the field of entrepreneurship is viewed as an antecedent to indigenous knowledge and grassroots innovations. Future research should subject this theorizing to empirical analysis. Such effort will add to the advanced understanding of the EO concept and at the same time open up a new opportunity/lens for further investigation of the phenomenon.

It has been suggested that collaborations between grassroots and mainstream innovators may thus enable mainstream innovators to tap into the possibilities provided by indigenous knowledge, and create more opportunities for knowledge transfer. Till date this speculation has not been tested to provide empirical evidence and a better understanding of the processes involved in such knowledge transfer. Future research should explore and test this supposition.

Lastly, future studies should compare several rival scales developed and used to measure mindfulness in terms of their parsimony and explanatory power. These include the Langer Mindfulness Scale (Langer, 2004; Ndubisi, 2014b), the Mindful Attention Awareness Scale (Brown & Ryan, 2003), the Five Factor Mindfulness Questionnaire (Baer et al., 2006), and the Kentucky Inventory of Mindfulness Skills (Baer et al., 2004). Future studies may compare these scales in terms of their parsimony and to show their respective explanatory power with regards to the hypothesized relationships.

REFERENCES

The references cited in this paper are omitted due to space considerations. Interested parties are invited to contact the author for a complete copy of the paper.
Assessment of the Impact of Computerized Accounting Information Systems on Efficiency of Human Resources in State Universities

Keywords: Human Capital, Computerized Accounting Information Systems, SPSS, Sri Lanka

INTRODUCTION

Modern computerized accounting systems are based on the concept of database. A database is implemented using a database management system, which is defined by a set of computer programs that manage and organize data effectively and provide access to the stored data by the application of programs. The accounting database is well-organized with active interface that uses accounting application programs and reporting systems. Hence well organized integrated data bases provide the basic foundation end users to use to increase the effectiveness of finance operations.

However, the success does not simply depend only on the advancement of and facilities available in computerized accounting systems but also it requires competent human resources to bring the effective results out of it. Since the computer programs are well tested, the efficiency of end users would affect the performance of organizations. The efficiency of the employee is most important for the growth of the organization. Therefore, the facilities provided through computerized accounting systems can be argued to help improve the efficiency of the employees through a systematic process operation.

PROBLEM STATEMENT

Together with introduction of computerized accounting systems, both private and public sector organizations started changing their reporting from manual systems to computerized systems. Now it has become common for many organizations to have Computerized Accounting System as part of their reporting system operating on integrated basis or in standalone. However, it is questionable as to whether organizations get the desired benefits from computerized accounting system mainly due to sophistications in the systems and inability of end users to get the maximum benefits out of it. Despite the argument that could be brought up that improved competency and efficiency of employees could fill this gap between end users capabilities and sophistication in the computerized accounting systems, it is unknown how these computerized accounting systems could increase the efficiency of human resources. Referring to this problem, the study lies in investigating and identifying the impact of computerizing accounting information systems in the increasing the efficiency of human capital in the finance departments state universities in Sri Lankan with the following objectives.

To examine the impact of computerized accounting information systems on the efficiency of human resources in State Universities to assess the relevance of human resource elements such as skill, experience, knowledge and creativity in using computerized accounting information systems in State Universities.
LITERATURE REVIEW

Computerized Accounting Information System is a tool with combination of Information and Technology systems (IT). It has been designed to help the management to control the firms’ economic and financial area. Firms have given the focus to improve the efficiency of the human capital in an organization, because of the success in efficiency of Accounting Information System. Also information technology has become one of the most important means which is used by different organizations in different operations such as planning, supervising, internal control or administrative affairs (Al-Oleemat, 2014).

Human resources generally comprise of individual’s capabilities, knowledge, skills and experience and the qualities of human resources are relevant to efficiently carryout tasks assigned to them. Hence, the capacity which built over time through new knowledge, skills, experience and learning gained from various sources (Dess & Picken, 2000) are very essential in achieving organizational objectives under any circumstance.

There is a large and growing body of evidence that demonstrates a positive linkage between the development of human resources and organizational performance. The emphasis on human resources in organizations can be highlighted on the fact that the market value of organizations does not much tangible resources but rather it depends to greater extent on intangible assets including the value of human resources by referring to importance of human resources, this study lies with the human resources and Computerized Accounting Information System in the finance departments in state universities in Sri Lankan. Research evidence is found to highlight the importance of human resources working with computerized systems in terms of improving the efficiency (Al-Oleemat, 2014). Hence, state universities can think of the policy of acquiring competencies at the individual level in order to create value in the operations in finance departments of universities.

METHODOLOGY

Data was collected by issuing the questionnaire to 66 (Eastern University 29, South Eastern University 28, and Trincomalee Campus) employees working in Finance departments of the selected three universities. 35 duly filled questionnaires were returned and the data analysis was carried out by using SPSS software. The efficiency of human resources was measured through four sub variables namely skill, experience, knowledge and creativity. LICKERT scale was used to measure the level of efficiency from Agree strongly (5), agree (4), neutral (3), disagree (2), strongly agree (1) positions.

The analyzed results were interpreted with a view to assess whether there is a relationship between computerized accounting system and the efficiency of human resources.

Questionnaire was developed based on the research questionnaire used by Al-Oleemat, 2014 (2014) which has done the reliability and validity using Cronbach Alfa and it was (85%) indicating the tool’s appropriateness for the purpose of the field study.

HYPOTHESIS TESTING

Hypothesis testing was developed with the combination of two alternative hypotheses.

\[ H_0: \text{There is no significant relation between the efficiency of the computerized accounting information systems effectiveness in increasing the efficiency of human capital in employees of the financial departments in the public universities.} \]
There is a significant relation between the efficiency of the computerized accounting information systems effectiveness in increasing the efficiency of human capital in employees of the financial departments in the public universities.

The variable of Human Capital is combinations of four Sub Variables are level of employee skill, level of experience of employee, level of knowledge of employee and the creativity of the employees.

**CONCEPTUAL MODEL**

![Figure 1: Human Resources Model](image-url)

Data was analysed though descriptive statistics, regression analysis and the correlation coefficients. For the descriptive statistics frequency, mean, standard deviation and the pie charts, bar charts, histogram and the scatterplot diagrams were used.

**DATA ANALYSIS AND INTERPRETATIONS: SUMMARY INFORMATION**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Categories</th>
<th>Frequency</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job title</td>
<td>Financial Manager</td>
<td>06</td>
<td>3.49</td>
<td>1.147</td>
</tr>
<tr>
<td></td>
<td>Chief of department</td>
<td>00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Programmer</td>
<td>00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational Level</td>
<td>GCE O/L</td>
<td>00</td>
<td>2.77</td>
<td>0.731</td>
</tr>
<tr>
<td></td>
<td>GCE A/L</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Degree</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Postgraduate/Master</td>
<td>06</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>other</td>
<td>00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working Experience</td>
<td>1-5 Years</td>
<td>11</td>
<td>2.03</td>
<td>0.822</td>
</tr>
<tr>
<td></td>
<td>6-11 Years</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt; 11 Years</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computerized package</td>
<td>Accounting</td>
<td>09</td>
<td>2.91</td>
<td>1.502</td>
</tr>
<tr>
<td></td>
<td>Payroll</td>
<td>05</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stock</td>
<td>09</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>04</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MS Office</td>
<td>08</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 describes the mean values standard deviation and frequency of the descriptive statistic. According the frequency of job title of the employee 29 of employees from 35 employees are representing as the
“Other”. Most of them have mentioned in their job title in the questionnaire as Computer Applicant Assistant, Bursar, and Assistant Bursar. There was no any employee named as Programmer in the selected financial departments in the Sri Lankan state universities.

Employee educational level is much more advance in the university recruiting system. All of the employees are GCE Advanced Level qualified and 17% of employees are qualified in postgraduate and master degree programs. 43% of employees are having a undergraduate degree. Employees are having the same level of percentage in working experience for both 6 years-10 years and more than 11 years are 34.3%.

Department of finance in the state universities are using Computerized packages for the transactions of Accounting, Payroll Management, Stock Management as well as the Microsoft Office package. Figure 2 explains the educational level of the employees in the finance departments in Sri Lankan public universities.

![Figure 2: Educational Background of Employees](image)

According to the results most postgraduate employees are having longer working experiences. Figure 3 explains the educational level of the employees related with the employee working experiences. According to the results most postgraduate employees are having longer working experiences.

![Figure 3: Educational Qualifications of Employees](image)
Majority of employees are working experience of one to five years with GCE Advance Level qualification. The employees who had a degree were with more or less equal working experiences. Figure 4 explains the figure regarding the job title and Computerized Accounting System which they are using. All employees under job category like Bursar, assistant Bursar, and Computer Applicant Assistant are categorized as “other”. Most of financial managers are engaging with overall computerized accounting packages which are included Accounting, Stock and Payroll system. In the “other” job category most of employees are using the Accounting Packages for their usual works those who are being under accounting field. Stock package and Microsoft Office packages are equally formulated by the employees and next the employees are engaging with the payroll packages. Less of amount in “other” category employees are using the overall accounting packages.

**Figure 4: Job Title of Employees**

H0: There is no significant relation between the efficiency of the computerized accounting information systems effectiveness in increasing the efficiency of human capital in employees of the financial departments in the public universities.

H 1: There is a significant relation between the efficiency of the computerized accounting information systems effectiveness in increasing the efficiency of human capital in employees of the financial departments in the public universities.

For the alternative hypothesis there are there are four alternative hypotheses has been discussed based on the independent variables. Hypothesis will be measured how Skill, Experience, Knowledge and Innovation will impact to the efficiency of Computerized Accounting System.

**MULTIPLE REGRESSION ANALYSIS**

<table>
<thead>
<tr>
<th>Table 2: Results of Multiple Regression analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model Summary</strong></td>
</tr>
<tr>
<td><strong>Model</strong></td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Anova</strong></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>0.077</td>
<td>4</td>
<td>0.019</td>
<td>6.929</td>
<td>0.000</td>
</tr>
</tbody>
</table>
### Table 3: Coefficient Table

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>$\beta$</th>
<th>P value</th>
<th>Decision</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\beta_1 = 0$</td>
<td>$\beta_1 \neq 0$</td>
<td>0.018</td>
<td>Reject H0</td>
<td>Skill is significant</td>
</tr>
<tr>
<td>$\beta_2 = 0$</td>
<td>$\beta_2 \neq 0$</td>
<td>0.684</td>
<td>Do not reject H0</td>
<td>Experience is not significant</td>
</tr>
<tr>
<td>$\beta_3 = 0$</td>
<td>$\beta_3 \neq 0$</td>
<td>0.776</td>
<td>Do not reject H0</td>
<td>Knowledge is not significant</td>
</tr>
<tr>
<td>$\beta_4 = 0$</td>
<td>$\beta_4 \neq 0$</td>
<td>0.001</td>
<td>Reject H0</td>
<td>Innovation is significant</td>
</tr>
</tbody>
</table>

**Estimate model**

$$Y^\wedge = -1.588 + 1.019(\text{skill}) + 0.958(\text{innovation}) - 0.088(\text{experience}) - 0.112(\text{knowledge})$$

Standardized coefficient of the variables impact on efficiency in computerized accounting system explains that skill and the innovation of the employee in the finance departments in the public Sri Lankan universities have the positive impact and experience and knowledge of the employee in the finance departments in the public Sri Lankan state universities have the negative impact.
CORRELATION ANALYSIS

Table 3: Correlation Analysis Results

<table>
<thead>
<tr>
<th></th>
<th>SKILL</th>
<th>EXPERIENCE</th>
<th>KNOWLEDGE</th>
<th>INNOVATION</th>
<th>SYSTEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKILL</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.013</td>
<td>.009</td>
<td>.234</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.940</td>
<td>.959</td>
<td>.176</td>
<td>.004</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>EXPERIENCE</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.192</td>
<td>.489**</td>
<td>.207</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.269</td>
<td>.03</td>
<td>.234</td>
<td>.35</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>KNOWLEDGE</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.171</td>
<td>.326</td>
<td>.048</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.35</td>
<td>.786</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>35</td>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INNOVATION</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.600**</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYSTEM</td>
<td>Pearson Correlation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Two variables are significant because of the less p value and the other two variables are insignificant. (Skill and Efficiency of the system p value 0.004 < 0.05, Innovation and Efficiency of the system p value 0.000 < 0.05, Experience and Efficiency of the system p value 0.234 > 0.05, Knowledge and Efficiency of the system p value 0.786 > 0.05). Skill and the Innovation have significant relationship with the efficiency of Computerized Accounting System. But the Experience and the Knowledge have insignificant relationship with the efficiency of Computerized Accounting System. All four of independent variables are having the positive correlation with the efficiency of Computerized Accounting System. Innovation of the employee has the highest correlation among the variables and that is 0.600. Next highest correlation shows the skill is 0.471. Knowledge has the lowest correlation which is 0.048. According to the Pearson correlation analysis it explains that the all independent variables have positive correlations with the dependent variable.

CONCLUSION

Data analysis revealed that the variables used in the models are significant. Both independent and the dependent variables are normally distributed. The model is significant when it is compared with the one independent variable. The independent variable is consisting with the combination of four sub independent variables. Form those variables; two of them are not significant. Only level of skill and level of innovation are significant with the efficiency of computerized accounting information system. According the results of correlation is also explaining the same results of the significant.
Level of the skill and the level of the knowledge of the employees are highly effecting to the efficiency of computerized accounting information system. Due to the rapid changes in the technology; employee should have a creative thinking ability and the flexibility to be familiar with new technology. Employees can get more advantages by gaining more knowledge. Employees should have creative mind to adapt to new computerized accounting systems. It will make more easiness to improve the efficiency of the computerized accounting information system of the employee in the finance departments in the Sri Lankan state universities.

RECOMMENDATION

1. The employees in the finance departments of universities in the eastern province are required to be more concerned on the knowledge and the experience.
2. The knowledge of the employees on Computerized Accounting Information systems can be improved by having the practical sessions using the expert resource person in the field
3. The research finding concludes that there is no relationship with the experience and the system efficiency. The experience of the employee should be weighted with the usage of the system by employees.

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A Business Process Reengineering Case Study at AZA M Travel

Keywords: Business Process Reengineering, Case Study, Travel Agency, Teamwork, Organizational Change, Malaysia

INTRODUCTION

The first computer-based reservation systems were operated by airlines. However, in the 1970s, some airlines began to provide access to selected travel agents. A growing demand for tourism brought new requirements for technology, and this trend continues today (Dabas and Manaktola 2007). The tourist industry relies heavily on access to information and its dissemination. Therefore, the effective use of information technology (IT) is pivotal. New IT systems are being developed and rapidly diffused through the industry. The impacts are far reaching, and no players in tourism can escape the need to embrace IT in their business activities. It is therefore essential that IT can supply an appropriate infrastructure that can facilitate key functions in the tourism industry (Kracht and Wang, 2009).

A global distribution system (GDS) is the portal that travel agents use to make reservations for flights, hotels, vehicle rental, and other travel service bookings. In addition to providing travel agency reservation services, a GDS can also provide access to information about pricing and availability to on-line travel agencies, and extend the reservation functionality on-line. GDS enables automated transactions to be conducted over a corporate network, and in the tourism industry this involves vendors and booking agents who provide travel-related services to consumers (Wang, 2010). The consumer is able to access a GDS via the internet, and carry out research into services provided by travel service providers worldwide. Consumers can access various global distribution systems and purchase tickets from a variety of flight providers and airlines.

![Figure 1: Overview of GDS connectivity](image)
Global competition has driven organizations to become leaner and more streamlined. Many organizations have turned to business process reengineering (BPR) as a means to radically change the way they conduct business. BPR theories enable organisations to, for example, analyse their marketing operations and see how they cross-cut more than one of their business units (Thao and Swierczek 2008). A typical scenario is that information systems which were built for carrying out a specific function are obsolete, because new processes have been introduced and previously segregated processes have since been integrated. BPR is concerned with identifying and restructuring corporate management and can encompass legal, ownership, operational and other structures, with the aim of making the business more profitable or better able to meet current needs (Wang, 2010).

In the tourism industry, travel agents are particularly affected by changing technologies which they must utilise, in order to provide quality services that meet consumer demands (Gazzoli, Kim & Palakurthi, 2007). The aim of this study is to investigate whether or not the use of the internet improves the services the industry provides through the adaptation of one of GDS. If there is no improvement in revenues and levels of service by using the internet, then it is important to be aware of the situation and adjust investment and BPR processes accordingly.

**AZAM TRAVEL AND TOURS SDN. BHD.**

In this study we have looked into the business model of Azam Travel and Tours Sdn. Bhd. (AZAM Travel), as well as the general conditions for travel agencies in Malaysia. With the unprecedented challenges which currently face travel agencies, AZAM Travel has acknowledge that to improve their performance, they must make substantial changes to their technology interfaces.

The management consider that a ground-breaking platform is needed, that can enable them to provide the best possible customer experience to travellers and the highest level of customer service, in order to compete in today’s very competitive environment. It is the goal of every travel agency to find ways to be the best service provider, and influence the design and implementation of an optimal business system for the industry that is both efficient and systematic. The requirements of agencies and their customers include being able to experience an improvement and an expansion of current services, which can also be personalised and offer specialised assistance, such as the benefit of bulk purchasing or other incentives. However, failure to reach these goals can be due to unrealistic expectations, or a question of management.

In the context of larger travel agencies, the main management questions that are raised concern the influence of a system on established modern management and planning. Some small travel agencies have become enmeshed in bad management practices, before they perhaps have had the expertise of specialised staff at their disposal. In the industry in general, travel agents have to eliminate caution and adopt modern systems, and small travel agencies often need to introduce highly skilled staff as soon as possible, in order to accelerate access to potential revenue streams (Fan, 2005).

**BPR at AZAM Travels**

At the time of the BPR initiative, AZAM had an annual revenue of MYR230,000 with approximately 5 staff. AZAM has been active in the tourism segment, enjoying every year a dynamic growth in terms of ticketing, tours and visa applications. The stated objectives of the re-engineering programme, as outlined in the AZAM's Reengineering Programme Initiation Document were:

The objective of this BPR is to assist AZAM in its efforts to restructure its travel program. AZAM currently is a single entity servicing its account and it is AZAM objective to reduce it to one.

- Cost savings priority (immediate savings achieved by lower transactions costs, management fees or service fee changes.)
• On-line booking tool (implementation of new tool or increasing adoption rate of existing program)
• Geographic expansion (enrolling additional location into the travel program)
• New configuration (travel manager is open to an entirely new configuration based on industry trends and developments)
• Enhanced Service Offerings (i.e., Service levels, security, disaster recovery)

Process team
Process reengineering requires improved leverage of people and technology operating within the appropriate structure. The importance of people cannot be overemphasised and the selection of the process team has been identified as critical (Caron et al., 1994). Process change is about challenging even the most basic business assumptions, and may thus require significant cultural change. The process team must be empowered and this has to come from the highest management level possible. The necessity of executive support has been empirically determined in the Caron et al. (1994) study. Thus, an executive sponsor was sought at AZAM. This person’s role was to initiate the project publicly, ensure that doors were opened, and necessary resources made available. The general manager at AZAM fulfilled the role of executive sponsor.

However, because of the intensive nature of the process reengineering task, it was considered unlikely that the executive sponsor could be sufficiently involved on an ongoing basis, and so a process leader—the project manager—was appointed by the general manager. This person’s role was to ensure that the project did not flounder and, for the duration of the project, the process leader reported directly to the executive sponsor and additional team members were then chosen. Members were chosen from all the specialist areas relevant to the process.

Process mapping
Process mapping is a tool that allows one to model the flow of any business process in a graphical form. The process map allows one to see how the process actually works across functional boundaries. It thereby enables all employees to see how the business process actually works and how it can be changed to be more effective. Process mapping also creates a common language for dealing with changes to business processes. Process mapping is a simple yet powerful method of looking beyond functional activities, such as marketing or accounting, to reveal an organisation’s core processes and discover how its different parts work together to serve customers. Process maps enable us to peel away the complexity of an institution’s organisational structure (and internal politics) to focus on the processes that are truly the heart of a business.

Process mapping is thus a valuable communications tool, a strategic business planning tool, and an analytical management tool. A process map enables AZAM Travels to compile data about the processes in place so that they can be analysed.

At AZAM Travels, process mapping consists of four steps; Develop processes currently being performed; Develop a vision of the reengineered process; Identify the actions needed to move to the new process; and Negotiate and execute. The objective of process mapping is to understand a process as it is currently performed, and to improve it. Process mapping gathers, organises, and displays facts about the processes, so that knowledgeable people can study and streamline them. It is also a very useful way for identifying areas of risk in any transaction or process.
Understand the current process
The first step is to develop the processes currently being performed. The map show how processes are currently being performed. The map includes both information and service flow through the system. Then identify the cycle time for each step in the process. Cycle time is determined by measuring both the distance the service travels through its process and the time required for performing the steps in the process. Time is measured by average and range. Average cycle time is the mean rather than the midpoint between the minimum and maximum time. Range is the difference between the minimum and maximum time. In the case of AZAM, there was strong evidence that the various processes did not fully appreciate the overall business process, so this phase preceded the redesign of the process.

The phase required detailed analysis of the current process. The nature of the analysis was both top-down and bottom-up. It involved the examination of relevant documentation, interviews with relevant personnel internally, and also externally, since customer concerns are vital in the service-market strategy.

Benchmarking of the existing process took place at this stage and other metric data on the existing process was gathered to assist later evaluation of the reengineered process. The analysis from this phase produced a graphical flow model of the current business process. The complexity of this model surprised the team, with one member commenting that having been used to viewing business functions in vertical terms, the scale of the horizontal process dimension was striking. The model helped to reveal several problem areas which had not been previously articulated. For example, the number of parties involves attending to one customer and also the time spends to respond to one customer request.

Develop a vision of the reengineered process
The second step is to develop a vision of the reengineered process. The mapping show prescribed procedures, usually in accordance with the organisations policies and procedures manuals. The identification and articulation of the current processes in process mapping helped to surface assumptions that needed to be challenged. To further stimulate desirable changes, the existing domain knowledge was supplemented by a strategic benchmark of similar processes in relevant industries and from world leaders in the process. This type of benchmarking is typical of reengineering exercises (Earl, 1994).

The team also identified a general need to flatten managerial and functional hierarchies and to align the process away from a bureaucratic structure to a more customer-focused one. For example, the process at AZAM is identified to have a longer lean time as compare to that of competitors which is costing the company some losses as it cannot keep pace with the current market demand. Additionally, corrective action reports, which gave customers feedback on the status of refund payment, were not being given adequate priority, with little inter-departmental co-operation. One staff collates this request from the customers mostly due to last minute cancellation among others.

However, the staffs were experiencing major difficulties as individuals’ agents and airlines do not devote adequate priority to this task. Thus, there was a clear need to find a long lasting solution in order to enable the AZAM to be more efficient in applying and processing to their customers refund request. To facilitate the process, a GDS system will be the main solution as its integrate and links all the airlines together in one system and structured medium for accessing and updating these type of request.

Identify the actions needed to move to the new process (Could be)
The third step is to develop the ‘‘could be’’ maps indicate how the procedures detailed the first and second Maps can be redesigned to improve efficiency and reduce risks. The ‘‘could be’’ map depicts what the process will look like after improvements are made. It provides a graphical picture of what the process team needs to work toward and the actions needed to move to the new process must be detailed and prioritised. Typical opportunities include waiting and storage steps, non-value-added steps, decision points for approval, steps with a wide range of cycle times, sequential operations that could be done in
parallel, and information that does not flow to those who do the work. If the process is streamlined, these should not be necessary. If a step has many decision points, it can be improved by removing most of them. If a step has a wide range of cycle times, this indicates that it is probably inefficient. Finally, information flow is just as important as product flow. If information is not flowing to those that do the work and make decisions, the process is inefficient.

A number of basic flaws had been identified in core operations related to the process being studied at AZAM, and these had to be rectified. For example, some problems emerged in relation to the working ticketing services. Firstly, the current process does not operate to provide a large platform of airline tickets simultaneously as compare to the competitors use as benchmark. In addition, the investigation of the ticketing process revealed a basic flaw in how the company dealt with refund request due to cancellation of booking. Typically, when customers cancel ticket and request for refund, AZAM will make all the necessary documentation and submit to the agent if ticket purchase is through agent or direct to the airline. However, the time taken for the customer to receive the refund is usual about 3 – 4 month but when compare to the competitors as benchmark, it usual take a month for the customer to receive the refund. This achievement by the competitors due to the latest GDS system in place and as result is costing AZAM its customers and revenue.

A major problem was also identified in relation to lean time (average time spent per customer). Too much time is spent in other to serve a customer, according to the general manager. The processes are not efficient enough to meet up with the current market demand as customers upon complaints on the time spend. The current process lack the integration and linkages that will enable AZAM to serve its customer faster and as a result the company is losing customer and eventual its revenue. A very simple solution to this problem is to reengineering the whole ticketing process and gives more emphasis on the IT (Installation of GDS) so as to meet up with the current market demand and to be able to survive and sustain its customers in a long run. The reengineering of the process will have a major impact on AZAM as the general manager estimated that the overall revenue of the company could increase by RM50,000 – RM100,000 per anun. Also, at this stage it was considered important to set audacious goals or "stretch targets" to use Davenport and Short's (1990) terminology.

This is necessary to avoid a half-hearted approach being taken, whereby BPR can lapse back into an incremental improvement program without any radical substance. Visible metrics were established wherever possible, so as to verify that the reengineered process is meeting expectations. If the efficacy and value of the reengineered process cannot be reliably assessed, then it is difficult to tell if BPR has been successful.

**Negotiate and execute**

The plan must be negotiated, and again the executive sponsor plays a critical role here in ensuring that any cultural change will not be impeded. This is a vital but delicate stage and it is imperative that negative effects on employee morale be avoided. Relevant support mechanisms and management processes must be aligned. What separates success from failure is execution. Top management has to be willing to dedicate substantial training resources to educate the workforce about the four mechanisms and how they work. Management behaviors have to change from autocratic to facilitative. Teams have to be rewarded for enterprise value-added activities.

Finally, the organizational structure has to change to allow an environment conducive to innovation. Execution flows from the corporate vision statement and strategic plan down to management and workers. The vision statement has to reflect the desired outcomes. Moreover, the strategic plan has to incorporate specific steps, policies and standards that will make real change happen. Top management has to live the new paradigm by being active participants in the change process. A formal presentation of the plan should be conducted to help win over those vital to ensuring its success.
This step can be anticipated to be difficult. The organisation must present a 'business as usual' front, while at the same time accomplishing a smooth transition to new processes which must then be institutionalised. Frequent monitoring is essential to ensure that the project does not fail at this stage, as this is where many BPR projects go on the rocks as radical change may not be fully undertaken.

LESSONS LEARNED

A number of lessons have been learned from the research case study at AZAM. BPR, while perhaps inevitable, is not an easy or automatic activity. The case experience allowed us to speak in-depth with people involved in enterprise transformation that should make the lessons more practical.

Business processes are complex, the early phases of the methodology through process mapping offers a comprehensive blueprint of the existing state. The blueprint enables systematic identification of opportunities for improvement. The selection process to be reengineered; establish process team; understand current processes were found to work well. Allowing people to question the way things are done is imperative to change. People are encouraged to question the existing state.

Team work and collaboration among team members should be encouraged as it makes them perceives that they “own” a project, they tend to want to make it work. It becomes “their” project. Organisations should try to instil corporate culture which should be done through various innovative activities. In organizations, employees work together. Having friendly interactions is a main feature of any dynamic environment. Collaborative climate when become culture in an organisation reduces resistance to change and simplifies BPR implementation.

Top management support and commitment should be encouraged through the process of BPR implementation. There should be management support, commitment and leadership in the upper levels of management and if the managerial attitude remains that of “command and control” and/or their behaviour does not change, transformation will most likely fail. In this case, effective communication of ideas from top management throughout the enterprise is imperative. Change is continuous and is never over.

CONCLUSION

Generalizability that is limit by sample size is one of the major limitations of a case study research. Also, the case studies more of industry-specific. AZAM is a travel agency company that provide services in terms of ticketing, tour and visa applications. AZAM customers demand world-class quality service that pushes the organization to continually improve. Different industries and organizations within those industries have different environmental forces to deal with. According to Yin (1994), case studies are appropriate in new and dynamic areas of research, therefore the case study approach appears to be viable in this instance. Although case studies rate low on generalizability, they rate very high on data richness. By researching the AZAM transformation program, we were able to uncover some very important insights regarding successful change. We concluded that the only way this information can be collected is through the case study methodology.

Change is painful and difficult to implement. Change of even the simplest sort is hopelessly complex even making the case for change is close to impossible. However, change is a fundamental aspect of BPR. Organizations should therefore openly deal with change.
REFERENCES


Human Resource Management Practices and Organizational Innovation: A Study of Four and Five Star Hotels in Malaysia

Keywords: HRM Practices, Four and Five-Star Rating Hotels, Organizational Innovation, Malaysia

INTRODUCTION

The services sector remains the main economic growth driver of Malaysia, contributing 46.9% to GDP in 2013 (excluding government services) and employing 44.5% of the country’s total workforce. However, most services sub-sectors have the potential to further accelerate economic growth, especially through domestic economic activities. Under the Economic Transformation Programme (ETP), seven sub-sectors have been identified as NKEAs (financial services, wholesale and retail trade, tourism, business services, communications content and infrastructure, education and healthcare). One of the sub-sectors of services is tourism sector, in particular hotel sector which has experienced the highest growth of 3.1% in 2013. However, the hotel sector has been suffering from homogeneity of offerings. Homogeneity suggests that the nature of services in hotels are almost same, which means that the services offered by one hotel are easily substitutable. This has caused difficulties for hotel managers to differentiate an individual hotel from its competitors (Dan Reid & Sandler, 1992). As an alternative to this challenge, a new and innovative offering may help to differentiate one’s hotel from its competitors, achieving lower costs and higher quality outputs (Chadee & Mattsson, 1996; Ottenbacher & Gnoth, 2005).

Hospitality firms, such as hotels, are an ideal example of a market which could benefit from the implementation of innovation. First, from a customer’s perspective, the hospitality market is perpetually inundated by many similar, often easily substitutable service offerings. This can cause difficulties for hotel managers as they attempt to differentiate an individual hotel from its competitors. One solution to this challenge may be to offer new and innovative features to customers. Secondly, the hospitality industry is rapidly changing due to accelerations in information technology (Olsen & Connolly, 2000). Managers will need to make proactive changes which focus even more intensely on customer preferences, quality, and technological interfaces in order to stay competitive in such a dynamic environment (Karmarkar, 2004). Thirdly, travelers today do not exhibit, as in past decades, a truly brand loyal behavior. Travelers instead are choosing to patronize hotels that offer the best value proposition under existing budgetary constraints. Furthermore, a quite recent article has pointed out the important role of service innovation in which “identifying drivers of sustained new service success” is a more prioritized research topic for the science of service (Ostrom et al., 2010). At the same time, researchers have pointed to the dearth of innovation studies in the services sector relative to manufacturing (Cainelli, Evangelista & Savona, 2006; Camacho & Rodriguez, 2008). Service sector was viewed historically as “laggards” or static and unable to innovate (Tether, 2005; Jankowski, Tassey, Gallaher, Link, & Petrusa, 2005).

Human resources management (HRM) practices such as staffing, reward and compensation, HR development i.e. training, development and career planning and development have been found to influence innovation in organization and used in previous researches. Thus, one reason for focusing on
the same HRM practices in this research was that it enables comparison with past studies. In addition, based on the “best practices” perspective, it would be appropriate for this research to explore whether these HRM practices which were used mostly in previous studies with innovation are suitable for innovation in service sector as well. This study intends to investigate whether the positive relationship that exists between HRM practices (i.e. staffing, compensation, performance appraisal and training & development) and innovation globally can also be established in Malaysian context especially in service industry like hotel sector. The study will also contribute to the scant literature on innovation in service sector, especially in developing country like Malaysia.

LITERATURE REVIEW

Staffing and Innovation
Staffing is an important factor for innovation (Jimenez-Jimenez & Sanz-Valle, 2008). Staffing of human resources involves two activities which are recruitment and selection (Fong, Ooi, Lee, Chong, & Tan, 2011). Since staffing includes organizational practices to attract, recruit and retain employees with traits that support innovations, it is argued to be a key practice in order to affect innovation in the organization (Jiménez-Jiménez & Sanz-Valle, 2008). Additionally, Chen and Huang (2009) argued that selecting employees with appropriate skills and attitude to perform at work will enable organizations to integrate diverse sources of knowledge and hence stimulate innovations. In a similar vein, Brockbank (1999) contended that when organizations use innovative capabilities and creative characteristics as selection and hiring criteria, their employees are expected to produce diversity of thoughts and commit to more innovation. Chang, Gong, and Shum (2011) argued that hiring employees with multiple skills enhances innovation in the hospitality industry for three reasons. Firstly, selective hiring implies employing those with knowledge, skills and talent that is directly relevant to the job of promoting innovation (Mumford, 2000). Secondly, selective hiring leads to better person-organization fit in terms of values, goals and personalities and such alignment is crucial in the hospitality business. Finally, because the range of tacit skills required in the hospital business is wide, the acquisition of these skills could be expensive as it would involve either formal training or direct hands-on experience. Consequently, instead of waiting for employees to gradually acquire the necessary tacit skills, organizations in the hospitality industry can opt for a policy of hiring ready-skilled applicants. This growth and innovation strategy involves a demanding recruitment policy and process, but will provide better chances of achieving firm innovation (e.g., Mumford, 2000). We therefore, hypothesise that:

Hypothesis 1: Staffing has a positive influence on organizational innovation.

Compensation and Innovation
Research on compensation system and innovation has reported inconsistent results. While some found that compensation (such as bonuses and pay increases) had a positive effect on innovation (Chen & Huang, 2009; Eisenberger & Cameron, 1996; Jiménez-Jiménez & Sanz-Valle, 2008) which plays an important part to stimulate innovation others failed to find a significant effect (Shipton, Fay, West, Shipton et al., 2004; Zoghi, Mohr, & Meyer, 2010). Yet, Ling and Nasurdin (2010) found reward system to have a negative effect on product innovation in a sample of 674 manufacturing companies in six states in Malaysia recognized as having a high percentage of innovation. They explained that the sampled companies were under pressure to reduce cost to gain competitive advantage. In this regards, firms are more likely to use tight controls, minimize overhead, and pursue economics of scale (Schuler & Jackson 1987). Tight control may cause companies to be highly cost-sensitive. Hence, as far as rewards are concerned, this may have accounted for the negative relationship between reward system and three dimensions of organizational innovation (product innovation, process innovation, and administrative innovation). Similarly, Walsworth and Verma (2007) found that compensation function did not have influence on organizational innovation. We therefore, hypothesise that:

Hypothesis 2: Compensation has a positive influence on organizational innovation.
Performance Appraisal and Innovation

Empirical evidence on the impact of performance appraisal on innovations is mixed. For example, Tan and Nasurdin (2011) found performance appraisal to have both a direct and an indirect effect on administrative innovations, but not on product innovation or process innovations. Lopez-Cabral, Perez-Luno, and Valle Cabrera (2009) found a positive relationship between performance appraisal and innovation. But Jiang et al. (2012) did not find a significant relationship between performance appraisal and administrative and technological innovation. They explained that performance appraisal may result in undermining the intrinsic motivation of employees since performance appraisals are mainly used when the level of payment are about to be determined. In examining different types of performance appraisal, Li et al. (2006) found that process appraisal and control, defined as information collection and information exchange inside the organization to develop subjective assessment using relevant strategic criteria (Hitt et al., 1996; Li et al., 2005), was positively related to technological innovation while outcome appraisal and control, defined as short-term performance measure and uses objective criteria such as return on investment and return on assets, was found to be negatively related to technological innovation.

According to some authors, since performance appraisal is a form of support provided by an organization for employees to work effectively (Leede & Looise, 2005), it is likely to enhance innovation in the organization (Shipton et al., 2006). It can elevate employees’ motivation to embark on innovation activities because performance appraisal has an important role to play in ensuring that staff is aware of the expectations of them with regard to the overall organizational goals. In the same vein, Akhtar, Ding, and Ge (2008) found that results of performance appraisal had a significant positive effect on financial as well as product/service performance. They stated that “the results-oriented performance appraisal system provides substantial incentives for employees to work hard to accomplish their performance objectives. Therefore, it is reasonable to suggest that a results-oriented appraisal system has significant effects on measurements of performance such as innovation (Akhtar, et al., 2008). We therefore, hypothesise that:

\textit{Hypothesis 3: Performance appraisal has a positive influence on organizational innovation.}

Training & Development and Innovation

In general, there appears to be an overwhelming support for the role of training and innovation. Shipton et al. (2006) showed that exploratory learning - conceptualized as a set of practices that expose individuals to new and different experiences and perspectives – has been shown to be a very powerful platform that can be used to inspire innovations in an organization. Li et al. (2006) also found a positive effect of training on technological innovation in their study that focused on high-tech firms in China. Beugelsdijk (2008) found that training was important for employees to generate incremental, but not radical, innovations.

Despite the positive effects training was reported to have on innovation, a quantitative study of high-tech firms in China by Jiang et al. (2012) found no relationship between training and administrative and technological innovation. Their explanation for this result was that in many firms, training tended to focus on routine knowledge or skills and performance of current jobs. They argued that innovation not only requires the ability to understand task-relevant techniques, but it also transcends logical and sequential thinking, making the leap to innovation. We therefore, hypothesise that:

\textit{Hypothesis 4: Training & development has a positive influence on organizational innovation.}
METHODOLOGY

Sample and Procedure
A quantitative research method (survey using questionnaire) was used to solicit responses from 200 head of departments across various departments working in 4 and 5 star hotels in Malaysia using purposive sampling technique. Out of 200 questionnaires sent, only 170 questionnaires were returned and usable, making the response rate of 85% which is considered very good. 49.4% of the responses were from 5-star rated hotels whereas 50.6% of the responses were from 4-star rated hotels. Most of the respondents in this study were attached to Food and Beverage department (26.5%) and Room Service department (24.7%) followed by IT department (18.2 %). 12.4% of the responses were from Customer Service Department as well as Marketing department. However, out of the 170 responses, only 7 responses were from Public Relation department while 3 responses were from Engineering department. In terms of industry tenure, majority (68.3%) of the respondents have been in the hotel industry for 4-9 years. Nevertheless, in average, the organizational tenure for respondents were only 1.59 years (SD = 0.69).

In this study, structural equation modeling was employed to analyze the proposed relationship in this study. In particular, partial least squares technique (PLS) which is a variance-based structural equation modeling technique is applied. Given that the objective in this study was predictive in nature, thus PLS is more appropriate than covariance-based SEM.

Measures
Measures were originally developed in English. Items were measured on a 5-point Likert response scale ranging from 1 (strongly disagree) to 5 (strongly agree). HRM practices (i.e., staffing, training & development, performance appraisal and compensation) were measured using Singh (2004) and Qureshi, Ramay, and Marwat, (2006). Seven items were used to measure staffing, eight items for training and development, seven items for performance appraisal, and five items for compensation. Organizational innovation was measured using 24 items used in previous studies (Tseng, Kuo, & Chou, 2008). The instrument was reported to have an internal consistency of 0.6907 (Tseng, Kuo & Chou, 2008). These items were measured on a five-point Likert scale, ranging from ‘1’ “strongly disagree” to ‘5’ “strongly agree.”

ANALYSIS AND RESULTS

Evaluation of Measurement Model
The loadings for most of the items are satisfying the minimum threshold recommended by Chin (1998). The result is presented in Table 1 as below. The composite reliability range from 0.818 to 0.890 indicated the satisfactory level of the internal consistency in the measurement model. To determine the convergent validity, Fornell and Larcker (1981) suggested the minimum AVE of 0.5. Based on the result tabulated in Table 1, it can be said that the measurement model has sufficient convergent validity given that the AVE values ranged from 0.607 to 0.691.

<table>
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<th>Construct</th>
<th>Item</th>
<th>Loading</th>
<th>CR</th>
<th>AVE</th>
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<tr>
<td>Staffing (s)</td>
<td>ST2</td>
<td>0.770</td>
<td>0.871</td>
<td>0.629</td>
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<tr>
<td></td>
<td>ST4</td>
<td>0.804</td>
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<td>ST5</td>
<td>0.769</td>
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<td></td>
<td>ST7</td>
<td>0.828</td>
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<tr>
<td>Compensation (c)</td>
<td>C1</td>
<td>0.778</td>
<td>0.860</td>
<td>0.607</td>
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<td></td>
<td>C3</td>
<td>0.819</td>
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Evaluation of Structural Model
After examined the reliability and validity of the measurement model, structural model was tested to determine (a) the significance of hypotheses (b) variance explained (R²), and the (c) predictive relevancy of the model. To determine the path coefficients between HRM practices (staffing, compensation, training and development, and performance appraisal) and organizational innovation, PLS algorithm was conducted. Figure 1 presents the coefficient between HRM practices (staffing, compensation, training and development, and performance appraisal) and organizational innovation.

![Figure 1: Path Coefficients for the Relationships](image)

Next, to determine the significance of the path coefficients, a nonparametric bootstrapping was applied to obtain the t-values (with 5000 resamples and 170 cases). Figure 2 shows the t-values between HRM practices (staffing, compensation, training and development, and performance appraisal) and organizational innovation.

<table>
<thead>
<tr>
<th>C4</th>
<th>C5</th>
<th>PA4</th>
<th>PA7</th>
<th>0.707</th>
<th>0.806</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perf. Appraisal (PA)</td>
<td>0.829</td>
<td>0.834</td>
<td>0.818</td>
<td>0.691</td>
<td></td>
</tr>
<tr>
<td>T&amp;D</td>
<td>TD3</td>
<td>TD4</td>
<td>TD5</td>
<td>TD7</td>
<td>TD8</td>
</tr>
<tr>
<td>0.796</td>
<td>0.783</td>
<td>0.793</td>
<td>0.775</td>
<td>0.787</td>
<td>0.890</td>
</tr>
</tbody>
</table>
The details of the path coefficients, standard errors, t-values and decisions for the proposed relationship between HRM practices (staffing, compensation, performance appraisal and training & development) and organizational innovation is tabulated in Table 2.

### Table 2: Results of hypotheses testing

<table>
<thead>
<tr>
<th></th>
<th>Relationships</th>
<th>Beta</th>
<th>Std.error</th>
<th>t-values</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>ST-&gt; Org innov</td>
<td>-0.047</td>
<td>0.095</td>
<td>0.494</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H2</td>
<td>C-&gt; Org innov</td>
<td>0.302**</td>
<td>0.087</td>
<td>3.468</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>PA-&gt; Org innov</td>
<td>0.153**</td>
<td>0.089</td>
<td>1.724</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>TD-&gt; Org innov</td>
<td>0.500**</td>
<td>0.089</td>
<td>5.599</td>
<td>Supported</td>
</tr>
</tbody>
</table>

*p**<0.01 (2.33); *p<0.05 (1.645)

As showed in Table 2, out of the four proposed hypotheses, three hypotheses were supported. Specifically, staffing was found to have non-significant relationship with organizational innovation (β = -0.047, p > .05), therefore H1 was rejected. Meanwhile compensation (β = 0.302, p < .05), performance appraisal (β = 0.153, p < .05) and training and development (β = 0.500, p < .05) were found to have a positive and significant relationship with organizational innovation, thereby supporting H2, H3, and H4.

**DISCUSSION AND CONCLUSION**

In general, the findings managed to provide empirical support for the relationship between HRM practices and organizational innovation. In particular, the results further indicated that HRM practices namely training and development, performance appraisal, and compensation promoted organizational innovation in the service sector, particularly, in the hotel sector. Taken together, these findings highlight the critical roles of human resource management practices in service innovation. As was expected, compensation, performance appraisal and training and development positively influence service innovation. However it was quite surprised to find that staffing (recruitment and selection) was not significantly influence service innovation as most previous researches consistently found significant relationship (Laursen & Foss, 2003; Jimenez-Jimenez & Sanz-Valle, 2008; Chen & Huang, 2009; Beugelsdijk, 2008; Jiang et al. 2012). One possible reason could be that employee turnover is among the highest in the hospitality industry. Studies have shown that the average turnover level among non-management hotel employees in the US is about 50%, and about 25% for management staff. Estimates of average annual employee turnover range from
around 60 to 300 percent, according to research conducted by the American Hotel and Motel Association. Retention experts say hotels spend thousands every year for each new employee they must train to replace a seasoned worker who leaves. It is no longer a startling fact that the cost of losing an employee is between half and one-and-a-half times their annual salary. The above phenomenon is worldwide and Malaysia hospitality industry is no exception.

Employees can be motivated to be more innovative as a result of compensation which plays an important part to stimulate innovation. In firms that are innovation driven, the reward system can be a very influential factor to motivate staff to take risks, develop more products and propose novel ideas (Gupta & Singhal, 1993). Leede and Looise (2005) indicated in their study the importance of the appropriateness of compensation to motivate employees but drew attention to the danger of negative implications that can result when the reward system is not implemented in a balanced manner. In this study, compensation was significantly influence service innovation. This is very much true since organizations today are trying hard to offer compensation package (both financial and non-financial rewards) in attracting, retaining and motivating the employees to continue contributing towards organization's success. The reason being that compensation is important to influence individuals’ choice to work with an organization. Many organizations not only use the compensation system to reward and recognize employees' efforts and contributions, but also use it as a motivation tool to improve employees' productivity (such as improving job performance, impeding the intention to leave and increasing career satisfaction).

Performance appraisal was also found to have a significant and positive influence on organizational innovation. One of the possible explanations may relate to the fact that organizational innovation is usually done within a shorter period of time since changes in the organizational management or structure can be adjusted according to the needs of the organization. Hence, feedback obtained from performance appraisal activities, usually conducted at least once annually, can help the organization further improve the management or structure of the organization. In this manner, the result is consistent with Tan and Nasurdin’s (2011) finding which indicated that performance appraisal had both a direct and an indirect effect on organizational innovation.

Training and development was also found to have a positive influence on service innovation. The result is in line with previous studies that looked at the role of training and development in service innovation (Beugelsdijk, 2008; Chen & Huang, 2009; Chang, Gong, & Shum, 2011; Li, 2006; Tan & Nasurdin, 2011). According to Edralin (2007), training and development is a vital function in human resource management and considered an important factor to promote innovation because such practice improves job performance, helps improve and acquire technical skills, develops creativity and problem-solving skills, helps retain a competent and efficient workforce, helps to achieve overall organizational objectives, and contributes to flexibility in order to adapt to changes. When a hotel industry gives much focus on training and development program, it will advance the growth of employees’ requisite knowledge, skills and their potential to learn. With an effective training and development program, the employees are able to generate new understandings and new ideas that will be useful for innovation.

IMPLICATIONS AND FUTURE RESEARCH

Our empirical findings provide several important managerial implications. Services sector in general and Malaysia hotel industry particularly should take on a proactive role in managing the companies’ human capital through a breadth of existing HRM practices dimensions such as compensation, training & development and performance appraisal to stimulate its capability to improve employee organizational innovation.

It is important to acknowledge the vital role of proper training and development programs, as well as proves and organizational innovation as their improvement would solely lead to a more improved
company performance. Secondly, it is important for the service sector to offer positive performance appraisal to the staff, as it would function as the primary motivating factor that leads to the growth in process and organizational innovation. A fair and just performance appraisal would strengthen employee’s faith and sense of motivation in the company, and a transparent communication between employer and staff is a source of healthy propeller in achieving better performance, process and organizational innovation. Compensation management program should be attractive enough to attract and retain best employees in order for hotel sector to remain competitive.

Notwithstanding the contributions of this study, it is worth to mention several limitations. First, this study is limited to the service sector alone, specifically hotel sector. Hence, our results may be specific to the context of this industry. Future research should be extended to the manufacturing industry in order to compare and generalize the results stated here. Second, more variables and antecedents might be inserted into the research framework. Furthermore work could possibly extend the analysis in other primary ways; such as, employing a moderator variable such as leadership style or organizational culture; to include others dimensions of innovation measurement such as marketing innovation and innovation performance; and to consider a mediator variables such as commitment, satisfaction, motivation in the relationship between HRM practices and innovation.

ACKNOWLEDGMENT

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AGBA 12th World Congress
Page 620 of 1173
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Success of Family Businesses and the Effectiveness of the Role of CEOs

Keywords: Family Business, CEO Effectiveness, Statistical Package for Social Sciences (SPSS), Triangle Module, Sri Lanka

INTRODUCTION

Family businesses are said to have been in existence since the beginning of mankind, and making a significant contribution to the economic development every country. However, in Sri Lanka there is a dearth of research in family businesses (Dissanayake & Kodithuwakku, 2011).

A high degree of control exerted by family members is a common phenomenon seen in the majority of family run entities. Further it has been found that unsuccessful family businesses are likely to have conflicting relationships whilst successful family businesses are likely to have supportive relationships among family members (Dissanayake & Kodithuwakku, 2011). Unlike in other public companies, in family business, owners are also the managers of the business. Therefore, a CEO in a family owned company has a challenge of managing the business while maintaining good relations with family ownership with minimum conflicts. Over 90% of family businesses was found have failed to reach the third generation and the lack of trust and communication within the family and it causes 75% of such failures.

On the other hand there is evidence that some family businesses in Sri Lanka is running successfully. For example, Abans Group by Pestongee family, MAS Intimates by Amalean Brothers and Maliban biscuits by another elite family can be named. In addition, more than 64% of the total listed companies in Sri Lanka are family businesses (Wellalage, 2012). Sri Lanka, being an emerging economy, has the potential to play a big role in contributing to the economy.

RESEARCH PROBLEM

Some entities have been in existence for more than 14 centuries. Such as Kongo Gumi in Japan (O’Hara & Mandel, 2012 ) which is run by the 40th generation, others on the other hand may well have commenced business just a couple of months back.

Due to strong competition, some family businesses may have withered under pressure and decided to take the easy way out and close down, whilst others have the courage to capabilities to continue amidst fierce competition. Therefore managing a family business is a very challenging task for a CEO, especially if he or she is a non family CEO or one who does not have substantial ownership or control of the organisation. Through research, it had been identified that family businesses run by outsiders appear to be better managed than other firms. One possible reason is that the combination of professional management and family ownership provides the best of both worlds (Dorgan, Dowdy, & Rippin, 2006). The conflict between management and ownership might lead to problems in running business operations. However the success of a CEO is the key to achieving corporate goals. Hence this study focuses on identifying the factors affecting a CEO in a family business.
THE OBJECTIVE OF THE STUDY

The following are the objectives for the research:

1. To examine the factors which lead to the success or failure of a family business CEO.
2. To examine whether there is a relationship between the variables and effectiveness of a CEO.

LITERATURE REVIEW

The European Commission Expert Panel on family business (final report) identified more than 90 definitions and found that several definitions could be used even within the same country (Collins & O’Regan) 2012). They have relatively short life spans and only a small number survives till the second generation and not even one third into the third generation. According to Longenecker, Moore, & Petty, (2003), a family business is a firm in which two or more members of the same family work together in its operation or share the ownership of the firm.

A family business contribute more than 75% of the gross domestic products (GDP) in most countries and employ more than eighty five percent of the working population around the world. (Poza, Family Business, 2007). Family business is also defined as a company where the controlling family including the founder(s) possess a voting majority and they intend to pass the business on to their descendents (IFC Corporate Governance). In the US 50% of the GDP and 50% of job opportunities are provided by family businesses. Forty percent of the world’s top five hundred enterprises are run or owned by families (Lee & Li, 2009).

On the other hand, family businesses were blamed for the economic decline of Great Britain by business historian Alfred Chandler (Alderson, 2011). Also according to Bloom and Van Reenen (2006) family ownership can shield badly managed family firms from competition if the owners are prepared to accept a lower than market rate of return on capital (Credit Suisse, 2008).

Poza (2007) explains that only approximately 15% of new businesses succeed within their first 5 years of operation out of which only thirty percent is transferred successfully to the second generation of the founding family owners. The transition between the 2nd and 3rd generation is much worse where only about 12 % remain. By the time the transition occurs between the third and the fourth generation only about four percent of such business remains in the same family.

In 2003, Anderson Reeb found that, out of the family owned firms listed in S&P 500 firms which are influenced by founding families, tend to outperform their counterparts. Family owned businesses such as the Bosch Group from Germany, the LG Group from Korea, The Tata Enterprise from India are examples of large and successful businesses located around the world and are common brands we can associate ourselves with.

The cultural “fit” between CSEs and practices of family businesses is very important when an outsider is recruited as a CEO. Unlike in a non-family business, the outside CEO has less freedom to change the existing culture in the family firm to suit him. This is considered an obstacle in recruiting good non-family CEO’s (Murphy, 2012).

In order to develop the business, firms should identify the need for professional management and the family interest should at times be secondary (Longenecker, Moore, & Petty, 2003). Findings in the survey carried out by Dissanayake, and Kodithuwakku (2011) state that there is a positive relationship between the success of the small family business and the supportive family member contribution to it.
Furthermore, family members of most number of successful small family businesses give their support through instrumental, emotional, instrumental material support (financial and/or other resource needs), social (paid/unpaid work) and nominal forms.

For the purpose of the study, this was defined as the support the family members extend to the business through their fame, recognition and/or societal status without actively contributing to the business operations through any other identified forms of contributions. It was also identified that the more family member support a given business receives through all forms of identified contributions, the more successful it will be (Dissanayake & Kodithuwakku, 2011). Some of the inherent strengths identified in family businesses are Commitment, Knowledge Continuity, Reliability, Pride, Communication, Work Life balance, Trust, Planning ahead, Flexible and Focused and Stronger Customer Relationships.

The Agency theory portrays that the Principals (Shareholders) hire Agents (Management) to run the business and they delegate the decision making authority to agents. In theory, the management should operate in the interests of the shareholders. But, in practice, the managers seek to maximize their interests at the cost of its shareholders. When the control of a company is separate from its ownership, management may not act in the best interests of the shareholders. This gives rise to the conflicts between these two parties and it has implications with corporate governance and business ethics as well.

When the gap between the ownership and control widens one group will have access to better and faster information than the other party at the same point of time which eventually will lead to information asymmetry (Collins J., 2001). This will be a disadvantage to family owners who do not get involved in the business but purely rely on the CEO to run the business and give them a good return on their investment. However unlike non-family CEO’s, family CEO’s responses towards shareholders or the board representing the shareholders is different. Findings suggest that consultants or advisors on the board will face resistance from the CEO on two fronts, namely, firm and family when business improvements are suggested. CEO’s generally receive less feedback on their performance from key non-family managers and family members due to the autonomy they possess and CEO’s too might be misled by their own success and thereby have difficulty in identifying problems in what they have created and continue to manage. Evidence from several studies indicates that CEO’s in family controlled companies tend to have long tenors and thus weakens the company’s ability to obtain the services of the next generation leaders (Poza, 2010).

Family businesses can benefit greatly from outside assistance such as the appointment of an outside director as a full board member. According to Honig, (2010) outside directors are brought into the company to provide a particular expertise or to act as a sounding board. The outside director’s role would be to ensure that the controlling family members do not breach their fiduciary duty to minority shareholders. This will also help the business to improve their corporate governance practices (Honig, 2010). However, according to research, it has been identified that family firms are less likely to use outside directors. In instances where they are used, their effectiveness can be undermined due to family dynamics. This is further confirmed by Schulze, Lubatkin, Dino and Buchholtz (2001) who have identified the fact that outside directors have a negative effect on firm performance (Credit Suisse, 2008).

This challenge will not be there for a non-family CEO because preserving the legacy or wealth creation is not the goal of the non-family business owners as their names are not tied to the company. The non-family business owners will be more concerned about the company’s reputation than preserving the legacy or creating wealth (Leilanie, 2010).
RESEARCH DESIGN AND METHODOLOGY

Research was designed to test hypotheses set in line with the objectives of the study as illustrated below:

H1 – The good governance practices affect the effectiveness of a CEO in a family business.

H01 – The good governance practices do not affect the effectiveness of a CEO in a family business.

H2 – The culture of the organisation influences the effectiveness of a CEO in a family business.

H02 – The culture of the organisation does not influence the effectiveness of a CEO in a family business.

H3 – An adopted leadership style affects the effectiveness of a CEO in a family business.

H03 – An adopted leadership style does not affect the effectiveness of a CEO in a family business.

H4 – A relationship exists between the values of the organisation and the effectiveness of a CEO in a family business.

H04 – No visible relationship exists between the values of the organisation and the effectiveness of a CEO in a family business.

H5 – Family influence has an impact on the effectiveness of a CEO in a family business.

H05 – Family influence does not have an impact on the effectiveness of a CEO in a family business.

The primary method of data collection was through questionnaires and interviews with family and non family CEO’s in family businesses. After analysing the collected raw data it will be compared with the categories recognised at the level of conceptualisation. Any additions and removals will be incorporated and a modified conceptualisation will be presented.

A pilot study was carried out and data was obtained from a sample of 15 CEO’s. The data so obtained was analysed using SPSS version 17. Thereafter, based on the results obtained after analysing the data using the Rotated Component Matrix in SPSS (except for the independent variable named Ownership structure), some of the original independent variables in the conceptual framework were reclassified for analysis purpose. The way variables reclassified is given in figure 1 below.
Cronbach’s alpha is an index of reliability association with the variation accounted for by the true score of the “underline construct”. Construct is the hypothetical variable that is being measured. Alpha coefficient ranges in values from 0 to 1 and may be used to describe the reliability (Muhandiram, 2012). The results of the validity test of data are given table 1 below.

### Table 1: Statistical Output for Validity Test

<table>
<thead>
<tr>
<th>Description</th>
<th>Cronbach’s Alpha</th>
<th>No of Items</th>
<th>KMO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good Governance Practices</td>
<td>0.710</td>
<td>5</td>
<td>0.571</td>
</tr>
<tr>
<td>Culture of the Organisation</td>
<td>0.586</td>
<td>5</td>
<td>0.412</td>
</tr>
<tr>
<td>Adopted Leadership Style</td>
<td>0.835</td>
<td>3</td>
<td>0.511</td>
</tr>
<tr>
<td>Values of the Organisation</td>
<td>0.579</td>
<td>5</td>
<td>0.769</td>
</tr>
<tr>
<td>Family Influence</td>
<td>0.932</td>
<td>5</td>
<td>0.850</td>
</tr>
</tbody>
</table>

### DATA ANALYSIS AND DISCUSSION OF RESULTS

Out of the 35 family businesses selected for the study 28.6% of the companies have been in existence for 10 years or less. Another 28.6% have been in existence between 26-50 years and 25.7% fell in to the category of 11-25 years. The balance 17.1% has been in existence between the periods of 51-75 years. However no company selected for the study has been in existence for more than 75 years.

With respect to the ownership of business, 88.6% of the companies are controlled by families with 50% or more of the shareholding while 11.4% of the sample comprised of companies of family shareholding ranging from 31% to 50%. Further it revealed that 45.7% of the companies have at least 2 family members in their ownership structure whilst 25.7% and 14.3% of the sample have 3 and 4 family members respectively. A shareholding structure containing 5 family members was seen in 11.4% of the sample and the highest number which is 6 or more family members could be seen in 2.9% of the sample.

Opinions of CEOs of family based companies revealed that 54% of the CEOs are in the opinion that family members’ interference in business was low while 32% of CEOS assesses that such influence of family members was medium. The rest, only 14% of CEOs said that the family influence was high. The mean (2.23) median (2), and mode (1) took low values with regard to low influence perception on family interference. More than 45% of CEO’s stated that the extent to which family members are allowed to voice their opinion in decision making has a high effect followed by 35% stating it has a low effect and
20% stated it to have a medium effect. The mean (3.09) & median (3) for this variable was medium whilst the mode gave a higher (4) value.

Approximately 37% confirmed that the family influence in the culture of the company has a low effect while 23% said it was medium and 40% stated that it was high. The mode for this question was high (4) while the mean (2.89) & median (3) gave a medium result.

43% of the CEO’s felt that habits of the family members influencing the business was low while 31% was of the opinion that it was high and 26% felt that it was medium. The mode was very low (1) while the median (3) and mean (2.57) was medium.

43% of the sample felt that the level of religious belief in the business is high. Approximately 34% felt it was low and 23% said it was medium. The mean (3.11) and median (3) value for this variable was medium while results according to the mode (4) showed that a large number of the sample felt that this variable had a medium to high impact. Of the total sample, 46% said that the impact of religious beliefs was low whilst 40% said it was high and 14% were of the opinion that it was medium. The mean (2.91) & median (3) value for this variable was medium while the results according to the mode (2) showed that a large number of the sample felt that this variable had a low impact. Out of the total respondents for this question, 40% felt that non family members allowed to voice their opinion in decisions was high and 37% said it was low while 23% said it was medium. The mode (4) was high while the mean (2.89) & median (3) for this question was medium. The Kurtosis value for this variable confirms that the data is spread wider around the mean.

Results of hypotheses testing revealed that, at the significance level of 0.1 level correlation is significant. This means that there is an association between the adopted leadership style and the effectiveness of a CEO in a family business. Hence the hypothesis H5 is accepted and the null hypothesis Ho5 is rejected.

Further it revealed that the association between the adopted leadership style and the effectiveness of a CEO in a family business.

The research concluded that the ownership structure of the firm was indeed a significant influencing factor for the effectiveness of CEO’s in a family business. According to research data, 88.6% of the sample who were in control of those companies, stated that they held more than 50% of the shares of the respective companies while even the balance 11.4% confirmed that their share holding was more than 31% of their respective companies.

Even when the number of family members in the ownership structure is considered it could be observed that most of the control is among a few family members. The research data shows that 45.7% of the companies in the sample had only 2 family members in the ownership structure while 25.7% of the companies had 3 members, 14.3% of the sample had 4 family members and the balance 14.3% had 5 or more family members in the ownership structure. It is also interesting to note that 60% of the companies in the sample did not have any non-family owners involved in their business while 17.1% of the sample had one non-family owner and 8.6%, 2.9% & 11.4% had 2, 3 and 4 or more non-family owners involved in the business.

As such, it was the researchers’ conclusion that the ownership structure of the firm does indeed exert a significant degree of influence on the effectiveness of a CEO in family business.

Existing literature also makes a comprehensive case for the existence of a significant influence between the ownership structure and the effectiveness of a CEO in a family business. According to Dehlinger (2009) business ownership plays a key role by giving proper identity to the founder CEO. For example a question of “who will I be if I am not a business owner” will arise in the mind of the CEO. Alderson
(2011) states that family businesses seek to keep the business in the family and prefer to pass it on to the next generation. Further, Bloom and Van Reenen (2006) state that family ownership can shield badly managed family firms from competition if the owners are prepared to accept a lower than market rate of return on capital. This further confirms the fact that there is a co-relation between the ownership structure and the effectiveness of a CEO in a family business.

Writers such as Gersick (1997), Fiegener, (2010) & Lansberg, (1983) have pointed out that CEO’s who are also shareholders could incur expenses sufficient to hurt the financial performance of the company or even threaten the survival of the business by exercising undue influence due to the authority and control they posses in instances such making decisions to declare dividends as against the reinvesting of profits, or with the intention of helping relatives hire family members instead of recruiting the most competent applicants etcetera.

Dyer (1989) also states that unlike professional managers who derive their power from positions of authority the founders (CEO) of family businesses derive it through ownership. Young, Peng, Ahlstrom, Bruton, & Jiang, (2008) also point out that attracting and retaining excellent non-family managers (CEO) is difficult as they would feel that however well they perform, their growth prospect would be limited and they would not get an opportunity to own and control the business and reap the reward for their contribution towards the firm. This confirms how important it is for a CEO to have ownership and control and thus endorses the fact that the ownership structure does play a key role in the effectiveness of a CEO in a family business.

Governance issues usually become more complex in family businesses when compared with their counterparts. According to a survey done in the UK on family businesses, the governance issue had been identified as more pressing at the stage when the business is about to reach maturity. Therefore when the family business becomes more complex and larger, outside managers need to be employed (Credit Suisse, 2008). According to MTI Consultancy (2007), concerted effort on Corporate Governance was a key factor for Sri Lanka family businesses such as Hemas, MAS and Brandix to be successfully transformed into internationally recognised large corporate entities. Similarly, according to Lauterbach & Vaninsky, (1999) business values of efficiency and profitability often conflict with family values such as unconditional love and concern. Longenecker, Moore, & Petty, (2003) states that in a family firm, the core values of the founder might become part of both the family code “the things we believe as a family” and the business culture.. Similarly, Ivan Lansberg had spoken of about the founders’ negative impact on the firm’s culture. Annika Hall from Sweden’s Jonkoping International Business School emphasises that families looking to hire non-family CEO’s need to clearly think what they want from their business and the values they need to uphold. She goes on to say that if values are not aligned it is destined to fail.

The results of hypothesis testing revealed that at the significance levels for hypotheses 1 and 2 were at 0.1 levels thus indicating the correlations were insignificant. This means that there is no correlation between family influence and the effectiveness of a CEO in a family business. Hence both hypotheses H1 and H2 were rejected thus indicating the family influence for the business operations was not significant.

With respect to hypothesis 3, p value was significant at 0.1 levels. This means that there is a correlation between values and practices and the effectiveness of a CEO in a family business. Hence the hypothesis H3 is accepted thus implying that values are practices of CEOs are critical factors of the success of business. This is further confirmed by this study which revealed a mean value of 3.90 and a standard deviation of 0.605 for this values and practices variable.

Test results for hypothesis 4 were also insignificant. This implies that there is no significant correlation between the culture of the organisation and the effectiveness of a CEO in a family business. However,
hypothesis 5 was significant and therefore, hypothesis H5 was accepted. This indicates that there is an association between the adopted leadership style and the effectiveness of a CEO in a family business. The last hypothesis, which assumed that there is a significant relation between family practices and effectiveness of a CEO in a family business, was tested not insignificant. Hence the hypothesis 6 rejected and it indicates that there is no such relationship.

In addition, multi regression was run and the results indicate that the model has a R square value of 0.449. This could be regarded as a good value. This model is significant at .007 levels as it is below .05. This means the model is acceptable up to 44.9% hence the other factors contribute up to 55.1%. Also the Durbin Watson value is at 1.962 which is close to 2. Therefore there is no auto correlation in the sample. The ANOVA analysis also indicates significant at 0.007 levels. This too confirms the above position. The F value obtained for the above model is 3.805. Since this value is greater than 1 it is in the significant range (0.007) which explains that there is a relationship between the predictors (Independent variables) and the dependent variable.

The impact of FI (family influence) variable based on the above coefficient table reflects as -0.019. This indicates that the impact is negative and insignificant. Therefore there is no impact. The coefficient reveals the impact of RB (religious beliefs) variable as 0.033 positive yet it is insignificant. Hence there is no impact. Coefficient results using the multiple regressions reveal the impact of VP (values and practices) variable as 0.260. This is a bit low yet positive and also significant. Therefore the impact of VP is very high. Impact for BC (culture) variable based on the coefficient table above reflects 0.042. This indicates that the impact is positive yet insignificant. Therefore there is no impact. Coefficient results of the multiple regressions reveal the impact of LE (leadership style) variable which is 0.274 as a bit average, positive and significant. Hence the impact of LE is high. The coefficient reveals the impact of FP (family practice) variable as 0.013 positive yet it is insignificant. Hence there is no impact. The above observations are further confirmed by the result of the ‘beta’ and ‘sig’ given for the six variables where value & practice (VP) and the adopted leadership style (LE) shows ‘sig’ values less than .05 and ‘beta’ values of .460 & .424 respectively which are very significant and acceptable figures. Being less than 5, the VIF results for all variables are also acceptable.

CONCLUSION

The study showed that only a very few companies went beyond the 2nd generation of family ownership. The ownership structure of the company plays a pivotal role in deciding the above. In the first generation the founder CEO controlled the company however when the baton is passed on to the next generation the ownership and the shareholding gets diluted which indirectly affects the incumbent CEO’s decision making ability and also as the shareholders increased, obtaining a majority vote for decisions become difficult.

It was also identified that a lot of emphasis had been placed on the integrity of the directors, as unlike in non-family companies where lot of internal control mechanisms exists, majority of family businesses functions on mutual trust. Thus honesty and integrity among the senior management plays a major role in the success of a family business.

Another factor identified through this research as having a high impact was the ability of the CEO to give the needed strategic directions to the company. It was observed that most of the CEO’s adopted democratic and coaching types of leadership styles when giving strategic directions. At the inception the founder CEO with his entrepreneurial background gives the needed strategic direction but subsequently when the ownership gets diluted and the CEO position gets transferred to the subsequent generations the
CEO is appointed based on his shareholding and the control and influence he managers to exert on the family, rather than on merit and capabilities such as ability, qualifications and experience.

The impact of the founder CEO was also identified as having a high influence on the effectiveness of a CEO. Factors such as founders’ habits and beliefs form part of the culture of the company. Therefore the legacy and the vacuum left by a founder CEO is always a difficult task to fill.

Preserving the legacy or wealth creation of the firm is the goal of family owners. However non-family owners concern would be to safeguard the company’s reputation.

The majority of the CEO’s selected for the study stated that they were able to make independent decisions. The ability to make independent decisions is an important element for a CEO to be effective. Especially so, if the founder CEO is on the board as chairman or if a previous CEO (including father, uncle or a close relative) is on the board the incumbent CEO will find it difficult to make independent decisions as he or she will be obliged to accommodate or listen to the former CEO and even the other family members will pressurize him or her to do so.

Having the necessary conceptual skills is another important criterion for a CEO. Most of the CEO’s selected for the sample agreed that they possessed the conceptual skills required to effectively run the company.

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The Mediating Effect of IT Importance between IT Knowledge, IT Training and IT Utilization among External Auditors: Evidence from Yemen

**Keywords:** Information Technology, Auditors, IT Importance, IT Utilization, IT Training, IT Knowledge.

**INTRODUCTION**

Businesses have increasingly used information technology (IT) and in the past century, the computer was noted to be among the top governing technological developments. To this end, IT tools have made a significant impact on majority of tasks required in different fields including business. IT systems are used to achieve business duties and activities and currently, management has found novel ways to use PC and its additional tools bring about efficiency in operations to assist in future decisions and judgments. Because businesses make use of computers, it has been noted that in the field of auditing, auditors are faced with issues when it comes to adjusting towards the ever-changing technology (Ismail & Abidin, 2009; Yang & Guan, 2004).

According to Curtis and Payne (2008), in the auditing environment, audit performance is primarily significant as one of the responsibilities of external auditors. Specifically, auditors are mainly responsible for the fraud detection as laid down by No. 99, Statement on Audit Standards (SAS), particularly because confirmation of internal control is compulsorily required by the Section 404 Sarbanes-Oxley Act as well as the Audit Standard No. 5 of the Public Company Accounting Oversight Board (PCAOB).

On official grounds, the laid down standardized rules indicate rules issuance to the practitioners with regards to the use of IT in the field. Other relevant professional entities (e.g. The International Federation of Accountants, The American Institute of the Certified Public Accountants, and the Information Systems Audit and Control Association) established the standards of auditing that encourage auditors and their firms to make use of IT specialists when they are needed as expounded on by Janvrin et al. (2008), and Yang et al. (2004).

Professional accountants hold IT consider the significance of IT competence owing to IT’s extensive utilization in the global market and its contribution to enhancing the auditing profession in terms of effectiveness and efficiency (IFAC, 2001; Ismail & Abidin, 2009). Despite the fact that IT knowledge is required to keep up the standards of the profession, only a few studies examined the use of IT and the factors influencing its use (e.g. Ismail & Abidin, 2009; Janvrin, Bierstaker & Lowe, 2008), particularly in developing nations, like Yemen.

Compounding the matter further, Janvrin et al. (2008) highlighted a gap in their findings were they revealed that auditors showed IT’s importance in several applications including the evaluation of internal control, risk assessment, audit planning, the auditor-client relationship, fraud detection, and acceptance of client. According to the authors, IT utilization has a potential impact on audit decision making and eventually audit performance.
Moreover, Yemeni auditors are not utilizing sophisticated IT during when auditing (Alkharbi, 2010). Therefore, it can be stated that ineffective use of IT systems can negatively contribute to the external auditors’ performance. Alkharbi (2010) argued that Yemeni auditors have been facing issues related to the lack of studies in the IT audit field that need to explain the effect of IT on the audit, and provide the required frameworks, tools and methods. In this case, if auditing firms are not adept at using IT, they may not be able to handle several challenges arising amidst the technology-driven business environment. Aligned with this contention, Al-Snafi (2010) showed that those interested in auditing are well-aware of the gap between actual auditing practice and the requirements of IT-related enhance in the profession.

It is crucial for external auditors to keep up with the changes taking place in the Yemeni IT environment that have witnessed a shift from traditional business processes monitoring and control (Al-Dois, 2010). In regards to this Al-Dois (2010) stressed on the need for external auditors to change their conventional methods into modern ones using IT to make sure that data is valid and credible, and the information obtained from the e-accounting systems are accurate. Without updating their working methods, practitioners will get isolated and they may lose their ability to audit companies with the help of automated auditing systems.

In this context, auditors that do not have knowledge and training of IT and who are not capable of using IT tools will not be capable of auditing typical clients with the help of complex computer systems. According to the statement provided by the head of the training center in the Central Organization for Control and Auditing (2007), the lack of IT information and training among the professional auditors is among the frequent reasons behind their inability to take on auditing jobs for Yemeni clients that possess the most complex computer systems.

Despite the past studies on IT adoption, very few studies have stressed on IT use for the purpose of external auditing. Extant researches focus either on internal auditing that contrasts with external auditing in its purpose. In this paper, the researcher aims to fill this gap in studies by studying the IT utilization in terms of its level, and the impact of IT knowledge and training on it in the Yemeni context.

**LITERATURE REVIEW**

**Information Technology: Definition and Categories**

Several definitions have been proposed for IT. In this study, the definition provided by the International Federation of Accountants Education Committees (IFAC, 2001) is adopted owing to its comprehensiveness. Specifically, IT comprises the hardware and software products, IS operations, and management processes, IT control frameworks, and the resources and skills of workers needed for the development, employment and management of products/processes to generate the required knowledge. This study also makes use of the IT list laid down by IFAC as illustrated in Table 1. This is based on Ismail and Abidin’s (2009) and Greenstein and McKee’s (2008) consideration of IT into 16 IT technologies divided into five categories namely general office automation, accounting firm office automation, automation of audit, technologies of e-commerce, and the implementation and design of system.

**Utilization of IT**

In the past few decades, information technologies have affected the external auditors’ performance and as such, there is a strong call to shed light on the phenomenon owing to the fact that several companies have increased their application of technology support. In order to maximize the organization’s efficiency, it is important for companies to leverage technological support. To this end, prior authors (e.g. Janvrin et al., 2008) revealed that the utilization of the applications of audit and their perceived significance have
The Mediating Effect of IT Importance between IT Knowledge, IT Training and IT Utilization among External Auditors: Evidence from Yemen

Different ranges and as such, it is crucial to deeply investigate the technologies use as stressed by Seetharman (2006). Therefore, some authors have concentrated on circumstances where the use of IT can be presumed, and they claimed that the performance of the organization hinges on the suitable fit between its task and technology (Goodhue, 1995; Thompson, 1995).

Moreover, in terms of technologies, their efficient use and perceived importance also significant vary (Janvrin et al., 2008). For instance, email, cell phones, and remote access were found to obtain the top utilization rating while instant messaging and extensive business reporting language were the lower ones among auditors. According to prior authors (Bierstaker, Burnaby & Thibodeau, 2001), technologies significant impact audit planning as computers are used to generate customer centered internal control templates to encourage the strengths of the system and minimize the disadvantages associated with it.

It is crucial for audit practitioners to implant technology while auditing that is similar to their client’s technology for them to be effective (Ismail &Abidin, 2009; Winograd, Gerson& Berlin, 2000). In relation to this, Solomon and Trotman (2003) recommended that auditors should respond expediently and adapt to the advancements in technology to enhance their performance.

Furthermore, six ways have been highlighted through which IT significantly affects auditors; first, firms are now frequently making use of technology to pave for the progression in documentation; second, major firms are maximizing their decisions to computerize their tasks, third, mini firms are encouraged to taking up IT; fourth, IT significantly impacts the performance and attitudes of the auditor through the changes in the construction and procedures in the firm - for instance, IT utilization could minimize the time of the auditors in achieving his responsibilities and it could improve the quality of audit performance through organized decision regarding the procedures; fifth, IT increases the performance of audit and quality through the automation of audit processes, minimization of specific auditing procedures and enhancing know-how, information and the skills of auditors, and lastly, lastly, several current standards bring forth the increased IT role in the profession of auditing (Janvrin et al., 2008).

Effective IT use generates organizational innovations and restructures commercial processes, and leverages competitive dynamics to reinforce superior performance owing to the innovations. Audit jobs automation and the use of specific audit software have been adopted in lieu of IT employment, and it modified the audit teams development as contended by Banker, Chang and Kao (2002), and Gogan, Applegate and Nolan (1995).

Based on the above, it is important for owners and executives to leverage information technology in their decision making particularly because their involvement in technology adoption could lead to enhanced IT use (Suhendra, Hermana &Sugiharto, 2009).

In sum, managers can reap their investments in information technology only when they comprehend the potential advantages of it. Although the perception of IT investments by audit firms may lead to the increase in firm’s efficiency as illustrated by prior studies (e.g. Banker et al., 2002; Lee &Arentzoff, 1991), the direct impact of IT on audit firm performance is still ambiguous. This should be clarified in order for audit firms to acknowledge the way technologies can modify their labor processes and whether or not such change will ultimate increase the achievement of their goals (Banker et al., 2002).

**IT Knowledge**

The requirements of external auditors of IT knowledge are higher than those of accountants and as to compound this need, auditors work for various clients who own various information systems (Greenstein & McKee, 2008). In this context, successful IT implementation initiatives in the auditing profession call for knowledge-sharing application and audit software as explained by prior studies like Banker et al. (2002) and Gogan et al. (1995). In essence, it is important to make use of advanced systems of IT for
skills-sharing, information-sharing across different sections of the organization to help audit firms in encouraging the cooperation of the auditors.

In order to comprehend the technologies needed in auditing, it is important for auditors to be knowledgeable and skilled (Merhout & Buchman, 2007) and to keep abreast with the technological developments, auditors should be capable of updating their technological knowledge for the use of AIS to generate superior auditing performance (POB, 2000; Kinney, 2001; AICPA, 2002).

In relation to the above, external auditors should be aware that in order to gain IT advantages, they need to acknowledge the importance of technologies, and in this regard, self-evaluation should be employed to determine their familiarity with such technologies as stressed by Greenstein and McKee (2008). According to them, there are 35 relevant technologies in auditing and external auditors should be knowledgeable in every one. They added that knowledge of IT may be related more with efficiency rather than effectiveness and as such, lack of knowledge of the auditor in particular fields of IT is superseded by that of IT technologies used in the audit professions.

On the basis of the technology acceptance model (TAM) the opinion of the user regarding his/her knowledge computer (self-efficacy) improves his/her opinion concerning the ease of use of technologies and their usefulness. This could impact the user’s behavioral intentions (Davis, 1989; Greenstein & McKee, 2008). Considering the above discussion and supporting arguments, the researcher proposes the following hypothesis for empirical testing:

\[ H_1: \text{IT knowledge positively and significantly affects the utilization of IT among external auditors in Yemen.} \]
\[ H_2: \text{IT knowledge positively and significantly affects IT importance among external auditors in Yemen.} \]

**IT Training**

Training is considered to provide and contribute information regarding the individual’s self-commitment in terms of his performance achievement. Relevant training would thus assist individuals to work effectively with the help of IT (Sulaiman, 2004). In a related study, Janvrin, Lowe and Bierstaker (2008) revealed that the management of audit firms should lead to the enhancement of IT initiatives in terms of training in order to heighten the auditors’ perception of ease when it comes to IT use, especially the Computer-Assisted Audit Techniques (CAATs). Additionally, training is important information and experience source that is effective in changing self-confidence as expounded by prior studies like Saks (1995) and Sulaiman (2004).

Several audit applications were suggested by Janvrin et al. (2008) when audit firms decide on increasing their IT training or IT use. According to them, auditors revealed that IT is crucial for several applications including internal control evaluation, risk assessment, audit planning, client relationship, fraud review, and client acceptance although it is not generally used. This indicate that there are potential applications that audit firms can use to maximize their IT technologies use and to provide an intensive training of them in order to integrate them in auditing processes.

The importance of training in IT use and consequently in the auditor’s work was highlighted by prior studies (e.g. Compeau & Higgins, 1995) who claimed that training leads to enhanced IT use improvement. Consequently, auditors should make use of audit software in a way that they deem it as a significant audit tool and make use of it to gather evidence for efficient audit online systems. This is consistent with the statements of Bierstaker et al. (2001) and Ismail and Abidin (2009). In the context of Yemen, Yemeni external auditors badly require training for the development of their IT-related skills in
order so that they may know how to efficiently audit e-commerce financial statements (Al-Amodi, 2006). Meanwhile, other studies (e.g. Curtis, Jenkins, Bedard & Deis (2009) emphasized that training auditors on IT knowledge is an important factor that affects the auditor’s performance. They recommended that more IT training should be provided to the auditors for their effective and efficient work. Therefore, to investigate the effect of IT training on IT use, the researcher proposed the following hypotheses:

H₃: IT training positively and significantly affects the utilization of IT among external auditors in Yemen.

H₄: IT training positively and significantly affects the importance of IT among external auditors in Yemen.

IT Importance
The audit use of application and its perceived importance significantly differs from one auditor to another (Janvrin et al., 2008). In this regard, Goodhue and Thompson (1995) asserted that IT positively impacts individual performance and that technologies used should fit the task at hand. They revealed the task-fit importance in achieving individual performance and its impact on the same. Their findings showed that fit can identify performance and in some instances, use. In sum, the task-technology fit theory strongly influences the user beliefs concerning the use consequences, and their impact on use.

Past literature dedicated to information systems showed that the resources availability in the auditing firms is boosted by their adoption of IT as explained by Riemenschneider et al. (2003). In this context, it is impossible for small audit firms to compete with their major counterparts when it comes to IT investments, and as a consequence, this could result in economic obstacles to achieve effectiveness and efficiency of audit. Considering the above discussion of prior literature, the following hypotheses are proposed:

H₅: IT Importance affects the utilization of IT among external auditors.

H₆: IT Importance has a mediating effect between IT knowledge and IT utilization.

H₇: IT Importance has a mediating effect between IT training and IT utilization.

RESEARCH METHODOLOGY

Sampling and Data Collection
Data was collected by the researcher through the survey questionnaires, where the questionnaire was distributed to the respondents consisting of random auditors selected from a list obtained from the Yemeni Certified Public Accountants Association. One hundred ninety seven out of three hundred and fifty questionnaires were returned to the researcher and were considered to be appropriate for data analysis.

Variables and Measurements
In the present study, the measurements of variables were adopted from the study of Ismail and Abidin (2009). For the IT utilization – the measurements are based on a 5-point Likert scale where 1 depicts no usage, 2 depicts little usage, 3 depicts moderate usage, 4 depicts more usage, and 5 depicts extensive usage. Moving on to the importance of IT, the measurement is based on a 5-point Likert scale where the concepts are measured by the range of 1 depicting not important, 2 depicting little importance, 2 depicting little importance, 3 depicting moderate importance, 4 depicting high importance, and 5 depicting extensive importance.

As for the IT knowledge, similar to the above measurements, the concept measurement is based on a 5-point Likert scale with the range of 1 depicting no knowledge, 2 depicting very little knowledge, 3 depicting little knowledge, 4 depicting moderate knowledge, and 5 depicting extensive knowledge.
Lastly, for IT training, the concept measurement was obtained from Mirani and King (1988) it has its basis on a 5-point Likert scale where 1 depicts strongly disagree, 2 depicts disagree, 3 depicts neutral, 4 depicts agree while 5 depicts strongly agree.

**Sampling Profile**
The profile analysis outcome of the firm’s categories that were examined in this study are exhibited in Table 2. It is evident from the table that majority of the respondents (74.1%) are working for the non-Big 4 and the rest (25.9%) are working for the Big-4 audit firms. Table 3 reveals that that some of the firms that the respondents are working in (21.3%) offer information systems audit and assurance services – a result that is aligned with past studies in the context of developed countries, like McKee (2000), Greenstein and McKee (2004), Greenstein et al. (2005), and Janvrin et al. (2008), and in the developing ones like Ismail and Abidin (2009). The above result shows that Yemeni audit firms use of information system audit is still a novelty.

Table 4 shows that 42.3% of the respondents are auditors and 32.1% are senior auditors, and also 44.6% of them in the age range of 20-29 years, and 55.4% in the age range of 30 and above. Moreover, majority of the respondents (91.4%) are males and the rest (8.6%) are females.

Table 2 omitted but would have been here

Table 3 omitted but would have been here

Table 4 omitted but would have been here

**Data Analysis and Findings**
The present study’s analysis is based on a two-step approach recommended by Chin (1998) to investigate the structural model with the following variables; IT knowledge, IT training, IT importance and IT utilization.

![Figure 1: The Research Model](#)

The data analysis process aimed to establish construct validity, and reliability via measurement analysis prior to hypotheses testing.
The Measurement Model. The outer model’s goodness of measure was examined for its content validity and construct validity. The details are discussed in the following sub-sections.

Content Validity. A construct’s content validity indicates that the entire items developed to measure a specific construct should significantly load on the construct they are intended to measure. Hence, factor loading is useful in assessing the content validity as recommended by Hair et al. (2010) and Chin (1998). In case some items load on other constructs greater than on their respective constructs, they may be deleted. All the variables in this study significantly loaded on their respective constructs as depicted in Tables 5 and confirming content validity of the measurement model.

Convergent Validity. Convergent validity shows the extent to which a set of variables converges in measurement the construct concept (Bagozzi, Yi and Phillips, 1991; Hair et al., 2010). On the basis of SEM literature, convergent validity can be confirmed through the item’s reliability, composite reliability and the average variance extracted. In other words, the items of each construct should highly load and should be statistically significant in measuring their respective constructs with at least 0.64 factor loadings, where the composite reliability of each construct should be at least 0.70 and the average variance extracted for each should be at least 0.50 in order so that convergent validity is confirmed (Bagozzi, Yi & Phillips, 1991; Hair et al., 2010). The composite reliability values of the entire constructs were over the recommended value of 0.70, the AVE values were over 0.50, as evident from Table 7, indicating that the measurement model possesses sufficient level of convergent validity.

Discriminant Validity. The level to which a set of items can discriminate one construct from its counterparts is known as discriminant validity, indicating that the variance among items that describes a particular construct has to be higher compared to the one they share with other constructs (Compeau et al., 1999). To this end, when looking into the measurement model’s discriminant validity, a criterion has to be satisfied (Fornell & Larcker, 1981). The correlation matrix within which the diagonal elements are the square root of the average variance obtained from the entire latent constructs are displayed in Table 8. The comparison that has to be conducted and the confirmation of discriminant validity lies in the fact that the diagonal elements have to be greater compared to counterpart off-diagonal elements in rows and columns respectively. The outcome of the correlation matrix below shows that discriminant validity exists.

Predictive Relevance of the Model. The study model was assessed through the use of $R^2$ and Cross-Validated redundancy. The overall quality of the model was assessed by calculating $R^2$ - a value that shows the variance in the endogenous variable that is explained by the exogenous variables. Table 9 shows that $R^2$ value indicates that 24% of the information technology use was explained by the model’s chosen variables. According to Cohen’s (1988) established rule of thumb, $R^2$ of 0.26 is considered substantial, that of 0.13 is moderate, and that of 0.02 is weak. In this study, $R^2$ is more than moderate and thus, IT knowledge, IT training and IT importance is significant in explaining IT utilization.
Model quality is also assessed via the outcomes produced by the blindfolding process in SmartPLS. This procedure is utilized to produce the cross-validated communality and cross-validated redundancy. The primary premise behind the procedure is to eliminate some data and address them as missing values that needs estimation. Later, parameters are employed for the reconstruction of such missing data. On the basis of the missing data obtained, the comparison is conducted to assess the proximity of the real form the implied results after which the $Q^2$ values are calculated. Upon practically estimating the data points through the latent variables prediction of the block in question, the output is viewed to be cross-validated redundancy.

Table 9 omitted but would have been here

In this context, the model’s predictive quality is confirmed if the value of cross-validated redundancy is higher than 0, otherwise it is not confirmed according to Fornell and Cha (1994). Based on Table 9, the result of the cross-validated redundancy is 0.135 of IT utilization, 0.033 of IT importance and hence, the model is said to have sufficient quality of prediction.

**Goodness of Fit (GoF) of the Model.** Unlike the CBSEM approach, the PLS-SEM has only a single measure of GoF and it refers to the global fit measure as laid down by Tenenhaus et al. (2005). In a mathematical statement, the measure is defined as the geometric mean of the average variances obtained and the average $R^2$ of the endogenous variables as depicted by the following equation;

$$GoF = \sqrt{(R^2 \times AVE)}$$

In the present study, the GoF value of the model is 0.32 and a comparison is made between it and the baseline values as suggested by Wetzels et al. (2009), where 0.1 is considered to be small, 0.25 is considered to be medium and 0.36 is considered to be large. The result indicates that the model of fit measure on the above criteria’s basis, is large and this shows sufficient model global PLS model validity.

**The Structural Model and Hypotheses Testing.** Following the confirmation and the establishment of the construct validity as well as reliability, the next phase entails the testing of the proposed hypothesis through the PLS Algorithm and Bootstrapping Algorithm in SmartPLS 2.0.
Figures 2 and 3 and Table 10 illustrate that IT knowledge positively and significantly impacts IT utilization at the level of significance of 0.01 ($\beta=0.422$, $t=6.710$, $p<0.01$) Similarly, IT knowledge positively and significantly impact IT importance at the level of significance of 0.1 ($\beta=0.198$, $t=1.538$, $p<0.1$) while IT training positively and significantly impact IT utilization at the level of significance of 0.1 ($\beta=0.103$, $t=1.447$, $p<0.1$). Along the same line of result, IT training positively and significantly impact IT importance at the level of significance of 0.05 ($\beta=0.200$, $t=2.193$, $p<0.05$). Lastly, IT importance positively and significantly impacts IT importance at the level of significance of 0.1 ($\beta=0.89$, $t=1.594$, $p<0.1$).

**Testing the Mediating Role of IT Importance.** The IT importance mediating effect was examined on the relationship between IT knowledge, IT training, and IT utilization. This was conducted through the mediating mechanism in SmartPLS.
The Mediating Effect of IT Importance between IT Knowledge, IT Training and IT Utilization among External Auditors: Evidence from Yemen

Figure 4: The Mediating effect of the IT Importance

Figure 5: The T value of the Mediating Model

Figures 4 and 5 evidence the mediating effect of IT importance on the relationship between IT knowledge, IT training and IT utilization as supported by the values in Table 11.

The results in Table 11 shows that the mediating effect of IT importance in the relationship between IT knowledge and IT utilization is found to be significant ($\beta=0.018$, $t=1.434$, $p<0.1$) according to the bootstrapping method. Moreover, a partial mediating effect of IT importance in the relationship between IT knowledge and IT utilization at the level of significance of 0.01 ($\beta=0.422$, $t=6.710$, $p<0.01$) based on the established rule by Baron and Kenny (1986). The result thus supports the sixth hypothesis (H6) of the study. Added to this, the mediating effect of IT importance in the relationship between IT training and IT utilization is found to be significant ($\beta=0.018$, $t=1.975$, $p<0.1$) according to the bootstrapping method. It is a partial mediating effect of IT importance was also found on the relationship between IT training and IT utilization at the level of significance of 0.1 ($\beta=0.103$, $t=1.447$, $p<0.1$) also based on Baron and Kenny’s (1986) method. Thus, the seventh hypothesis (H7) is also supported.

Table 11 omitted but would have been here

DISCUSSION, LIMITATIONS AND RECOMMENDATIONS

The present study proposed seven hypotheses concerning IT utilization particularly in the Yemeni work context. The extant literature was reviewed specifically one that is dedicated to the use of IT in auditing that has received little attention from researchers. In an organized manner, the seven hypotheses were tested and positive associations were revealed of all variables. IT importance was also found to significantly relate specifically with the dependent variable.

In sum, the study results evidenced the several variables (IT knowledge role, IT training, IT importance role in the identification of the IT level of utilization) in the context of the Yemeni external auditors. The outcomes of the analysis were aligned with prior studies in this regard as prior studies also related the significance of the above mentioned variables. The studies include those conducted by Chaveerug and Ussahawanitchakit (2009), and Janvrin et al. (2008). The results also showed that when auditors lack
knowledge concerning IT and lack formal training to improve their capabilities and their perception of IT importance, the IT system use is expected to be of lower levels.

The results indicate that auditor’s IT knowledge, IT training and IT importance are significant to maximize the use of IT. Added to this, the results also indicate that information systems for auditing are still in its infancy in the context of Yemen. It is therefore suggested that the Yemeni Certified Public Accountants Associations should establish policies mandating auditors to have at least a certain category of IT knowledge and skills in order to be proficient in their audit work using the complex computer systems.

Moreover, the result of the IT importance mediating role confirmed the utilization of IT importance in the perception of auditors that may lead to the improvement of IT among them. The low use may be attributed to the lack of IT training programs and the lack of better knowledge of employees in running IT-complex systems. IT plays a role in explaining the impact of IT knowledge and IT training on the utilization of IT.

With regards to the contribution of this study, the results are invaluable in fueling discussions and debates concerning the exploitation of IT utilization to assist in changing auditing in the context of Yemen and other developing nations for them to move forward in the current era’s technology-dynamic environment. This study also contributes to the in-depth understanding of the mediating impact of IT importance on the IT knowledge-training-use association in the context of Yemeni external auditors.

Nevertheless, it is important to note that the study outcomes should be dealt with, with caution in light of its limitations. The current study considered 16 technologies from past literature, several of which have been purposely excluded from the study. Future studies are thus recommended to include them in their research.

Limitation is also present in view of the study design, wherein the sample study was asked to rate their use of IT, and this is expected to impact their actual practice. In this regard, future studies could examine the model on the basis of other research design for findings validation.

In the hopes of gaining a more in-depth understanding of the information systems role on the auditor’s performance, it is important for future studies to expend efforts on investigating the IT importance-fit relationship. To this end, future studies could investigate the impact of other impactful variables on the relationships. In reality, this is a very complex context, and a clear picture has to be obtained and this entails the consideration of many other variables into—variables that could impact the proposed model.

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All of the tables cited in this paper are omitted due to space considerations. Interested parties are invited to contact the author for a complete copy of the paper.
Network Marketing

Keywords: Network Marketing, Malaysia, Entrepreneurship, India, Globalized Era, Amway

INTRODUCTION

NM companies practice economics principle like ‘division of labour’ and ‘specialization of work’. NM is in vogue in MNCs and they apply global strategies to combat rivals. The regulatory bodies administer ‘Code of Ethics’ on distributors. Different NMCs adopt various CSR initiatives by spending at least 2% their profits as it is mandatory. Some of the NMCs make their place green business environment by producing ‘Green and biodegradable’ products with FMS. Innovation plays a vital role in this kind of business.

Network Marketing (NM) involves many satisfied customer-cum-distributors who are utilizing, retailing and enrol new members. NM provides an opportunity for retail distributors to reach their prospective customers. This is a ‘Low investment and high returns’ business opportunity to become micro entrepreneurs. This paper is to identifying and analysing the reasons for attrition in NM companies, includes the retention strategies; and ethical issues are discussed. The organized NM companies are Amway India, Avon Beauty Products, Hindustan Unilever Network, Modicare, operating in India and in Malaysia is Amway (Malaysia) Sdn Bhd, Avon Cosmetics (M) Sdn Bhd.

Purpose–An attempt to understand the motivation behind the attrition rate among distributors.

Design / Methodology / Approach – Survey using ‘Snowball’ sampling technique on Network distributors in Hyderabad with the help of structured questionnaire. Sample size is 600.

Originality / Value – Attrition studies NM in Indian context has very few studies on attrition rate.

LITERATURE REVIEW

Review of Literature is most vital to identify the research problem of the study, which can be solved by collection of data. It helps to avoid the mistakes, which were already done by a researcher. In the existing literature, based on the research gaps, hypotheses may provide meaningful insights to the Network distributors, executives and policy makers.

Network Marketing is an extension of direct selling and its basis is positive ‘Word of Mouth’ publicity. It can do anything and everything for the rapid spread of what it intends to spread. According to news item published in India Today many liters of milk disappeared into the tiny Ganesha’s idol in Mumbai and other parts of India and also other countries of the world. The example of Lord Ganesha’s idol drinking milk is globally quite evident and popular among all circles. It is quite clear that the piece of news about Ganesh idol’s drinking milk has been spread globally in a rapid manner. This is what ‘Word of Mouth’ publicity can do.

Even though Network Marketing is quite a new territory for most Indian marketing pundits, some of the interested scholars and researchers have furnished many valuable opinions concerning what constitutes a
Network Marketing. It is always good and useful to explore what research scholars and eminent writers in the field of Network Marketing have done so far. That will give us an idea of the area covered so far and what yet remains to be addressed. Also, it will save a researcher from repeating what has been done before.

Gazing at the reliable research work done earlier by the authentic researchers is like standing on their shoulders to look afar, that is, the research work done earlier can serve as a useful guide for further investigation. Therefore, in this chapter an attempt has been made to review the relevant literature on this topic which might prove to be highly rewarding.

JOINING BUSINESS GROUPS

Richard C. Bartlett (1992) made a survey on “A Profile of Direct Salespeople” and it presents information on the demographic characteristics and direct-selling experience of direct salespeople. More specifically, the report covers personal characteristics of direct salespeople, including gender, age, ethnicity, education, marital status, and household income. Direct-selling employment experience is measured by average weekly hours in direct selling, direct-selling income, expenses and other items. The article also provides key salespeople and characteristics of the salesperson. In addition, the report provides foundation for future research.

Bloch Brain (1996) stated that Multilevel Marketing is the relationship between the would-be seller and his prospective ‘Down line’. He opines that truly determined sellers may well make money but most will not, yielding rather in the face of rejection ranging from interestedness to serious disapproval and resentment of the matter having been raised at all. He further described that if you get your friends to join up, you get a commission not only from the cosmetics, magazines or whatever your friends purchase, but from the sales they make to their friends too. Theoretically, you can make a fortune as this process expands in a sort of multi-layered network which, when drawn on paper, fans out into a pyramid-like structure.

Richard Berry (1997) articulates that in essence, Network Marketing [NM] is a way of organizing sales operations of a direct selling organization. It is a non-store approach to relating and distribution of goods and services, directly to the customers. Network Marketing embodies the essence of free enterprise by providing an opportunity for the interested individuals or independent contractors to run a home based business. Richard Berry (1997) also indicates that, instead of a supply organization constructing a large administrative and sales force comprising of employees, self-employed independent contractors can be encouraged to build a sales organization of persons, like themselves, by using a unique coaching and training system called ‘sponsoring’. In this system of sponsoring the distributor (sometimes referred to as an ‘independent contractor’ or ‘a direct salesperson’) shares knowledge and expertise with new entrants leaving the business for the first time. In turn, for this commitment, the sponsor earns commission based on a percentage of the sales from those recruited, subject to the structure of the organization plan.

Patralekha B. and Krishna Kumar M. (2000) exemplified the fact of attracting many-a-distributor which was proved in the Nu Skin annual convention held in March, 1998 attracted 13,000 distributors out of which more than 8,000 came from Japan, Taiwan, Hong Kong, Korea, Thailand, and Philippines. Rexall hosted series of conventions in 1998, each of which was attended by about 2,000 distributors. Five thousand distributors from USA, Canada, Australia, New Zealand attended USANA’s Health Science 1998 convention. Nearly 15,000 attended America’s 1998 convention.

King C W (2000) narrated that globally fourteen countries have done combined business amounting over US $ 100 billion. P.Msweli-Mbanga (2001) distributors are able to generate more sales and recruit more distributors in their network if they are committed to their organizations and have positive perceptions to
the organization's marketing mix. Distributor’s social contacts have a higher propensity to purchase the distributors’ social circles and this would result in increased performance.

Even more astonishing than the phenomenal growth of Network Marketing Organizations (NMO) is the controversies these organizations seem to attract. Critics have complained that the average Network Marketing Organization distributor earns very little. Every NMO has its share of distributors but most NMO distributors make negligible debate of their propensity to mould into close knit (and often very exclusive) social groups and revolve primarily around parties, meeting, rallies, convention and other occasions organized under the NMOs banner.

Koehn D. (2001) in his article explains “Multi-level marketing (MLM) schemes” are one of the fastest growing types of business. However, little has been written about the ethics of MLMs. This oversight is somewhat surprising, especially because some prominent MLMs have been accused of being pyramid schemes. Pyramid schemes were the number one type of internet fraud in 1996, and the fourth most common form of internet fraud in 1997 (National Consumers League, 1997). This paper examines the nature of MLMs and their similarities with differences from pyramid and endless chain schemes. The paper argues that MLMs pose some unique ethical issues, issues that are not easy to address or resolve.

This is supported by local directors who receive a 250-page manual and hours of training before managing an area. Directors are offered training twice a year in three-day conferences on strategies that give them a distinct competitive advantage in their markets. Business Networking International (BNI) emphasizes the following benefits to join: increased business through referrals, participation in business tradeshows, free networking workshops and the knowledge that everyone in a group has been screened for competency and ethics.

Forehand and Grier (2001) research on persuasion knowledge and skepticism states that ‘word-of-mouth’ may be seen as a means of coping with consumer’s skepticism towards marketing and advertising, but it is conceivable that the effectiveness of interpersonal influence decreases when the recipient perceives the influencer as being motivated extrinsically rather than intrinsically. Within the marketing literature, word-of-mouth is merely seen as a component of diffusion. Number of studies that focus explicitly on the design of marketing actions that create and stimulate word-of-mouth is unaware. Customer referral and other marketing-related social interactions take an important place in the literature on loyalty and CRM (Customer Relationship Marketing), but have not yet been investigated from behavioural point of view.

Network Marketing Organizations [NMOs] like Amway, Mary Kay, Nu Skin, Shaklee etc, have been growing their importance over the last few decades. Today two per cent of direct-sales reference is generated by Network Marketing organization and business units Coughlan and Grayson 1998.

Davis, R., Misner (2002) founded Business Network International in 1985 in Arcadia, California. Misner originally assembled a group of friends to exchange business referrals. There was some overlap in the professionals represented, and some of those in attendance asked Misner to start another group in Pasadena, California. These two groups grew into over 2,000 groups internationally by the early 21st century. A total of 42 chapters existed in Minnesota in January, 2002 of this total, 26 were located in the Twin Cities of Pasadena and Minnesota of California.

Vander NPJ and Keep WW (2002) in their study observed that a specific form of direct selling, multilevel marketing (MLM), experienced significant international growth during the 1990s, facilitated in part by the development of the Internet. A corresponding increase in the investigation and prosecution of illegal pyramid schemes occurred during the same period. These parallel activities led to increased uncertainty among marketing managers who used or wished to use the MLM approach. The authors examine similarities between the multilevel approach to marketing and activities associated with illegal pyramid
schemes. A mathematical model is used to differentiate between the two on the basis of previous pyramid scheme cases and current U.S. law. The results of the model suggest key factors that marketers interested in MLM will need to consider when developing this type of distribution channel.

Antony K.Y.P. (2003) says that the definitions of Network Marketing and direct selling are constantly changing and being interpreted differently by various scholars and even industrial practitioners.

Muncy J. A. (2004) in his article described that because of their inherent interest in marketing, students in ‘marketing and sale’ classes are often approached by those attempting to recruit them to become involved in Multilevel Marketing programs. When students are presented with such a business opportunity, they often turn to their marketing professors for advice. Marketing educators need to be able to help their students in differentiating ethical, legitimate business opportunities from those that are not. The current paper presents the following five questions students should ask when trying to ascertain the ethical and legal legitimacy of a multilevel marketing opportunity.

Question 1: How is the money being made?
Question 2: Are the products legitimate?
Question 3: How much does it cost to be involved?
Question 4: How much work is required?
Question 5: How long has the Company been around?

Vander Poll J.A. and Kotzé P. (2004) in their study a number of proof obligations arising from operations on the state are identified. Since $Z$ is based on first-order logic and a strongly typed fragment of Zermelo-Fraenkel set theory, the utility of a number of heuristics for reasoning about set-theoretic constructs is investigated to discharge the identified proof obligations. Using the resolution-based theorem-proving program OTTER, it is illustrated how the proof obligations may successfully be discharged using a set of well-chosen heuristics.

In their research article in 2004 Reinartz, Krafft, and Hoyer (1) conceptualize a construct of the CRM process and its dimensions, (2) operationalize and validate the construct, and (3) empirically investigate the organizational performance consequences of implementing CRM processes.

Chang A. and C.N.Tseng (2005) used survey research to collect data from members of four Taiwanese multilevel companies. They explored the mediating roles of the drivers of customer equity. A total of 306 valid responses were analyzed using structural equation modeling analysis. Four types of relationship marketing activities – core service performances, recognition for contributions, dissemination of organization knowledge, and member interdependence enhancement – have significant influences on relationship equity. Relationship equity in turn affects customer capital. Value equity and brand equity respectively have significant effects on customer acquisition and customer retention. Customer acquisition has a significant “feedback” effect on value equity, and relationship equity affects brand equity positively. The generalizability of this research is constrained due to a non-probability sample of firms being used to verify the theoretical framework. It is also constrain due to the fact that only customer-size data were collected and proxy measures of customer capital were used.

Farrellw J. and Michael (2005) established that although network effects can make predation more likely to succeed, it is found that the leading anti-predation rules may lower or raise efficiency and consumer welfare in network markets. The authors found that: (a) the extensive debates about the ‘correct’ measure of cost on which to base price floors are unlikely to be productive; (b) the Ordover-Willig rule that is widely thought to be correct in theory but difficult to apply in practice is, in fact, incorrect in theory; and (c) efficient price floors would have to depend on consumer expectations and co-ordination processes that are unlikely to be observable in practice.
Schmidt A. U. (2005) in his study found that the free-rider phenomenon which impedes the marketing of information goods is conventionally countered by copyright protection regulations and technology. Alternative ways to market information goods, in particular through systems based on the super-distribution of a good from buyer to buyer, have recently raised some interest. Some of them mimic peer-to-peer file-sharing networks, while advanced ones are mechanisms falling into the category of multi-level markets. Motivated by this, the present paper develops a general model for the monetary flux in a multi-level market, quantitatively describing the incentives that buyers receive through resale revenues. Based on it, some qualitative questions pertaining to a profitable marketing of information goods are discussed.

Thomas R. Wotruba, Stewart Brodie and John Stanworth (2005) examined that turnover among salespeople is a significant issue for direct selling firms because attrition impacts the size and continuity of revenue generation by a firm’s sales force. While turnover rates in direct selling are high overall, turnover rates and intentions to quit differ significantly between multilevel (ML) and single level (SL) forms of direct selling organizations. This study examines whether specific demographic and behavioural/attitudinal characteristics of direct salespeople correspond to differences in turnover between ML and SL salespeople. For many demographic variables there are significant differences between ML and SL salespeople, but none of these differences correspond to differences in quitting intentions. There are also significant differences between ML and SL salespeople on the behavioral and attitudinal variables studied. Analysis revealed that the relationship between some of these variables and quitting intentions differed substantially between ML and SL salespeople. These variables included job satisfaction, organizational commitment, perceived image of direct selling in the marketplace, and the importance of the job characteristics of work rewards and career growth. Specific managerial implications follow from these findings.

Alexander A. and Nicholls A. (2006) aim to investigate the value of a network perspective in enhancing the understanding of the business to consumer marketing of high-involvement product categories. This is achieved through the analysis of the development of fair trade marketing in the UK. The relevance of an Actor Network Theory (ANT) informed interpretation of the development of the fair trade marketing network is revealed. Its emphasis on the processes of exchange and the role of human and nonhuman actors in enabling interactions within the network are shown to be important and fair trade marketing is shown as occurring within an unfolding network of information exchanges. Analysis of this emerging network highlights a shift of emphasis in fair trade marketing from the fair trade process to fair trade products and finally, fair trade places.

Sparks J. R. and Schenk J. A. (2006) in their article says that Multilevel Marketing Organizations (MMOs) are “a rapidly growing but often controversial marketing organizational type boasting nearly 10 million members and over US$ 20 billion in annual sales”. The success of the MLM business model rests largely on forming cooperative social networks of member distributors. Socialization of new members to the norms and values of the MLM plays a key role in eliciting that co-operative behavior. However, the member co-operation that produces successful networks may inhibit the financial performance of individual distributors. Drawing upon social identity theory, this study investigates whether communication of the MLM’s behavioral norms during the socialization of members affects the degree to which members co-operate with each other and how that cooperation affects the sales performance of individual distributorships. The results of a survey of MLM members suggest that both effects occur. Socialization communication positively affects member cooperation, which produces direct and indirect effects on sales. Cooperation, measured by several organizational citizenship behaviors, exerts a positive direct effect on sales, but a negative indirect effect when the relationship is mediated by group cohesion.
Ylikoski E. O. (2006) in her research reveals that the purpose is to explore conflicting representations of selling and especially Network Marketing. Her first objective is to identify the fundamental features of sales discourses within academic and practitioner communities. The second objective is to understand in what ways the combination and contestation of these discourses produce ambiguous images of selling and network marketing, for example, in the media.

The study approach is based on the social constructionist research tradition. Central to this approach is the interest in how different communities create social realities of selling through discourse practices characteristic to each community. This study focuses on the discourses of selling and salespeople created by (1) academic researchers studying sales management and personal selling, (2) Network Marketing practitioners – salespeople and other actors, and (3) the media, which in this study is represent exploits stating that there is a difference between American Jewish consumers and American non-Jewish consumers in the use of word of mouth and brand loyalty in response to the purchase of durable goods (automobiles). Additionally, this article delves deep to explore if there is a difference in the use of word of mouth and brand loyalty among American Jews with differing levels of acculturation, represented by the Finnish press.

Nicola Yankov (2007) explained that the paper’s intention was to deal with the issues of the comprehensive multilevel marketing integration. It is a conceptual view over the different aspects of the integration process on different levels. The author presents some basic principles of internal and external integration of the marketing inside and outside the business systems. In this regard the Business Organization Network (BON) is also an object of approach. It suggested an integration methodology to be used for the conceptualization and development of the integration process. Another aspect of the paper is the presentation of models for vertical and horizontal markets and marketing integration beyond the boundary of the business systems.

Mylonakis J. and Malioukis A. (2007) stated that the rapid growth of Multilevel Marketing (MLM), or Network Marketing industry, in the last decade has made itself an attention-gathering star in the retailing industry. Hoping to reap the merits and benefits of this unique marketing method, more and more companies who marketed their products and services through traditional market channels previously are now testing the possibility of employing the Network Marketing formula. Nevertheless, influenced by numerous factors, not every product or service has equal chance for realizing its market potential in the area of direct selling. The paradigm of this study raises the question of how a business, in which almost none of its sales representatives earn a profit and almost none has a sustainable retail distributor base, could be called direct selling company. Indeed, how such an enterprise could be considered a legitimate business.

Fine L. (2007) says that almost 14 million Americans are employed in sales or sales-related jobs. Many organizations derive their entire revenue stream from the efforts of salespeople. As part of the domain of marketing, the academic study of selling and sales management is relatively young. While there are a great many widely-used and studied models in the field, there is still much to be learned about this topic.

Macintosh G. (2007) on the other hand, seeks to test a model examining the potential links between customer orientation, expertise, and relationship quality at the interpersonal level and the link between relationship quality and positive service outcomes at the firm level, such as loyalty and positive ‘word of mouth’. The study employs a survey methodology to obtain the opinions of 220 business travellers regarding their relationships with their travel agents. The research found significant positive relationships between customer orientation, expertise and respondents’ perception of relationship quality. It also found significant links between relationship quality at the interpersonal level and positive outcomes at the organizational level. Interpersonal relationship quality enhanced customer satisfaction.
with the service firm but was also directly linked to loyalty to the firm and positive ‘word-of-mouth’ about the firm.

Research on the recipient side of ‘Word-of-mouth’ by Duhan et al. (1997) has shown that consumers have been found to seek more ‘word-of-mouth’ information when they are faced with a decision that is more difficult.

JOINING NON-BUSINESS GROUPS

Rotolo T. (2000) in his research focused primarily on school and community groups. It is found that life cycle transitions among adults could include marriage, the birth of a first child, the entry of a child into school and a child’s leaving the parent’s home. Further, it is learnt that different life cycle affects for men and for women. For men, marriage significantly increased the joining rate for voluntary groups. Young school-aged children in the home also increased the joining rate for men, while older children in the home had no effect. For women, marriage had no effect on the joining rate. The effect of parent- hood on women’s joining rate ran counter to expectations. The presence of young children did not influence the female joining rate. School-aged children in the home increased the female joining rate and older children had no influence on the joining rate for women. Life cycle concerns are unlikely to play an important role in Business Networking Groups because they are considered part of the “business day” rather than the “personal day”. Most people with jobs commit an eight to twelve-hour block of time to their job each work day, and do not consider the time spent at a networking meeting to be cutting into their personal time.

Xueming Luo., Christian Homburg 2007 centered their research on suggested that although there is significant evidence that customer satisfaction is an important driver of firm profitability. Existing literature has largely neglected two intermediate outcomes of customer satisfaction: a firm’s advertising and promotion efficiency and its human capital performance. On the basis of longitudinal analyses of large-scale secondary data from multiple sources, the authors find that customer satisfaction boosts the efficiency of future advertising and promotion investments. This finding can be explained by the possibility that customer satisfaction generates free word-of-mouth satisfaction and has a positive influence on a company’s excellence in human capital (employee talent and manager superiority).

INDIAN STUDIES

Network Marketing is a system of moving products or services via a Network of agents known as ‘distributors, who are not salary paid employees but independent contractors of respective Network Marketing Companies. The Network is built by the distributors themselves as everyone they recruit or sign up becomes a wholesale customer who in turn can sponsor others as sub-distributors known as ‘Down lines’. The introducer is known as ‘Up Line’ distributors. In traditional marketing, when the manufacturers want to get their products quickly into the hands of as many people as possible, they may require millions of money for the expenses for advertisements, celebrities and other expenses. It will also probably require going through layers of middlemen like wholesalers, and retailers, etc. The Network Marketing companies will produce and supply the products on wholesale basis, provide the necessary promotional and sales materials, which are chargeable; handle the data processing, accounting and even impart the training. This group of people then introduces the products and business opportunities to others, who in turn, introduce it to even more people. So it continues with the base of consumers and Independent contractors from time to time, growing leaps and bounds. The company does not have to advertise any more either because its distributors do it for them often just through “word of mouth.” ‘Word of Mouth’ is known as ‘Buzz marketing’ or ‘Viral marketing’. Word of Mouth Marketing Association (WOMMA) defined ‘Word of Mouth’ as “Giving people a reason to talk about the products and services, making it easier for the conversation to take place”. When a customer is satisfied, the same
customer will refer to known people e.g. to the kith and kin by way of giving positive Word of Mouth, for example, the Hollywood movie *Titanic*, or any good experience at a restaurant.

Network Marketing companies does not have to advertise any more either because its distributors do it for themselves often just through positive “word of mouth” publicity. ‘Word of Mouth’ through friends and relatives plays a dominant role in spread of Network Marketing for example, *Amway India Enterprises* and *Hindustan Unilever Network* uses this kind of publicity. The study conducted by Bhavannarayana Kandala, Madhusudhan Prasad V (2010) found that *Amway India* and *Hindustan Unilever Network* promote individual ‘business opportunity’ through their direct selling approach of world-class network products. Most of the distributors collected information about *Amway India* and *Hindustan Unilever Network* through the ‘Friends’ and ‘Relatives’, who are also distributors and in the opinion that the favorable products of the distributors are fast moving Network products. A majority of the distributors opined that the long-term association with *Amway India* and *Hindustan Unilever Network* influences the distributors to pursue the business. The level of satisfaction has been measured with the help of five-point Likert scale technique and Henry Garret Rank technique. The demographic characteristics such as gender, education, marital status, occupation, and monthly income of the distributors of *Amway India* and *Hindustan Unilever Network* products do not influence their level of satisfaction.

Neena Vyas and Savita Batish (2009) says that in their article present investigation was undertaken to study the involvement of women in direct selling enterprises and their income contribution. The purposively selected direct selling enterprises were *Amway India*, *Aviance*, *Avon*, *Oriflame* and *Tupperware*. The total sample for the study comprised of 298 respondents from Ludhiana city selected through probability proportional to size sampling method. Data were collected through personal interview method. The findings revealed that majority of the respondents were middle-aged, graduates, having nuclear families and housewives before joining the enterprises. Maximum number of the respondents joined these enterprises during the year 2002-2003 by just paying membership fee less than rupees 5000. Income earned by the respondents ranged between rupees 5000 to 15,000 per month from their respective enterprises.

Arpita Mukherjee, Tanu M. Goyal, Divya Satija, Nirupama Soundararajan, in their report mentioned that there is need for (a) Need for a clear definition (b)Need to streamline the Foreign Direct Investment policy and (c) Need for a governing legislation and (d) Need for a nodal ministry.

**LITERATURE GAPS**

1. The researcher felt the need to identify the problem and prospects of *Network marketing* in the Indian context as this dimension was not included in the earlier studies.
2. Detailed comparative study of two or more companies in the field of *Network Marketing* was not comprehensively covered.
3. The researcher did not come across the attempt to explain and analyze the role of distributors in *Network Marketing*.
4. The researcher did not come across analysis of impact of ‘demographics characteristics’ on ‘factors influence business orientation’.
5. ‘Sources of Information’ about *Network Marketing*, which was not covered comprehensively in the Indian context. Hence The researcher wanted to ascertain this aspect.

**RESEARCH QUESTIONS (RQs)**

The Research Questions are derived from the review of literature, after identification of literature gaps.
RQ1: What are the factors that motivate distributors to ‘join’ Network Marketing Companies?
RQ2: What are the factors influencing distributors to ‘deal’ with Network Marketing Companies?
RQ3: What are the factors influencing ‘Level of Satisfaction’ of distributors belongs to Network Marketing Companies and what is their nature of association?

Based on the literature gaps in the review of literature and the need to understand the various aspects of Network Marketing, the above three research questions are framed for the purpose of the study. The objectives of the study, formation of hypotheses and the research methodology adhered to address the above research questions. It also explicates different areas such as ‘Reasons for entering Network Marketing, Joining Business Groups, Joining Non-Business Group, Working Style, and Joining Networking Groups.

According to Cecilia Ong See Kiaw and Ernest Cyril de Run (2007) Studies on the Multi-Level Marketing (MLM) industry have noted its impressive exponential growth in the past 30 years in terms of total volume of sales and number of salespersons involved. The purpose of this study is to identify the reasons why Malaysians join and continue to remain in the industry. It was found that the main reasons for joining and remaining in MLMs can be grouped into financial independence, personal freedom, types of products and benefits, product credibility and incentives. The initial data was collected by interviewing a sample of MLM distributors in Kuching and Kota Samarahan, Sarawak, Malaysia. The findings were then extrapolated onto a questionnaire to a larger sample throughout Malaysia. Generally, the findings indicate that the desire for money and product features made respondents to join and stay on. The management of MLM companies should look more into the development and promotion of the product rather than the method of selling. This paper provides new knowledge of why people remain in MLMs, and this is important to academia as well as for MLM management.

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For a complete copy of this paper with omitted footnotes and endnotes see author(s).
Fast and Furious to Social Media Success: The Effect of Social Media Unique Relevance Features in the Premium Cars Segment - The Case of Audi and YouTube

**Keywords:** Social Media, Brand Community, Customer Relationship, Audi, YouTube

**INTRODUCTION**

Social media has radically changed how customers interact with one another and with their preferred brands and products. As car manufacturers try to present their products as lifelike as possible, especially YouTube plays a vital role in the social media mix in the automotive sector. Here customers love to watch new ads (e.g. Mercedes-Benz’ 2015 Super Bowl ad „Fable“ gained over 3 Million views after 4 days), reviews of new car models or even stunts of their favorite car brands. Advantageously for car manufacturers, notably YouTube users show high engagement levels, from which car manufacturers can profit directly and indirectly. A recent study shows that e.g. 48% of UK YouTube users are connected to more than 100 people online and about every second user shares YouTube videos that he saw or even talk about with his peers. Furthermore, nearly a third of the UK users think that YouTube is a great place for a brand to connect with them (ipsos, 2013). Of course, studies like these have to be seen critically; still it becomes evident that car brands should focus not only on their products but also on the online relationships with their relevant peers. For example, the premium car brand Audi is providing an official YouTube channel amongst others for Germany (Audi Deutschland), with over 440,000 subscribers, and about 50 Million views since 2009. Doing this, companies like Audi expect to intensify the dialogue with their customers as well as to gain valuable insights regarding customers’ perception and customers’ brand related behavior. Still, only very few brands measure the success of their social media activities in its full complexity. Marketing research as well lacks an integrated approach that measures social media activities and their brand related outcomes in one holistic model, combining all important social media relations (brand-to-customer, customer-to-customer, the relation of customers to their preferred brand community, and the relation of customers to the used social media channel (e.g., YouTube or Facebook)). Therefore, the main motivation of our paper is to better understand the interplay of this very relevant part of customer-premium car brand interaction and its impact on customers’ brand perception and customers’ brand related behavior to uncover what “drives the brand on and off the web”. Furthermore, the purpose of this very research is to reveal the effects of different customer relations on the customer’s perception of Audi’s social media presence in general and their official YouTube channel in particular, on their online behavior (e.g. sharing a YouTube link), on the customer’s perception of Audi in general, as well as on the willingness to prospectively buy a car or even to pay a price premium for this brand.

Consequently, in the course of this paper we firstly define social media and relate it to the main characteristics of classic brand communities, in order to deduce the important social media unique relevance features (SMURF). Secondly, based on our theoretical background we introduce our conceptual
model of SMURF and its related outcomes - brand perception and brand behavior. Thirdly, we analyze the results of our study, proving that not only the concept of SMURF could be reproduced but also that SMURF has a significant effect on both Audi customers’ brand perception and behavior.

THEORETICAL BACKGROUND

Social Media

“Social Media is a group of internet-based applications that build on the ideological and technological foundations of the Web 2.0, and that allow the creation and exchange of User Generated Content” (Kaplan and Haenlein, 2010, p. 61). This involves specific sources of online information like e.g. social networks, weblogs, or video sharing platforms that are mainly composed of consumer-generated-contents. Nowadays, many of the most visited websites in the world are social media websites like Facebook or YouTube (alexa.com, 2015). The latter is deemed the second largest search engine behind Google. As customers use social media as their “de facto modus operandi” (Mangold and Faulds, 2009, p. 359) to gather and share brand related information, many marketers have anticipated these developments and the potentials social media has to offer for achieving brand objectives (Van Den Bulte and Wuyts, 2007). Still, classic marketing measures do not cover social media’s dyadic and interactive communication process, as they remain on mainly linear and one-way lines of communication. As we have to include most facets of social media related communication, we have to fall back on measures that cover interactive communication like in brand communities.

Brand Communities and Social Media

The ability of a brand to interact and exchange with its customers has an effect on the level of people’s affiliation with the brand (Keller, 2001, 2003). In a distinct state of interaction and exchange, positive effects on the affiliation are observed as customers feel very connected to the brand, recommend it to friends and family and even form brand related communities with other fans of the brand. Muniz and O’Guinn (2001) describe these brand related communities as “specialized, non-geographically bound [groups that are based] on a structured set of social relations among admirers of a brand” (Muniz and O’Guinn, 2001, p. 412). Although many researchers agree on this definition, they differ in their approaches to measure the customer brand interaction, though (e.g., McAlexander et al., 2002; Algesheimer et al., 2005; Bagozzi and Dholakia, 2006). In our paper we follow the original approach of Muniz and O’Guinn (2001), who define a brand community as a customer-customer-brand triad. Against this background and in consideration of the strong dependency between social media and the channel in and with which the communication takes place, we propose an extension of their model that includes four dimensions covering all social media unique relevance features (SMURF). Figure 1 shows our suggested framework of SMURF.

![Figure 1: Theoretical Framework of SMURF](image-url)
CONCEPTUAL MODEL

Dedicated to the investigation of the impact of social media unique relevance features on customer’s perception and behavior, Figure 2 shows the conceptual model, which forms the theoretical framework for our study and for the development of our hypotheses.

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**Figure 2: Conceptual Model**

**SMURF and Effects on Consumer’s Perception and Behavior**

In order to evolve our hypotheses, we focus on the following proposed effects of social media unique relevance features on consumer’s perception and behavior:

**Social Media Unique Relevance Features and Related Outcomes.** Four core elements define our construct of SMURF, as shown in Figure 1, namely (1) the customer-brand relation, (2) the customer-customer relation, (3) the customer-community relation and (4) the customer-channel relation. As we propose a high influence and relevance of these features on the individuality and uniqueness of a given SMBP, and of the official SMBP of Audi in particular, they constitute the social media unique relevance features. Besides, as the composition of these features affects consumer’s SMBP perception and behavior as well as consumer’s perception of the brand and the brand related behavior, the social media unique relevance features are critical for any SMBP. Therefore, we suggest:

\[ H_{1a}: \text{SMURF has a positive impact on the social media brand presence perception}. \]
\[ H_{1b}: \text{SMURF has a positive impact on the social media brand presence behavior}. \]
\[ H_{1c}: \text{SMURF has a positive impact on customer’s brand perception}. \]
\[ H_{1d}: \text{SMURF has a positive impact on customer’s brand behavior}. \]
Social Media Brand Presence and Related Outcomes. As SMBP rather seems to be a communication and awareness tool than a complementary way to sell products it essentially addresses consumer’s perception of a SMBP as a part of an integrative strategic brand management. Furthermore, a literature review has shown that perception (e.g. trust in a brand) has a directly positive effect on brand related consumer behavior, as for instance on brand loyalty (e.g., Delgado-Ballester and Munuera-Allemán, 2001; Sirdeshmukh et al., 2002; Gurviez and Korchia, 2003; Farrelly and Quester, 2003). In addition, as any experience perceived during a customer’s visit of a brand related SMBP would be addressed to the brand as the host and provider of the SMBP, we suggest:

H<sub>2a</sub>: SMBP perception has a positive impact on the SMBP behavior.
H<sub>2b</sub>: SMBP perception has a positive impact on the brand perception.
H<sub>2c</sub>: SMBP perception has a positive impact on the brand behavior.

Regarding the aspect that the SMBP could be considered as a service of the brand in order to assist its overall strategic brand management, the brand related consumer behavior towards a specific SMBP (e.g. willingness to recommend the social media presence to friends) leads to accumulated experiences, either positive or negative, and repeated usage. Consequently, resulting in an impact on the consumer’s brand perception and their brand related behavior. Therefore, we hypothesize:

H<sub>3a</sub>: SMBP behavior has a positive impact on the brand perception.
H<sub>3b</sub>: SMBP behavior has a positive impact on the brand behavior.

Brand Perception and Related Outcomes. Furthermore, studies have shown that consumer’s brand perception serve as a fundamental key driver of consumer’s brand related behavior (e.g. del Rio et al., 2001; Faircloth et al., 2001). Consequently, we suggest:

H<sub>4</sub>: Brand perception has a positive impact on the brand behavior.

METHODOLOGY

Questionnaire
With regard to the reflective constructs as introduced in the conceptual model, here social media brand presence perception (SMBPP), social media brand presence behavior (SMBPB), brand perception (BP) and brand behavior (BB), we used and adapted already tested measures by Wiedmann et al. (2011). Specifically, any item was rated on a five-point Likert scale (1=strongly disagree to 5=strongly agree). Moreover, a novel measure was developed for social media unique relevance features (SMURF) as our multidimensional formative construct. In this respect, we followed the guidance of index construction (content specification, indicator specification, external validity and indicator collinearity) as proposed by Diamantopoulos and Winklhofer (2001) in order to generate a new formative measurement instrument. Referring to the conceptualization section in the present paper, we understand SMURF as defined by four core elements: Customer-brand relation, customer-customer relation, customer-community relation and customer-channel relation. The created formative indicators were rated on a five-point Likert scale as well (1=strongly disagree to 5=strongly agree). Furthermore, we evaluated each facet of SMURF with one global item rated on a seven-point semantic differential (1=very bad to 7=very good). Against the backdrop of YouTube as our chosen brand-related social media website and Audi as our selected brand company, each reflective and formative measure was specified to the official Audi appearance on YouTube.

Sample
We applied an online survey for the empirical investigation of the conceptualized research model. The subjects were recruited via links on selective car-related websites to contribute actively to an opinion
survey concerning Audi’s official YouTube appearance. Only interviewees who visit Audi’s official YouTube channel within the last six months were allowed to participate in the survey in order to ensure reliable and valid opinion patterns against the backdrop of our introduced research model and the proposed relations. In total, a sample of 109 valid questionnaires was received in winter 2014/2015. The characteristics of the recruited sample are presented in Table 1.

Table 1: Demographic Profile of the Sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 – 24 years</td>
<td>15</td>
<td>13.8%</td>
</tr>
<tr>
<td>25 – 29 years</td>
<td>46</td>
<td>42.2%</td>
</tr>
<tr>
<td>30 – 34 years</td>
<td>12</td>
<td>11.0%</td>
</tr>
<tr>
<td>35 – 39 years</td>
<td>11</td>
<td>10.1%</td>
</tr>
<tr>
<td>40 – 49 years</td>
<td>12</td>
<td>11.0%</td>
</tr>
<tr>
<td>50 – 65 years</td>
<td>11</td>
<td>10.1%</td>
</tr>
<tr>
<td>66 years +</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>No answer</td>
<td>2</td>
<td>1.8%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>43</td>
<td>39.4%</td>
</tr>
<tr>
<td>Male</td>
<td>65</td>
<td>59.6%</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td>0.9%</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>67</td>
<td>61.5%</td>
</tr>
<tr>
<td>Married</td>
<td>37</td>
<td>33.9%</td>
</tr>
<tr>
<td>Divorced</td>
<td>2</td>
<td>1.8%</td>
</tr>
<tr>
<td>Widowed</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>No answer</td>
<td>3</td>
<td>2.8%</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not graduated from high school</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Lower secondary school</td>
<td>6</td>
<td>5.5%</td>
</tr>
<tr>
<td>Intermediate secondary school</td>
<td>10</td>
<td>9.2%</td>
</tr>
<tr>
<td>A-Levels</td>
<td>18</td>
<td>16.5%</td>
</tr>
<tr>
<td>University Degree</td>
<td>71</td>
<td>65.1%</td>
</tr>
<tr>
<td>No answer</td>
<td>4</td>
<td>3.7%</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full time</td>
<td>74</td>
<td>67.9%</td>
</tr>
<tr>
<td>Part-time</td>
<td>7</td>
<td>6.4%</td>
</tr>
</tbody>
</table>
Variable | n | %
--- | --- | ---
Pensioner / retiree | 1 | 0.9
Housewife / husband | 0 | 0.0
Job training | 2 | 1.8
Student | 16 | 14.7
Scholar | 2 | 1.8
Seeking work | 2 | 1.8
No answer | 5 | 4.6

Household Income
- 500 EUR or less | 4 | 3.7
- 501 EUR - 1000 EUR | 6 | 5.5
- 1001 EUR - 1500 EUR | 5 | 4.6
- 1501 EUR - 2000 EUR | 13 | 11.9
- 2001 EUR - 3000 EUR | 20 | 18.3
- 3001 EUR - 4000 EUR | 30 | 27.5
- 4000 EUR or more | 25 | 22.9
- No answer | 6 | 5.5

The majority of the asked subjects was male (59.6 percent), aged between 18 and 29 years (56.0 percent), single as marital status (61.5 percent), with higher education (A-level and university degree: 81.6 percent), fully employed (67.9 percent) and receiving a household income over 3000 EUR per month (50.4 percent). The higher percentage of well-educated and male people, working in a full time and well paid job is indicative of the fact that a) Audi as a premium car manufacturer has an expensive sales price above the average of the regular car market, and b) the brand aura of Audi as highly dynamic, powerful and sporting is extremely attractive for successful business men seeking for some challenge and affirmation as some kind of compensation for the daily (probably) stressful work and routine job as well.

Analysis Technique
The introduced conceptual model was examined in order to check the postulated research hypotheses using PLS structural equation modelling due to the fact that the model has formative (=drivers of SMURF) and reflective measures (=consequences of SMURF). In particular, the analysis software package SmartPLS 2.0 (Ringle, Winde, & Will, 2005) with casewise replacement and a bootstrapping procedure (probing individual sign changes) was used.

RESULTS AND DISCUSSION

Evaluation Criteria for the Results of PLS Path Modeling
The assessment of a structural model's quality is only reasonable if the outer and inner measurement models satisfy certain minimum requirements (Henseler et al., 2009). Therefore, the guideline catalogue
for nonparametric criteria as suggested by Chin (1998) was applied to evaluate the structural model’s quality. In detail, the model assessment refers to the reliability and validity of the measures, the relationship between constructs and the interpretation of path coefficients in a final PLS model as well (Sarstedt et al., 2009).

### Table 2: Manifest Variables of the Formative Measurement Model

<table>
<thead>
<tr>
<th>Social Media Unique Relevance Feature Dimension</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMURF_Customer_Brand_Relation</td>
<td>Please rate your perceived relationship quality between you and BRAND NAME on YouTube.</td>
</tr>
<tr>
<td>SMURF_Customer_Customer_Relation</td>
<td>Please rate your perceived relationship quality between you and the customers of BRAND NAME on YouTube.</td>
</tr>
<tr>
<td>SMURF_Customer_Community_RELATION</td>
<td>Please rate your perceived relationship quality between you and the whole BRAND NAME community on YouTube.</td>
</tr>
<tr>
<td>SMURF_Customer_Channel_RELATION</td>
<td>Please rate your perceived relationship quality between you and YouTube as the used social media channel of BRAND NAME.</td>
</tr>
</tbody>
</table>

### Evaluation of the Formative Measurement Model

All formative indicators used for the multidimensional SMURF construct are reported in Table 2. Even though not all outer weights are significant and above .1 as shown in Figure 3, those indicators (here: Customer-customer relation and customer-community relation) were not omitted from the model due theory-based relevance in providing information to cover all facets of the corresponding construct (Cenfetelli and Bassellier, 2009). Regarding the problem of multicollinearity, as presented in Table 3, the maximum variance inflation factors (VIF) was 3.12 and lies well below under the common threshold of 10 (Diamantopoulos and Winklhofer, 2001). Therefore, in the presented study multicollinearity should not pose a problem indicated by that result. Next, the correlation of all four formative indicators with a global factor that summarize the essence of SMURF was examined in order to assess external validity. On that account, an overall SMURF factor was calculated by mean computation related to five semantic differentials, which are reported in Table 4 (including the results of a factor analysis) and incorporated the overall social media brand appearance on YouTube of the investigated brand Audi. In support of external validity, all formative indicators showed a significant correlation with this global SMURF factor.

### Table 3: Test for Multicollinearity and External Validity

<table>
<thead>
<tr>
<th>Social Media Unique Relevance Features (SMURF): Formative Indicators</th>
<th>Variance Inflation Factor (VIF)</th>
<th>Spearman's rank correlation coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMURF_Customer_Brand_Relation</td>
<td>2.17</td>
<td>0.752 (p=0.000)</td>
</tr>
<tr>
<td>SMURF_Customer_Customer_Relation</td>
<td>3.12</td>
<td>0.640 (p=0.000)</td>
</tr>
<tr>
<td>SMURF_Customer_Community_Relation</td>
<td>2.97</td>
<td>0.635 (p=0.000)</td>
</tr>
<tr>
<td>SMURF_Customer_Channel_Relation</td>
<td>1.55</td>
<td>0.537 (p=0.000)</td>
</tr>
</tbody>
</table>
Table 4: Assessing the Global SMURF Factor

<table>
<thead>
<tr>
<th>Global Statements (How do you rate the overall social media brand presence of BRAND NAME on YouTube?)</th>
<th>Factor Loading</th>
<th>KMO</th>
<th>Average Variance Explained (AVE)</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all attractive — highly attractive*</td>
<td>0.892</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not at all valuable — highly valuable*</td>
<td>0.888</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>very negative — very positive*</td>
<td>0.886</td>
<td>0.868</td>
<td>76%</td>
<td>0.921</td>
</tr>
<tr>
<td>not at all useful — highly useful*</td>
<td>0.874</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>very bad — very good*</td>
<td>0.821</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*seven-point semantic differential

Evaluation of the Reflective Measurement Models
The manifest variables that are reflective indicators for the corresponding measures are presented in Table 5. With .797 being the smallest loading, as presented in Table 6, the results suggest a satisfying indicator reliability. In addition, satisfactory values in terms of internal consistency for all constructs are reached (Bagozzi and Yi, 1988): the average variance extracted (AVE) estimates range from 76% to 80%, the Cronbach’s alphas range from .92 to .95, and the composite reliability values range from .94 to .96. Furthermore, all tested latent variables pass the Fornell-Larcker criterion (Fornell & Larcker, 1981) in support of discriminant validity.

Table 5: Manifest Variables of the Reflective Measurement Models

<table>
<thead>
<tr>
<th>Social Media Brand Presence Perception (SMBPP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMBPP_Image_01 “I like this social media brand presence very much.”</td>
</tr>
<tr>
<td>SMBPP_Image_02 “This social media brand presence is really likeable.”</td>
</tr>
<tr>
<td>SMBPP_Trust_01 “I trust this social media brand presence very much.”</td>
</tr>
<tr>
<td>SMBPP_Trust_02 “I rely on this social media brand presence very much.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social Media Brand Presence Behavior (SMBPB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMBPB_Loyalty_01 “I would recommend this social media brand presence brand to my friends.”</td>
</tr>
<tr>
<td>SMBPB_Loyalty_02 “I would be upset if this social media brand presence doesn’t exist anymore.”</td>
</tr>
<tr>
<td>SMBPB_Usage_Intention_01 “I intend to use this social media brand presence in the future.”</td>
</tr>
<tr>
<td>SMBPB_Usage_Intention_02 “Prospectively, I am aiming to visit this social media brand presence.”</td>
</tr>
</tbody>
</table>
Brand Perception (BP)

BP_Image_01  “I like this brand very much.”
BP_Image_02  “This brand is really likeable.”
BP_Trust_01  “I trust this brand very much.”
BP_Trust_02  “I rely on this brand very much.”

Brand Behavior (BB)

BB_Loyalty_01  “I would recommend this brand to my friends.”
BB_Loyalty_02  “I would be upset if brand doesn’t exist anymore.”
BB_Buying_Intention_01  “I intend to buy products from this brand in the future.”
BB_Buying_Intention_02  “Prospectively, I am aiming to buy products from this brand.”

Table 6: Assessing the Reflective Measurement Models

<table>
<thead>
<tr>
<th>Factor Loadings</th>
<th>Average Variance Explained (AVE)</th>
<th>Cronbachs Alpha</th>
<th>Composite Reliability</th>
<th>Fornell-Larcker-Criterium (AVE &gt; Corr²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMBP_Perception</td>
<td>0.797 – 0.909</td>
<td>76%</td>
<td>0.938</td>
<td>0.951</td>
</tr>
<tr>
<td>SMBP_Behavior</td>
<td>0.850 – 0.915</td>
<td>80%</td>
<td>0.916</td>
<td>0.941</td>
</tr>
<tr>
<td>Brand_Perception</td>
<td>0.871 – 0.912</td>
<td>80%</td>
<td>0.951</td>
<td>0.961</td>
</tr>
<tr>
<td>Brand_Behavior</td>
<td>0.844 – 0.931</td>
<td>79%</td>
<td>0.947</td>
<td>0.958</td>
</tr>
</tbody>
</table>

Note: SMBP = Social Media Brand Presence

Evaluation and Discussion of the Structural Model

Next, the coefficients of determination of the endogenous latent variables (R²) were assessed. Figure 7 illustrates the estimated R², which range from .43 to .71. With reference to Chin (1998), those values can be termed as moderate to substantial. Furthermore, a blindfolding procedure (cross-validated redundancy) was run to evaluate Stone-Geisser Q-square values (Tenenhaus et al., 2005). With .32 being the smallest Q² value, all values are well above zero (Geisser, 1974; Stone, 1974), thus indicating a reasonable predictive performance of the introduced PLS model.

Table 7: Assessing the Structural Model

<table>
<thead>
<tr>
<th>Endogenous LV</th>
<th>R²</th>
<th>Q²</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMBP_Perception</td>
<td>0.430</td>
<td>0.316</td>
</tr>
<tr>
<td>SMBP_Behavior</td>
<td>0.652</td>
<td>0.521</td>
</tr>
</tbody>
</table>
Testing the Hypotheses

In order to test the significance of the path coefficients between the latent variables, and therefore to analyze the proposed hypotheses, a nonparametric bootstrapping procedure (individual sign changes, 109 cases and 1090 subsamples) was applied. As shown in Table 8 regarding the estimated path coefficients, the following insights with reference to our initial hypotheses are revealed.

<table>
<thead>
<tr>
<th>Exogenous LV → Endogenous LV</th>
<th>Original Sample</th>
<th>Sample Mean</th>
<th>Standard Deviation</th>
<th>Standard Error</th>
<th>T Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMURF → SMBP_Perception</td>
<td>0.656</td>
<td>0.666</td>
<td>0.062</td>
<td>0.062</td>
<td>10.611</td>
</tr>
<tr>
<td>SMURF → SMBP_Behavior</td>
<td>0.180</td>
<td>0.188</td>
<td>0.077</td>
<td>0.077</td>
<td>2.340</td>
</tr>
<tr>
<td>SMURF → Brand_Perception</td>
<td>0.332</td>
<td>0.340</td>
<td>0.135</td>
<td>0.135</td>
<td>2.465</td>
</tr>
<tr>
<td>SMURF → Brand_Behavior</td>
<td>0.016</td>
<td>0.068</td>
<td>0.050</td>
<td>0.050</td>
<td>0.309</td>
</tr>
<tr>
<td>SMBP_Perception → SMBP_Behavior</td>
<td>0.678</td>
<td>0.673</td>
<td>0.075</td>
<td>0.075</td>
<td>9.046</td>
</tr>
<tr>
<td>SMBP_Perception → Brand_Perception</td>
<td>0.266</td>
<td>0.274</td>
<td>0.147</td>
<td>0.147</td>
<td>1.808</td>
</tr>
<tr>
<td>SMBP_Perception → Brand_Behavior</td>
<td>-0.076</td>
<td>-0.099</td>
<td>0.076</td>
<td>0.076</td>
<td>0.998</td>
</tr>
<tr>
<td>SMBP_Behavior → Brand_Perception</td>
<td>0.183</td>
<td>0.200</td>
<td>0.125</td>
<td>0.125</td>
<td>1.458</td>
</tr>
<tr>
<td>SMBP_Behavior → Brand_Behavior</td>
<td>0.177</td>
<td>0.172</td>
<td>0.091</td>
<td>0.091</td>
<td>1.942</td>
</tr>
<tr>
<td>Brand_Perception → Brand_Behavior</td>
<td>0.767</td>
<td>0.763</td>
<td>0.080</td>
<td>0.080</td>
<td>9.612</td>
</tr>
</tbody>
</table>

Note: SMBP = Social Media Brand Presence

$H_{1a}$, $H_{1b}$ and $H_{1c}$ are confirmed; $H_{1d}$ is declined. Regarding the first set of hypotheses, an effect was proposed from SMURF on brand-related social media brand presence and brand performance as well. Against the background of the PLS estimation, a highly significant and positive impact of social media unique relevance features (SMURF) on social media brand presence perception (SMBPP), social media brand presence behavior (SBMPB) and on brand perception is revealed, whereby the direct relation between SMURF and brand behavior is not significant. These results are supportive of $H_{1a}$, $H_{1b}$ and $H_{1c}$, but not of $H_{1d}$.

$H_{2a}$, $H_{2b}$, $H_{3b}$ and $H_{4}$ are confirmed; $H_{2c}$ and $H_{3a}$ are declined. The second to fourth set of hypotheses postulates different relationships between the adequate constructs of social media brand presence and brand as well as among themselves. Direct effects of social media brand presence perception (SMBPP) on social media brand presence behavior (SBMPB) and on brand perception are indicating by the estimated path coefficients, but not on brand behavior. Moreover, the results reveal a moderate and significant
impact of social media brand presence behavior (SBMPB) on brand behavior; whereas the relation between social media brand presence behavior (SBMPB) and brand perception is not significant. Finally, the effect of brand perception on brand behavior is highly significant and strong as proposed. Thus, the findings provide support for $H_{2a}$, $H_{3b}$, $H_{3b}$, and $H_{4}$, but there is no support for $H_{2c}$ and $H_{3a}$.

**Figure 3: Structural Model**

**Additional Impact Indicator Analysis**

The outer weights shown in Figure 3 indicate the relative importance in representing the formative construct of SMURF. In the present study, customer-brand relation (.63) has the highest impact on SMURF. Moreover, the results indicate a moderate importance of customer-channel relation (.20), which is well below the relevance of customer-brand relation but still significant. In contrast, the impact of customer-customer relation and customer-community relation on SMURF are not significant. In the light of that additional analysis, Audi’s social media and brand manager in charge should address customer-brand relation and customer-channel relation by prioritization in order to enhance and strengthen a) the social media brand presence as well as b) the “regular” brand appearance. Following Audi’s advertising slogan “Truth in Engineering” (original phrase in German: “Vorsprung durch Technik”), the SMURF measurement approach identified key success factors by some kind of customer relationship and brand management re-engineering in order to “drive the brand on and off the web”.

AGBA 12th World Congress
Page 667 of 1173
CONCLUSION AND FURTHER RESEARCH

Scientific Contributions
The first contribution of this research is to provide a multidimensional framework of value-based drivers of social media unique relevance features with special focus on the official YouTube brand presence of Audi. Second, the empirical study findings contribute to explain the consequences of social media attractiveness such as unique relevance features, which provide a great brand appeal. Furthermore, our structural model and the sample of Audi-related YouTube users reveal the relevant features in order to influence customer’s perception and behavior regarding the social media brand presence (e.g. share a video with their peers) and regarding general brand perception and brand related behavior (e.g. willingness to pay a price premium). At least for the video sharing platform YouTube, Audi’s marketing managers do not have to focus on the customer-customer and the customer-community relation on their social media presence but more on the customer-brand and customer-channel relation, in order to exploit the potential of SMURF and to gain positive effects on the brand Audi on and off the web. Third, with reference to our conducted study, another interesting finding follows from the interplay of the social media brand presence (the official Audi YouTube channel) and customers’ brand perception and brand behavior. Whereas the social media brand presence perception and SMURF itself have significant positive effects on the perception of Audi in general, neither of them affects the brand related behavior.

Next Research Steps
In a next research step, the presented framework should be extended in two ways. First, all SMURF dimensions should be refined in an expanded quantitative level of detail (e.g. customer-brand related fairness or knowledge sharing), since all four dimensions have a limited explanatory scope due to their qualitative characteristics. A holistic model enlargement would provide brand manager with valuable information if and how their social media brand presence enhances social media-related as well as brand-related key performance indicators. Second, our multidimensional framework should be tested against the background of a scenario (B2B vs. B2C) or product category (luxury vs. consumer goods) comparison, so that resilient insights regarding the generalization of our assumptions and findings could be revealed. In sum, we hope that our research can start a vital discussion about social media and its successful measurement at the upcoming conference.

Your feedback is greatly appreciated!

REFERENCES


The remainder of the references cited in this paper are omitted due to space considerations. Interested parties are invited to contact the author for a complete copy of the paper.
Examining the Innovative New Design in Simulating Teaching Course on Entrepreneurship: Case Study of Polytechnic Approach in Learning

Keywords: New Product Design, Teaching of Technology and Innovation, Entrepreneurship, Engineering Lectures, Malaysia

INTRODUCTION

Innovation is not a new concept in education in Malaysia. Recent literature has offered a more integrated framework, considering both strategic aspects and firm profitability in a balanced scorecard perspective with a cause and effect relationship between leading and lagging indicators.

The former is just a measure of input, not considering the productivity and the effort spent in the innovation process, and the latter is the ‘‘official’’ result of a process of invention and a partial measure of output, unable to capture other intangible investments in innovation (Mairesse & Mohnen, 2005; Mairesse, Mohnen, & Dagenais, 2006). There is several kinds of innovation, for example, product, and process and improvements organizational structure. Innovation requires widespread reform to ensure Malaysia provides a commercial neighbourhood of a highly flexible, and harmonize.

Education and Training agenda of innovation depend on the success of Malaysia who flatter value openness, critical thought and dared to attempt and take risks. This requires an arrangement of pedagogy that fosters the insane capital creative and analytical. The primary focal point of entrepreneurship training and programs in polytechnics is to influence attitudes, knowledge, accomplishments, experiences and competencies of entrepreneurship to the students irrespective of their background (Norasmah, Halimah, Zaidatol, 2006; Rafidah, 2008). This paper aims to examine how far the use of new product design in the innovation of teaching and learning among engineering lecturer from a technical perspective.

INNOVATION IN TEACHING TECHNIQUE APPROACH

Education is a process that aims to bring changes to an individual in accordance to the norms and values of a society. In this modern age, educators are responsible for providing education and producing changes in behaviour over a person. They should understand that idea requires proper, adequate and careful strategizing to ensure changes can be implemented successfully.

The measurement of innovation has also generated a lot of debates from different analysis perspectives. The most typical indicators used are Research and Development (R&D) expenditures and patents (OECD, 2002). Nevertheless, the former is just a measure of input, not considering the productivity and the effort spent in the innovation process, and the latter is the ‘‘official’’ result of a process of invention and a partial measure of output, unable to capture other intangible investments in innovation (Mairesse & Mohnen, 2005; Mairesse, Mohnen, & Dagenais, 2006).
Innovation is often intended to be as synonymous for R&D, especially in everyday life. However, literature typically refers to the broader meaning of the word, which embraces investments in R&D and technology (Lev, 2001; Lev, Nissim, & Thomas, 2005), new processes, new products, innovation in terms of marketing and organization and investment in training of human resources. Government, academicians and executives have considered innovation as the main source of economic growth and increasingly competitive advantage.

TEACHING AND LEARNING

The tide of change occurring in our country to make the process of educating students is increasingly complex. Thus, the main goal of education for the present day generation is to address the challenges of rapid change in development. At the same time, educators should also help students in order to offset the mental and emotional well-being that can lead to the formation of unhealthy behaviours. This goal can be achieved if educators today are aware of the changes and know that these changes require impartation from various aspects including responsibilities, workload, addition of knowledge and the role that should be played. According to Haris (1993), understanding the teacher about innovation in teaching and learning is important for observing the success of its implementation. Failure in carrying out its mission of implementation is sure to raise a bad impression to potential recipients, namely students. Addressing the changes in requirements, educators need to master innovation technologies that are always changing as well as enhance our knowledge.

Educators should practice the culture of reading, learning, thinking and writing. According to Sharil et al. (1999), through practice and appreciation of the culture of knowledge, educators can be a role model to students’. Without the construction of knowledge in innovation in teaching and learning, targeted quite difficult. An increase in knowledge and appropriate technology used by educators to solve problems depends on the ability of the teacher to be a facilitator, problem solver, a catalyst and driver for learning.

ISUES IN THIS CONTEXT

The case study is about Polytechnic Sultan Abdul Halim Mu’adzam Shah roles of new design in simulation teaching and learning course on entrepreneurship module PB201. Research study on simulation teaching and learning have been studied to get data, as previously as so far research conducted to ensure the validity of relationships is still at infancy stages. As well as not in line with the targeted areas of competency knowledge, a lecturer who runs entrepreneurship subjects is the main contributing issue in this approach. Entrepreneurship requires greater emphasis on skills and attitudes in comparison to its knowledge. This being an obstacle because the competency level of the lecturers who dominated the practical aspects of entrepreneurship is still limited. (Mohd Zahari, 2010).

Therefore, Department of Polytechnic Education in 2009 mentioned that the Transformation Plan of the Polytechnics is expected to produce graduates who have marketable skills and are enterprising by the year 2015. Ismail (2013) point out there is some methods by which entrepreneurship education can be taught effectively in Malaysian polytechnics. The finding confirmed that polytechnic lecturers still not imbued with entrepreneurial tendencies. In this regard, it is in line with Smilor (1997) who mentions that “Effective entrepreneurs are exceptional learners”. They learned from everything around them. They learn from customers, suppliers, and especially competitors. They learn from employees and associates. They learn from other entrepreneurs. They also learn from the experience, from what works and, more importantly, from what doesn’t work.
The methodology of the study undertaken to identify the technical educators knowledge about innovation teaching and learning in Polytechnic. SPSS as a tool is use to analyse and important factor to achieve the results that have validity and reliability. Therefore, the method of sampling and analysis is the most important thing before a decision is made.

A number of things related to steps running study of innovation in the teaching and learning among the technical educators from the perspective of the teacher is as follows:

a) Design of study: quantitative methods used to collect the data surveyed by using questionnaires. (Mohd Najib, 2003) stated that the survey method through the use of the questionnaire has been widely used because it is an effective and practical way to get information.

b) Population and sample study consisted of all engineering lecturer who teaches the subject of entrepreneurship from the four departments of engineering at POLIMAS. A total of 35 lecturers have been identified. Based on tables R.V and Morgan D.W. (1970), for a population of 35 should take at least 32 people as samples.

c) The review procedures in this instrument, the respondents are asked to indicate an answer to round a number representing each statement produced based on the Likert Scale. According to (Mohd Najib, 1999), this scale is used to assess attitudes in various situations and circumstances. (Yahya, 2004) stated that the scale of Likert used to assess both direction of the attitude which is positive and negative and the strength of the attitude of respondents towards a statement submitted. The score for each item will be submissive to combination and a percentage value is obtained to determine the degree of frequency of agreement by the respondents.

ANALYSIS AND RESULT

According to (Majid, 1994), data processing is a technique for collecting, processing, storing and analysing data. Descriptive statistical analysis were performed on the data collected. Analysis of these data is done manually by calculating the number of respondents, the percentage of and mean. All data collected through the questionnaire will be reviewed in advance so that all instructions are followed correctly.

Table 1: Item analysis of Innovation Practice by Percent (%) and Min

<table>
<thead>
<tr>
<th>Item</th>
<th>Respondent Percent (%) and Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>I'm using computer software in my T&amp;L</td>
<td>SNA 2.5 7.5 57.5 32.5 4.2</td>
</tr>
<tr>
<td>I use technological tools in T&amp;L</td>
<td>NA 2.5 2.5 70.0 25.0 4.2</td>
</tr>
<tr>
<td>I use multimedia software in T&amp;L</td>
<td>NS 5.0 5.0 45.0 45.0 4.3</td>
</tr>
<tr>
<td>I created induction set my T&amp;L</td>
<td>A 7.5 5.0 70.0 17.5 4.0</td>
</tr>
<tr>
<td>I conduct T&amp;L in English language</td>
<td>SA 20.0 5.0 47.5 22.5 3.6</td>
</tr>
<tr>
<td>My T&amp;L is student-centred</td>
<td>Min 5.0 5.0 2.1 62.5 30.0 4.2</td>
</tr>
<tr>
<td>I use Problem Based Learning in my T&amp;L</td>
<td>12.0 25.0 47.5 10.0 3.5</td>
</tr>
<tr>
<td>I train students to apply thinking skill in learning process</td>
<td>5.0 12.5 45.0 42.5 4.3</td>
</tr>
<tr>
<td>I inculcate in students the culture of knowledge</td>
<td>7.5 52.5 40.0 4.3</td>
</tr>
</tbody>
</table>
From the findings obtained, it can be concluded that the adaptation of innovations in teaching and learning in engineering lecturer of POLIMAS is at a high level with a mean score of 4.10. This is because all items are mostly obtained from respondents practicing innovation in teaching and learning in POLIMAS well.

For the tenth item, namely, teaching lecturer strategy in advance before teaching and learning is to have the highest mean score (mean = 4.48). According to Saipo (2001), education is a process and an activity that aims to bring change into someone. In modern times, the lecturer is responsible to provide an education and produce changes in behaviour over a person. Lecturers should understand the idea changes and carefully strategize to ensure changes are implemented successfully.

This statement is in line with the opinion of Hamdan et al. (2004) in which with the availability of the restructuring strategy prior to teaching and learning undertaken will ensure that every objective accomplished, lecturer adhere with rules, reference materials and lecturers are also able to schedule sufficient time for the duration of the content classes.

The changes in the innovation in teaching and learning, lecturers should utilize the fast evolving technology to enhance our knowledge. Lecturers must adapt a culture of knowledge such as reading, thinking, writing in teaching and learning. This is available for the items to nine, with the second highest mean score (mean = 4.32), lecturer of cultural knowledge in the practice of teaching and learning. According to Sharil et al (1999), through practice and appreciation of knowledge, it can be exemplary to their students. Without the application of knowledge in teaching and learning innovation, the targeted goal achieved is quite difficult.

For other items, the respondent has agreed to use technological equipment with software like Autocad, Sketch-up, Microsoft Power Point etc, to supplied to facilitate teaching and learning. The majority of respondents to build an introduction at the beginning of the content set of lessons in order for students to understand the topic that will be taught. In addition, respondents also agreed to adapt a student-centred learning as well as to train students with the skills to utilize students’ own independent thinking to find information without the help of lecturers.

Nevertheless, the result of the fifth item is found that respondent carries out teaching and learning in English are at moderate levels (mean = 3.62). The rationale of transition to English medium in entrepreneurship module is the responsibilities of the government’s to achieve a developed nation status preparations should be given from the medium stages of education to compete in the era of globalization.

The seventh item has the lowest mean (mean = 3.45) in respondents is problem based learning (PBL) skills in teaching and learning. The respondent may not understand or be equipped to implement PBL is not enough to adopt PBL in teaching and learning. PBL is an innovation where the learning process using this method showed good results by researchers who use it. Design the new product will be given the solution for students to enhance the knowledge and simulate the themselves as a entrepreneurial students.

**CONCLUSION**

As a result of the review, the use of new product designs is still new to being practiced among Polimas. They need to be exposed to the culture of innovation and simulation so that students can better understand
Examining the Innovative New Design in Simulating Teaching Course on Entrepreneurship: Case Study of Polytechnic Approach in Learning

and experience being an entrepreneur. This method is also seen as the catalyst to nourish the interest of students into becoming a successful entrepreneur. Simulation methods should be practiced by certain quarters to bear entrepreneurial success in the subject because with the production of new product designs by students the programme will be made effective. Lecturers that implement innovation and appropriate practices have also been in teaching and learning as recommended by the curriculum. But, this aspect has to be given priority is training. Adequate training should be given to the lecturer to equip themselves with new methods in teaching and learning, the usage of technology has increasingly become sophisticated with equipment and techniques in depth. This will facilitate the teaching and learning process to run smoothly.

Most of the lecturers have the desire to improve themselves in relation to responsibilities as a professional. These include the teaching and ability to govern and lead their students. Someone should expose to the lecturers inteaching the latest techniques or learn how to use simulation plays an important role in the classroom so that teaching and learning become more interesting and easily accepted by students. Lecturers would also like to learn all the knowledge related to their field by attending seminars, specialized or related program.

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AGBA 12th World Congress
Page 674 of 1173
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Teaching and Learning Innovation in Entrepreneurship Education: A Systematic Review of the Evidence

Keywords: Entrepreneurship Education, Teaching and Learning

INTRODUCTION

Innovation in education and entrepreneurship training has been introduced. It was first introduced by Myles Mace at Harvard University through entrepreneurial subjects (Katz, 2003). Until now there are several types of entrepreneurship training conducted in universities and colleges in the United States. These statements are based on the existence of 200 subjects who had been taught in more than 1,600 pieces of these institutions. It includes 277 institutions that provide a venue for entrepreneurial activity, 44 institutions are related to academic research on entrepreneurship and more than 100 hundred founders and financiers for the development of entrepreneurship (Kuratko, 2005).

Definition of Innovation Entrepreneurship Education

Education and Training agenda of innovation depend on the success of Malaysia who flatter value openness, critical thought and dared to attempt and take risks Entrepreneurship education can be incorporated as an education that develops individual characteristics and abilities of entrepreneurship, creation of awareness about the creative, entrepreneurial teaching knowledge and skills to generate business whether or not (Muhammad Harun and Khairul Anuar Ahmad Husaini, 2008; Mwasalwiba, 2010; Othman, 2002). In addition, entrepreneurship education is the process providing individuals with the ability and capacity to seek and evaluate commercial opportunities, increase self-esteem, their knowledge and skills to start a business (Mwasalwiba, 2010; Othman, Othman, Tin, & Ismail, 2012).

Innovation in Entrepreneurship education has been considered as being one of the key instruments to enhance the entrepreneurial attitudes of both potential and nascent entrepreneurs (Ahmad, 2013). Entrepreneurship education is not only about the transfer of knowledge, but also about facilitation of knowledge creation processes; and it is not only about cognitive knowledge about a scientific field, but also about the ability to discover new opportunities and masterventure creation processes (Balan and Metcalfe, 2012; Mwasalwiba, 2012).

(Matlay, 2008) appear to be attentively entrepreneurship education as the equipped formal delivery of entrepreneurial knowledge. Entrepreneurial knowledge refers to the impression, skills and mentality individual owners’ use during the course of starting up and developing their businesses. According (C. Jones & English, 2004) entrepreneurial education is the process of providing individuals with the ability to recognise commercial opportunities and the insight, self-esteem, knowledge and skills to act on them.
It be acknowledged in the literature that innovation in entrepreneurship knowledge and skills can be taught and developed provided the appropriate environment is provided (Gibb & Hannon, 2006) and that education plays an important role in the process of building entrepreneurial capacity (Gibb & Hannon, 2006). (Gibb, 2002) suggest that there are three main objectives for introducing entrepreneurship education: develop a wide understanding of entrepreneurship (Pihie and Salleh, 2009) obtain an entrepreneurial mindset (Hytti and O’Gorman, 2004), as well as how to start and drive an enterprise effectively (Solomon, 2008).

According Li, (2011) in the writings of the view that entrepreneurship education is a key instrument for improving the entrepreneurial attitude of individuals that have the potential to be involved in entrepreneurship. This view is consistent with the opinion of (Kemat and Yusof, 2011) stated that the entrepreneurial attitude among students can be nurtured through entrepreneurship education.

Based on table 1 show the key element definition entrepreneurship education. Based on the explanations mentioned above, the researchers agree with (Pihie, Bagheri, & Sani, 2013) which states that the definition of entrepreneurship education are varied depending on the perception and evaluation of a person who termed it.

### Table 1: Key Definition Entrepreneurship Education

<table>
<thead>
<tr>
<th>References</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gibb, (2005),</td>
<td>Developing Knowledge, awareness</td>
</tr>
</tbody>
</table>

Sources: Illustrate author

According Li, (2011) in the writings of the view that entrepreneurship education is a key instrument for improving the entrepreneurial attitude of individuals that have the potential to be involved in entrepreneurship. This view is consistent with the opinion of (Kemat and Yusof, 2011) stated that the entrepreneurial attitude among students can be nurtured through entrepreneurship education.

**Teaching and Learning Entrepreneurship Education**

Determining the teaching technique depends first on the objectives of the course (Arasti, Kiani Falavarjani, and Imanipour, 2012). Jones, (2010) suggest three purposes for entrepreneurship education: education about (giving students an understanding of the nature of entrepreneurship and the entrepreneurial process), education for (preparing students to start their own business) and education in enterprise (as hands-on training for entrepreneurs in their own business).

This is supported by Jones and Iredale (2010) suggest that entrepreneurship education requires experiential learning styles, creative problem solving and learning by doing in order to engage students. Learning by doing could provide a basis for selecting suitable teaching methods. For example (Linan, 2008) have argued that “entrepreneurial skills are learned in a variety of ways and methods.

Jamieson (1984) has divided entrepreneurial education into three classes, i.e. education about for and in enterprise. Herrmann et al. (2008) have quarrel that in entrepreneurial education there be supposed to be
“a shift from transmission models of teaching (learning ‘about’) to experiential learning (learning ‘for’)” in order to “offer students techniques that can be applied in the real world”. Politis (2008) has affirmed that entrepreneurial teaching, i.e. “attempts to stimulate entrepreneurial activities through formal training and education” are “not likely to have a strong and direct impact on the development of entrepreneurial knowledge.

In order to achieve this deep learning, some educators suggest that entrepreneurship education should be connected to practice and be seen by students to be practical so that they are encouraged to develop skills essential for success as an entrepreneur (Arvanites et al, 2006)

Nevertheless entrepreneurship education teaching needs to be learner-centred, and help students to understand elements of entrepreneurial activity (Gibb, 2002; Jones and Iredale, 2010; Linan, 2008). Teaching methods that might best engage a particular group of students in order to convey the desired body of entrepreneurship knowledge, and stimulate future learning (Balan & Metcalfe, 2012). However in order to enhance entrepreneur knowledge teaching method be important to educator rising entrepreneurial attitude engage nascent entrepreneur.

According the argument several researcher classify the teaching methods into following categories: case Study, group discussion, individual presentation, individual written report, group project, formal lectures, guest speakers, action learning, seminar, web-based learning, video recorded (Maritz & Brown, 2013).

The study by Solomon (2002) highlighted that the most popular teaching methods in entrepreneurship education are creation of business plans, case studies and lectures. However, (Hytti & O’Gorman, 2004) advocate different outlook as they argued that there are many ways to offer entrepreneurship education, depending on the objectives of such education.

It seems that commonly author categorize teaching methods into two groups, which are termed “traditional methods” (comprising normal lectures) and “innovative methods” (which are more action-based), also known as “passive methods” and “active methods”, respectively (Mwasalwiba, 2010).

The selection teaching and learning methods should be appropriate to the style of the students and the learning objectives (Reece and Walker, 1997). Selection of appropriate teaching methods need to be made because the aspects that have a positive relationship to student achievement (Othman, 2000). This opinion was in line with studies carried out by (Kolb, 1976) and (Fry, 1978) indicating that the method of teaching and learning is an important indicator of student achievement. Thus the choice of teaching methods be corresponding to topics to be studied by students be able to enhance understanding and performance of student (Mohamed, Rezai, Shamsudin, and Mahmud, 2012).

Nevertheless, methods a traditional approach to teaching and learning that are often used by lecturers in delivering information to students (Lourenco and Jones, 2006). However, criticism of Sexton and Upton (1987) argues that the traditional teaching style of the is not appropriate for teaching and learning entrepreneurship. Learning and teaching entrepreneurship should be active and passive open it requires action to implement innovative ideas in line with the entrepreneurial function (Sharif, Hazri, Mohamd and Jusoff, 2010).

| Table 2: Entrepreneurship Education Teaching Methodology |
|-----------------|-----------------|
| References      | Teaching Methodology |

AGBA 12th World Congress
Page 677 of 1173
CONCLUSION AND RECOMMENDATION

This article explores the specific teaching methods and makes it possible to identify which ones make the greatest contribution to overall student engagement. Teaching methods have an important role in entrepreneurship education (Ahmad, 2013; Balan & Metcalfe, 2012; Mwasalwiba, 2010; Othman, 2002; Pittaway et al., 2009). Previous studies mentioned the importance of entrepreneurship education and its effect on development of countries. Although researchers have been investigated in the field of entrepreneurship education, a few studies have been conducted on the subfield of teaching methods.

Effectiveness of entrepreneurship education is largely related to the teacher's skills and his (or her) knowledge of using different teaching method, specifically the methods of teaching entrepreneurship (Cheng, Chan, & Mahmood, 2009). This study tried to review the teaching methods in entrepreneurship education and provide a list of these teaching methods.

It is recommended that the entire set of education and training activities within the educational system which provides ample knowledge and inspiration for entrepreneurship develop in the students’ intention to execute entrepreneurial behaviours and prospect of choosing an entrepreneurial career may increase among young people. This had supported Shapero’s (1982) findings where it was argued that attitudes toward entrepreneurship should partly derive from prior exposure to entrepreneurial activity and shape intentions through changing attitudes. It is noticeable that this result confirms the key role of educational support in the development of entrepreneurial intention.

REFERENCE


The Influence of Perceived System Quality and Perceived Information Quality towards Continuance Intention of Tax E-Filing System in Malaysia

Keywords: e-Government, e-Filing, Continuance Intention, Perceived System Quality, Perceived Information Quality

INTRODUCTION

In this twenty first century, organizations are competing each other's to survive in this globalization arena. Not only organizations, government sectors of each countries also facing challenges and keep on finding the best ways to provide the better government services to their citizens. For that government agencies increasingly explore and giving priority for information and communication technologies (ICTs) to improve, advanced the delivery of government services and information (Azmi, Kamarulzaman, & Hamid, 2012; Chen, 2010) by using internet as a powerful tool to deliver government services via electronic means (Wangpipatwong, Chutimaskul, & Papasrаторn, 2009) to the benefits of citizens and organizations. As the tremendous growth of internet users worldwide (Internet World Statistics, 2013), affordability and accessibility of ICT (Ahmad, Markkula, & Oivo, 2013) offers government a new medium to reach their citizens (Ahmad et al., 2013) and transformed the delivery of services from traditional services (manual method) to electronic means (Satapathy, Mahapatra, Patel, Biswas, & Mishra, 2014). Thus, to cater the citizens' needs and to take priority of speedy growth of internet popularity government launches electronic government (e-government) services (Vathanophas, Krittayaphongphun, & Klomsiri, 2008) for the benefits of citizens and government.

According to recent survey conducted by UNPAN (2014) the number of e-government usage in most of developing countries is lower than 50 percent and suggested that more improvement is needed on demand side to increase take-up of e-government. There is also great deal of attention is needed for the developing countries to makes e-government projects successful (Rehman, Esichaikul and Kamal, 2012). Thus, according to Alalwan (2013), initial adoption and at same time subsequent continued usage of e-government services necessary to receive the maximum benefit of e-government service. While initial adoption of e-government services is a key indicator of e-government success, but this does not necessarily lead to the desired outcome unless a significant number of citizens move about beyond the initial adoption and use the e-government services on continual basis (Wangpipatwong et al., 2009). Moreover, even a technology is success in initial adoption, users' will re-evaluate their decision and may decline or discontinue use it in future again if that technology does not meet user's requirement (Bhattacherjee, 2001; Hernandez-Ortega, Serrano-Cinca, & Gomez-Meneses, 2014; Limayem & Hirt, 2003; Wangpipatwong, Chutimaskul, & Papasrаторn, 2008).

Therefore, understanding factors that influences continuance (continued use) intention towards e-government services is an essential step to achieve government goal (Alalwan, 2013) particularly in e-
The Influence of Perceived System Quality and Perceived Information Quality towards Continuance Intention of Tax E-Filing System in Malaysia

filing context which is target to achieve 80 percent usage near future (Islam et al., 2012), to reduce more operation and management cost (Thominathan & Ramayah, 2014) and to ensure success of this services (Hu, Brown, Thong, Chan, & Tam, 2009). At the same time, continuance intention at individual level have been deems to be important for long term sustainable of web-based services (Lee & Kwon, 2011) and central to the survival for the electronic service providers (Bhattacherjee, 2001). By analysing existing literatures in continuance intention, despite past researches provide profound importance of user's continuance intention, to date most of the prior studies have been focused more on initial adoption of e-government services (Aziz & Idris, 2012b; Azmi et al., 2012; Azmi & Kamarulzaman, 2010; Azmi & Bee, 2010; Hussein et al., 2011; Ilias & Razak, 2009; Ilias, Suki, Yasoa, & Rahman, 2008; Lean et al., 2009; Ramayah, Yusoff, Jamaludin, & Ibrahim, 2009; Ramoo et al., 2013; Suki & Ramayah, 2010; Tallaha et al., 2014) while very less research is focused on continuance (continued use) intention (Belanche, Casalo, Flavian, & Schepers, 2014; Hoehle, Huff, & Goode, 2012; Santhanamery & Ramayah, 2012) which is about what happens beyond the initial adoption stage (Limayem, Hirt, & Cheung, 2007) empirically in e-government services and specifically in e-filing context in Malaysia.

This shows that, less focused is considered in the long-term engagement and interactions among e-government service provider and citizen (Chatfield & AlAnazi, 2013). Thus, given the paucity of research on continuance intention both generally in e-government context and particularly in e-filing context, to fill this gap in the literature, this research attempt to provide to examine the influence of perceived system quality and perceived information quality towards citizens' continuance intention of tax e-filing system in Malaysia by review the literatures.

Although tax e-filing system have improved, gained significant response and existed many years in most of the countries including in Malaysia, issues regarding system quality such as technical difficulties, functional difficulties, slow processing speed, system breakdown and downtimes issues which forced the users to queue in the system still exist (Chen, 2010; Chen et al., 2015; Chumsombat, 2014b; Hussein et al., 2011) and this caused user dissatisfied and weaken overall users' perception towards the system (Chen et al., 2015). Other than that, issues such as imbalance and asymmetrical information regarding taxpayers incomes and deductible expenditures impacts negative perception towards e-filing system information quality (Chen, 2010). Hence, regardless how good are the information is, if it cannot proceed effectively and efficiently, overall perception will become negative (Chen, 2010; Chen et al., 2015; Chumsombat, 2014b; Hussein et al., 2011).

In online tax filing system, when citizens use the system needs to download necessary documents, navigate different pages, precise and sufficient information at right time to complete task related activities (Saha, Nath, & Salehi-Sangari, 2012). Even, quality perception largely formed through user's personal previous experiences with the technology itself, but in post adoption context this perception can have direct effects on users' future intention to use or not (continuance decision) that technology again in future (Teo et al., 2009). In this regards, based on above scenario, it is reasonable and meaningful to understand the influence of perceived system quality and perceived information quality on continuance intention towards tax e-filing system. Moreover, as to best of researcher knowledge, the literatures lacks empirical research that confirms the importance of perceived system quality and perceived information quality towards continued use intention specifically in e-filing context.

Hence, this research attempt to explore the relationship of perceived system quality and perceived information quality on continuance intention towards tax e-filing system in Malaysia. Moreover, from review of previous studies, have identified that the extant of prior studies extensively focused on examination of system quality and information quality perception towards initial intention to use and subsequent satisfaction in e-government and e-filing context (Almahamid et al., 2010; Ilias & Razak, 2009; Khayun & Racham, 2011; Rehman et al., 2012; Wang & Liao, 2008) while very little attention given on quality factors to examine continued use tax e-filing system context.
LITERATURE REVIEW

Perceived system quality

Perceived system quality is defined as an evaluation of performance of the a system features based on users' own experience of using the system (as cited in Zheng, Zhao, & Stylianou, 2013). While, as cited in Teo et al. (2009) defined perceived system quality as users' perception about the technical performance of the website in the form information retrieval and delivery.

Prior researchers found that system quality in initial intention to use and consequent on satisfaction in e-government context (Almahamid et al., 2010; DeLone & McLean, 1992, 2003; Ilias & Razak, 2009; Khayun & Racham, 2011; Rehman et al., 2012; Wang & Liao, 2008; Yahya, Nadzar, & Abdul, 2012). For example, Yahya et al. (2012) found that system quality have significant positive influence on intention to use e-Syariah portal in Malaysia. According to DeLone and McLean (2003) system quality is one of key factor that influence satisfaction and intention to use. The higher the quality of the system will contribute to more use, more satisfaction and positive net benefits, conversely if the system have poor quality will cause to user dissatisfaction and negative net benefits (DeLone & McLean, 2003). Other than that, if the system does not meet users need, further use will be avoided by user of the system (as cited in (Wangpipatwong et al., 2009).

Thus, from review of previous studies, system quality were used as a determinants on initial intention to use an information system but very lack of studies used this determinants to examine the continuance intention generally in e-government context (Wangpipatwong et al., 2009) and specifically in the e-filing system. Impact of system quality on continuance intention has received little attention from previous researchers (Islam, 2012; Ramayah, Ahmad, & Lo, 2010; Teo et al., 2009; Wangpipatwong et al., 2009; Zhou, 2013b) in variety of technological context such as e-government website, e-learning and other online services. For example, Wangpipatwong et al. (2009) have been conducted a study with using DeLone and McLean IS Success model as underpinning model to examine the web site quality which contain system quality, information quality and service quality on continued use of e-government web site by 614 e-citizens in Thailand. The results of the above study revealed that system quality has the greatest significant influence and enhance continued use e-government website than service quality and information quality. Wangpipatwong et al. (2009) also highlighted that higher the quality of e-government website the higher the citizens' intention to continued use of e-government websites.

Contrariwise, (Islam, 2012; Teo et al., 2009; Zhou, 2013b) found that negative relationship between system quality and continuance intention were existed in e-government website and other technological settings as the hypothesis were not supported. For instance, Teo et al. (2009) conducted a study on intention to continue using e-government website among 214 Singapore university students by incorporated DeLone and McLean IS success model and online trust literature and found that perceived system quality have statistically no significant influence on intention to continue using e-government website. While, Islam (2012) also identified that perceived system quality have no significant effect on e-learning continuance intention among university educators in Finland. Other than that, Zhou (2013b) found that system quality has statistically insignificant influence on continuance usage of mobile site among China users.

In summary, the results of above studies indicates that perception of quality of an online service (e-government website) whether this will fulfil expectation on completion of certain task will influence user's decision to continue use that online service (e-government) again (Teo et al., 2009) in future. This indicates that perceived system quality have significant influences on continuance intention and the higher the quality of an system the higher will be continuance intention. In contrast, despite significant relationship there were few previous studies found insignificant relationship between perceived system quality and continuance intention.
quality and continuance intention. Thus, the above results revealed that the relationship between perceived system quality and continuance intention is inconclusive. Moreover, the relationship between perceived system quality on continuance intention received minimal attention from researchers towards e-filing system in Malaysia. Hence, this research attempt to examine the relationship between perceived system quality and continuance intention in Malaysia in the context of e-filing system.

**Perceived information quality**

Perceived information quality is defined as users perception of quality of web content (accurate, valid and timely information) presented on the e-government website (Teo et al., 2009). DeLone and McLean (2003) categorized information quality based on how completeness, relevance, ease of understanding, security and personalization are the information generated for measuring information system success. As overall, in the electronic government and e-filing literature, information quality is similarly defined and measured using following attributes such as accuracy, comprehensive (completeness), timeliness (recent, up-to-date), relevancy, reliability, accessibility, understandability, appropriate amount, security and free of error (Abu-Shanab, 2014; Almahamid et al., 2010; Almahamid, 2009; Chen, 2010; Chen et al., 2015; Chumsombat, 2014; Floropoulos, Spathis, Halvatzis, & Tsipouridou, 2010; Jiang, 2011; Saha et al., 2012; Teo et al., 2009; Wangpipatwong et al., 2009). Perceived information quality have long been found to be related with user intention to use different technologies in previous researches (Almahamid et al., 2010; Rehman et al., 2012; Wang & Liao, 2008; Yahya et al., 2012).

For instance, in G2C e-government system the belief of information quality have the most important dominant influence on use, satisfaction and perceived net benefit with an system (Wang & Liao, 2008). As the main purpose of users' use e-government website is for searching for information (Jiang, 2011; Teo et al., 2009). At the same time, poor information quality may undermine user experience with the system as the users have to spend more effort on searching for relevant information (Zhou, 2013a).

Likewise, prior literature also have researched but very little attention given on the relationship between perceived information quality and continuance intention (Almahamid, 2009; Teo et al., 2009; Wangpipatwong et al., 2009). For instance, Wangpipatwong et al. (2009) adapted DeLone and McLean IS success model as underlying framework to examine website quality towards enhancement of continued use of e-government website in Thailand and found that significant relationship between information quality and continued use. This indicates that improved information quality enhanced users' intention to continue using e-government websites (Wangpipatwong et al., 2009). Furthermore, Almahamid (2009) also indentified that perceived information quality have significant effect on continuance intention to use e-government services in Jordan. However, contrarily, Teo et al. (2009) found that perceived information quality have no significant effect on intention to continue using e-government website among active users during post analysis among active and passive users of e-government website users in Singapore.

As overall, from review of previous studies it identified the authors came up with a significant outcome and at the same time, there were also some studies found that insignificant relationship between perceived information quality and continuance intention. Thus, this results reveals that inconsistent in nature of findings. Moreover, lack of empirical studies that used perceived information quality to examine continuance intention (Wangpipatwong et al., 2009) particularly in e-filing context in Malaysia. Hence, this study attempt to explore the relationship between perceived information quality on continuance intention towards e-filing system in Malaysia.
CONCLUSION

To summarize, from review of extant previous literatures found that perceived system quality and perceived information quality have significant relationship towards continuance intention in various online technologies context. This indicates that higher the quality of an system the higher will be continuance intention. However, at the same time there were also some studies found that insignificant relationship between perceived system quality and perceived information quality on continuance intention. Thus, this results reveals that inconsistent in nature of findings. Moreover, the relationship of perceived system quality and perceived information quality on continuance intention received minimal attention from researchers towards tax e-filing system. Hence, this research attempt to examine the influence of perceived system quality and perceived information quality towards continuance intention in the context of tax e-filing system in Malaysia.

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AGBA 12th World Congress
Page 686 of 1173


The Important Roles of Islamic Business Ethics towards Housing Project Performance in Malaysia

Keywords: Housing Project Performance, Conventional and Islamic Business Ethics, Conceptual Studies

INTRODUCTION

Efforts have been taken seriously by the government as one of the national agendas to provide affordable own house for every Malaysian in this country (Budget 2014), nevertheless there are some obstacles that interfere with the government to realize that goal. That barrier is the negative and bad practices of business ethic attitudes among developers during the implementation of the housing project are often featured in the media. The attitude of business ethic developers was motivated and influenced by ethical attitudes conducted by all stakeholders in the housing projects. Brenner and Molander, (1977), Moore, (1999) and Wiley, (1995) posit that, developers with the practice of good business ethic attitudes, will enhance and upgrade the housing project performance. If the unethical business practices continue to be practiced by developers, it will affect the cost to business organizations (McMahon and Harvey, (2007) and Trevino & Victor, (1992), spirit of work motivation of employees (Beu and Buckley, (2001), Karpoff, Lee and Martin, (2008) and self-government and the community on the implementation of housing projects undertaken (Jones and Kavanagh, (1996), McMahon and Harvey(1996).

Despite the positive growth of housing projects, there are things that many overlook. Previous research has proven the performance issues of housing projects that often burden the purchaser. For example, buyers not only have to bear the financial burden from the bank, but there are also plagued with frustration due to failure processing the dreamt home. The Ministry of Housing and Local Government (KPKT) has received complaints about housing project that was especially abandoned projects that affect the buyer in terms of the financial burden, including the repayment of loan installments and rental payments occupied home buyers. In addition, home buyers are more likely to be blacklisted by the financiers of the financial institutions, if they fail to settle outstanding debts and this will cause in difficulties of obtaining next loan facilities. (Abu Bakar, 2009).

<table>
<thead>
<tr>
<th>Year</th>
<th>Current</th>
<th>New</th>
<th>Total</th>
<th>Planning</th>
<th>Construct</th>
<th>Completed</th>
<th>The % difference in completing the course</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>144</td>
<td>4</td>
<td>148</td>
<td>87 (58.8%)</td>
<td>46 (31.1%)</td>
<td>15 (10.1%)</td>
<td>-</td>
</tr>
<tr>
<td>2010</td>
<td>133</td>
<td>13</td>
<td>146</td>
<td>50 (34.2%)</td>
<td>60 (41.1%)</td>
<td>36 (24.7%)</td>
<td>14.60%</td>
</tr>
</tbody>
</table>
The Important Roles of Islamic Business Ethics towards Housing Project Performance in Malaysia

<table>
<thead>
<tr>
<th>Year</th>
<th>Abandoned Housing Projects</th>
<th>Completed Projects</th>
<th>Abandoned Housing Projects</th>
<th>Completed Projects</th>
<th>Failure Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>110</td>
<td>6</td>
<td>116</td>
<td>62 (53.4%)</td>
<td>2.9%</td>
</tr>
<tr>
<td>2012</td>
<td>84</td>
<td>11</td>
<td>95</td>
<td>9 (9.47%)</td>
<td>9.25%</td>
</tr>
<tr>
<td>2013</td>
<td>60</td>
<td>27</td>
<td>87</td>
<td>24 (27.5%)</td>
<td>-13.94</td>
</tr>
<tr>
<td>2009-</td>
<td>144</td>
<td>61</td>
<td>205</td>
<td>33 (49.6%)</td>
<td>-</td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
<td>20 (22.9%)</td>
<td></td>
</tr>
</tbody>
</table>

Source: Division of Abandoned Housing Projects Private National Housing Department (Updated on December 31, 2013)

The statistical findings of the annual trend of abandoned housing projects in Peninsular Malaysia for the period from January 2009 to December 2013 by the Division of Abandoned Housing Projects, Ministry of Housing and Local Government (KPKT), as in Table 1 above shows that the housing project was completed and finished experiencing an increasing trend in the percentage of 2009 to 2010 of 14.6%, in 2010 to 2011 by 2.9%, in 2011 to 2012 of 9.24%, however, by 2012 to 2013, the percentage rate has dropped to 13.94%. This fact in practice, have revealed evidence of the failure of performance of housing projects in Malaysia. The question of ethical business practices related to the effects of success and failure of performance of the project has attracted interest in this research.

As was discussed by Hanafi and Sallam (1997), the modern era debate had pointed out the important issue of business ethics among academics, professional associations, public authorities and other relevant organizations. In addition, the principle of the organizational arrangements that are beneficial in both indoor and outdoor environments, involved rational and imaginative thinking about human behavior among the stakeholders in the housing projects. The stakeholders are developers, contractors, sub-contracts, consultants, financial institutions, governments, local authorities (PBT), the suit, customers and communities. With a good business ethics, they are able to perform certain norms, moral standards, and the principles exalted impartial, honest, dignity and integrity in the performance of business activities towards housing projects. Therefore, the purpose of this paper is to discuss the important role of business ethics especially Islamic business ethic practice toward the success and failure of housing project performance in Malaysia.

LITERATURE REVIEW

Business ethics from the conventional perspective

There are two main ethical theories which are deontological and teleological from the conventional perspective. Deontological stressed the importance to meet their obligations as necessary to fulfill the duties, responsibilities based on the procedure, do the right thing and moral standards in the ethical course of action. Teleological asserts that the purpose and/or good results determine the ethical values of action (Beauchamp & Bowie, 2001; Dunfee, Smith, & Ross Jr., 1999; Ferrell & Gresham, 1985; Hunt & Vitell, 1986; Goodchild, 1986; Laczniak & Murphy, 1991; Lu & Lu, 2010; Pojman, 1998; Shaw & Barry, 2000). Or will it be purity, quality way that would justify the end? There are a number of research literatures that says ‘do well’ and thus will benefit the bottom line. The argument may be true, but no one has ever proven to be systematic (Kleiner 2001). Generally, ethics are a part of philosophical debate about values, norms or moral defining certain acts are right or wrong (Mackie, 1977) and (Lamb, C.W. Jr., J.F. Hair and C. McDaniel, 2004) also reinforces the view of the enhancement, stating that ethics refer to moral principles or values that generally govern the conduct of an individual or group. In addition, Chakarborty (2002) seen more interesting to debate where he argues that business ethics message is business must come first and ethics is part of it, nevertheless ethics in the business is giving priority to ethics.
However, the theory of business ethics practiced by Weber includes several positive elements of the business such as the reduction of rest and working long hours, hard work, perfection in doing the work, take pride in work, recognizing achievement, wealth, thrift, frugality and prudence investment. Without doubt, business ethics practice has an important role to obtain a positive relationship with organizational performance. According to Meriam-Webster (2010) business ethics is defined as a legal, social responsibility, moral values and codes of behavior in the workplace, while Stajkovic & Luthans (1997) and Rosouw et al. (2011), stipulates that business ethics is a set of rules, morals, standards or principles that correct work behavior in certain circumstances and culture when used for business activities and operations. They also reveal ethics is set of moral values that distinguish what is right and what is wrong, and business ethics merely restrict the use of ethical frameworks in the context of the organization only. In addition, Heisler (2007) stated, business ethics is the ability of a firm to provide a serious commitment to the important role of moral practice in making business decisions. The fundamental question is whether the ethics and business can be carried out together?

Milton Friedman (1970) pointed out that business is a nature to gain profit as much as possible and the business is a commercial enterprise that exists in a capitalist society, which only thinking of profit solely as a result of the capital invested in it. Therefore, he says, profit is the only value that should be pursued by the owner (Friedman and Friedman 1962, 1990; Hayek 1982). The arguments by Abdullah & Zainol Abiddin (2011) pointed out unethical practices in business is not a minor issue because it can destroy the economy. Although many firms have spent huge amounts of money for the purpose of improving performance by intensifying efforts to adhere the code of ethical behavior, most of them just look at the expense as an important cost of doing business rather than as an investment that will yield to business (Cogman and Oppenheim, 2002).

Thus, after the publication of Max Weber about the role of ethics in Europe, the interest of researchers has been found to increase on business ethics and the role of religion in achieving economic gains and wealth accumulation (Ali, 2007). The important roles of business ethics in determining business performance also debated from an economic point where Paul Ormerod (1994) in his famous book entitled ‘The Death of Economics’ has expressed its concern over business ethics today and considers the economy of today has no ethical value. It emphasizes, the economic performance alone is no longer sufficient to provide the authenticity of the business.

Earlier, Etzioni & Amitas (1988) in their book ‘The moral dimension: Toward a New economic’ also discuss how the awareness of moral and economic life of modern business has eroded and depleted. They also clarify the distinction between the moral and ethical morality. Moral, which is also known as an understanding norms of good or bad, while ethical morality is a rational explanation of why something is good or bad. For example, cheating is a bad thing and is on moral rules, while critical studies and the rationale why cheating is bad and what is the reason of his mind is from the point view of ethics. Thus, the efficiency of housing project organization key factors especially project managers, team members, organizational support and external environment stability are the critical success factor that determinant the housing project performance based from the theory of project management success developed by Belassi and Tukel (1996).

This development, related to the efficiency of a leader to lead and be able to influence the other stakeholders (Lussier and Achua, 2007). Thus, the efficiency of housing project organization key factors play an important role to initiate and promote ethical conduct and to prevent unethical practices in the organization (Yulk, 2002).

Therefore, the researchers found the discussion above also strongly supported by Rice (1999) and Rizk (2008) in which they assert business ethic in ethical perspective. They also revealed, business is part of ethics that examines ethical rules and principles within a commercial context, the various moral or ethical
problems that can arise in a business setting, and any special duties or obstruction of the parties involved in the business environment.

**Business Ethics from an Islamic Perspective**

Philosophy of Islamic business ethics provides a variety of different contemporary concept with the primary objective of a conventional business that only focus on profit alone. Basically, Islamic business ethics is the understanding and interpretation of Islam from the Qur'an, the Prophet Muhammad (SAW) (Sunnah), and the immediate successor (especially Khulafa Ar- Rashidun) and passed on to all Muslims for more than 1,400 years ago, which always leads to submission to Allahs.w.t (Ali & Al-Owaihan, 2008; Tayeb, 1997; Yousef, 2000a). The main motive of Islamic business ethics is that every man is required to practice the good and forbid the evil practice in all aspects of life. From the perspective of Islam, the holy Quran is the word of command from Allah s.w.t revealed to the Prophet Muhammad (SAW) through the mediation of the angel Jibrail as, and as a source of reference for all Muslims since 1,400 years ago. Islam is not a religion of man-made and faith in Islam is derived from the divine commandments (Ali & Al-Owaihan, 2008). Although many non-Muslims assume Islam as pessimistic, however the Quran clearly says that every man is free to make decisions and choose their own destiny. After that, people will all be held accountable for what they did (Beekun, 1996).

Therefore, Allah has provided to mankind, the Quran and the Sunnah of Prophet Muhammad (SAW) as the most valuable reference and source of guidance that leads people in the course of their daily lives. Unlike any other faith, Islam covers the relationships between faith and activity control every aspect of daily life, social affairs, political and economic community (Ali, 2005). In other words, Islam teaches the aspects of religious and secular must go hand in hand together at the same time. In addition, a Muslim businessman ordered to conduct business transactions and management, a concern for the welfare of individuals and businesses by offering a fair wage to workers, reasonable price, by taking good care of the environment, and all the profits to be spent with wise (Ali, 1992). Thus we can see that Islam has offered a unique perspective with a specific concept in business ethics, particularly in the development of economic wealth, business in Muslim encompasses moral, psychological and social (Ali, 2005).

As a basis, the principles of conventional and Islamic business ethics are not the same. In particular, the essential elements of Islamic business ethics are not addressed explicitly in the conventional. However, both of them put a significant focus on the involvement of ethical business practices as claims in religion (Ali & Al-Owaihan, 2008). Principles of Islamic business ethics emphasize the moral determination which is essentially the intent and not the result (Ali & Al-Kazemi, 2007). Islam forbids business activities that are considered as sinful and immoral, like starting a business as a monopoly, the liquor and gambling, and so even though it can bring huge profits (Abdullah & Zainol Abidin, 2011). Meanwhile, Beekun (1996) described a service to the public and society as a whole is considered to be a fundamental part of Islamic business ethics. Furthermore, Islamic business ethics encourages transparency in business dealings. In essence, the concept of Islamic business ethics derived from the Quran, the Sunnah of Prophet Muhammad (SAW), and the consensus of the scholars (Ijma ' Ulama) (Mohd. Fauzwadi, Abu Bakar & Hishamuddin, 2008).

The Quran tells us about fairness and honesty in doing business. Islamic business ethics underlying commitment as a virtue. Thus, the duty of compulsory and not voluntary for someone to put a satisfactory effort while performing tasks in their business. Darwish (2000) asserts that Islamic business ethics encourage teamwork in the workplace and encourage negotiations to overcome any obstacle and avoid mistakes. Therefore, the industrious always seen as good, and they are working hard in life are more likely to succeed. On the other hand, there is no room for wasting time as nature laziness, either by engaging in activities that are not productive (Ali, 2001). Prophet Muhammad (SAW), warned not to take more revenue or wages of the labor of his (Ali & Gibbs, 1998). In terms of housing project performance, practices the Islamic business ethics and morals affect the schema code of ethics in the social
The Important Roles of Islamic Business Ethics towards Housing Project Performance in Malaysia

AGBA 12th World Congress
Page 693 of 1173

environment. With the practice of Islamic business ethics business ethics code changes will be translated in the face of political challenges and the broader transformation in the culture of the surrounding community. Moreover, in the Quran the word ethics is closely related to *khuluq*. According Beekun (1996), described the Qur'an also uses several terms to describe the concept of goodness as *khayr* (good), *adl* (fairness and justice), *birr* (good), *qist* (equity), *haq* (truth), *taqwa* (piety), and *maaruf* (known and approved) (Beekun, 1996).

In addition, good deeds described as *salihat* and immoral practices described as *sayyi'at*. Accordingly with the discussion of ethics in Islam is not only about relations between Muslims but includes relationships with Allah s.w.t (Al-Ghamdi, 2010). Basically, the practice of business ethics covers a set of values based on the moral virtue of diligence, hard work, and also a belief that is able to develop positive character and a moral benefits to the business work (Mohd Sidek, 2009). Islamic business ethics practice focuses on issues such as pursuing a legitimate business, obtaining wealth, doing quality work, fair wages, self-reliance, to avoid monopoly and corruption, intentions and actions, transparency, greed and generosity (Ali, 2005). Thus, the ethical system revealed that the practice of Islamic business ethics is not purely economic aspects, but has social, psychological and moral as well. Therefore, all the practices of Islamic business ethics must be the best interests of the individual and society (Yousef, 2001). In general, the practice of Islamic business ethics based on four key pillars, namely business, competition, transparency and morally responsible way (Ali & Al-Owaihan, 2008).

Therefore, all these aspects can increase the performance of businesses and the economy in society (Yousef, 2000). However, the elements of Islamic business ethics have an important influence on the housing project performance of housing developers, where traditional cost management and quality of service must consider the ethical influence today's business world (Ali, 2005). Islamic business ethic is different from the values of ethics and moral code of conventional or secular. Conventional system or a secular moral code are considered temporary and very narrow because the system is based on values established by their founder (human) and in general this model suggests an ethical system separate from religion. Meanwhile, Islamic business ethics focus on human relationships with the creator (Beekun, 1996). However, both the conventional and Islamic business ethics have one thing in common in that it emphasizes the importance of hard work, dedication and a commitment to work, encourage creativity, stay away from unethical practices in the accumulation of wealth, promote cooperation and competitive healthy in business (Yousef, 2000b).

The main difference between conventional and Islamic business ethics is Islam puts more emphasis on the intention and not the result of business performance. Islamic business ethics not intended to pursue purely economic gain, but argue the practices must be useful, meaningful and beneficial to themselves and society in general (Mohd Fauzwadi, 2008).

In addition, the practice of Islamic business ethics are formed into four basic concepts of effort, competition, transparency, and responsibility in terms of behavior and morality (Ali, 1988; Ali & Al-Owaihan, 2008). Generally, all of the fundamental pillars of business ethics evaluation criteria are based on the assumption of intent rather than results. Actions which bring harm are considered illegal, although it will produce huge profits (Muhammad Shakil, 2006). Collectively, Islamic business ethics emphasizes the harmonious environment to promote prosperity and higher performance (Ali, 1992; Ali & Al-Owaihan, 2008). Muslims consider the effort as a necessary element in order to serve the individual and society. Competition must be fair and honest business coupled with good intentions.

Prophet Muhammad (SAW) clearly states that the business must be carried out without the restrictions that may hinder prosperity. However, all business should be conducted on the basis of trust and openness. Meanwhile, transparency has been designated as a moral obligation (Ali, 1992). Transparency is important because of the acts of fraud and misconduct to deny justice and prevent freedom of the market. Prophet Muhammad (SAW) warned Islamic business ethics should have the presence of good moral
behavior in order to guarantee balanced advantages to individuals and society. By having good moral behavior, it helps to keep the economy growing for a basic business community (Ali & Al-Kazemi, 2007).

Based on previous empirical researches have provided strong evidence that the practice of Islamic business ethics has a significant relationship with organizational performance. Organizations in this context, refers to housing developer. However, Islamic business ethics practices are totally different compared to conventional business ethics practices. The main sources of Islamic business ethics practices based on the Quran and the Sunnah of Prophet Muhammad S.A.W teaches all Muslims to always play an important role to lead and govern the stakeholders in the management of the business.

CONCLUSION

Islamic business ethics practices are seen often overlooked by housing developers, even among Muslim developers. Many developers today are more oriented to the concept of profit maximization alone, without looking at the blessings that are taught by Islam. When the concept of blessing based on Islamic law is not understood well, automatically many unethical things can influence in housing project organization that will consequently affect the performance of their projects. With the Islamic business ethics practices, housing projects performance can be controlled and governed successfully. Various things that are not ethical in business ethics practices such as corruption, hidden costs to home buyers, false information to home buyer, can be controlled and addressed properly by the relevant stakeholders in the housing projects.

The discussion above clearly shows that Islamic business ethics include ethical issues of social work relationships, psychological, moral aspects, economic dimensions and clearly cover the variety of conventional ethical theory that have parallels from the point view of Islam. Additionally, Islam teaches that any business performed must be meaningful and beneficial not only for individual, but for others and society as a whole and as a source of dignity and well-balanced life. Therefore, awareness of the importance of Islamic business ethics practices among the parties involved in the housing project particularly housing developers will enhance the success of their housing project performance.

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Optimizing Performance Outcomes of Manufacturing Firms: Does Plural Sourcing Matter?

**Keywords:** Sourcing Strategy, Competitive Strategy, Sourcing Relationship Quality, Firm Performance, Manufacturing Firm, Conceptual Studies

**INTRODUCTION**

A prime question that has dominated much of strategic management research is: What determines superior firm performance? Over almost two decades, scholars have sought to examine the role of various factors that could possibly influence business performance of a firm. This is because regardless of the country’s boundary consumers from other parts of the world, in fact, have financially benefited from continuous escalation on volume of products of lower prices imported from developing countries. The increased pressures from fickle consumers and uncertain business environment are making more and more firms to recognize the strategic role in the rapid change of business environment. The firms ought to have the capability of responding the changing business environment efficiently and effectively, where sourcing can play a significant role in order to achieve sustainable competitive advantage (Bruce & Daly, 2011; Gligor & Holcomb, 2014; MacCarthy & Jayarathne, 2012).

Firms in the manufacturing sectors are facing the most inevitable challenge to decide whether products to make through internal effort, or solicit from outside independent suppliers (buy) with a high degree of economies-of-scale to enhance efficiency and productivity (Espino-Rodríguez & Lai, 2014; Hilman & Mohamed, 2011; Lafontaine & Slade, 2007). Efficiency and productivity thru reducing costs, maintain high quality, flexibility, improved delivery dependability, and prompt quick response enable a manufacturing firm to achieve competitiveness and performance (Su & Gargeya, 2012).

These perspectives assessment to decide in-house production (Make) by adapting the cost strategy or source externally (buy) by adapting differentiation. There are fewer studies to understand the long-term benefits of outsourcing to the firms (Hunter & Hall, 2011; Premuroso, 2008). Previous researches have conceptualized sourcing strategy and its effects on organizational performance, in which some of them emphasize on make or buy of sourcing (Espino-Rodríguez *et al.*, 2014; Hilman & Mohamed, 2011; Lamminmaki, 2011).

Extent literature considered sourcing as an evident governance modes or forms but little attention has been given to the underlying quality of relationship of sourcing firms which might influence performance. Extent literature to date about the relationship quality focused mainly on western culture and stable business environment and yet little know about the manufacturer’s relationships with its key suppliers in emerging economies (Yang, Yu, Liu, & Rui, 2015).

Thus this study aims to provide an integrated model of competitive strategy, sourcing strategy, sourcing relationship quality and firm performance. Thus, the corresponding objective of this study is to address the quotation on how manufacturing firm can achieve better performance.
LITERATURE REVIEW

Sourcing Strategy
Sourcing is a useful way to adapt the firm’s boundaries by restructuring its activities in order to stimulate the growth of its core business (Bustinza, Arias-Aranda, & Gutierrez-Gutierrez, 2010). Sourcing is not simply a purchasing decision also represents the fundamental decision to reject to do an activity in-house (make) and look for outside to optimize productivity and increase performance of a firm (Größler et al., 2013; Hilman & Mohamed, 2011; Quinn, 1999). Previous researchers found that sourcing strategy (make or buy) has mix impact on firm’s performance (Heide, Kumar, & Wathne, 2014). Sourcing is known for its effect on value chain or related manufacturing activities (Kotabe, 1998; Mol & Kotabe, 2011). Based on Transaction Cost Economics (TCE), manufacturing firm makes decision either to produce a product through market based contract if this transaction cost is lower than producing internally (Jaklič et al., 2012, Lin et al., 2012; Mohiuddin & Su, 2013). This leads firm to consider sourcing as it become strategic forefront of modern practice in enhancing firm performance and competitive advantage (Weele & Raaij, 2014). Sourcing practices in the era of global supply chains, products are bought from multiple companies and across multiple continents in their path from material suppliers to the final consumer (Shmueli, 2011).

Make Strategy
Firms to recognize the strategic role that sourcing can play in achieving sustainable advantage. Transaction cost economics (TCE) suggests that firms should produce goods in-house (make) if the transaction cost of such product ‘market based contract’ is higher (Jaklič et al., 2012; Mohiuddin & Su, 2013; Wallenburg et al., 2010) firm must focus to make a product internally concerning if it could achieve economies of scale which requires the firms to reduce cost and increase efficiency. Prior research found that firm that opt for make strategy will have opportunities to reduce production cost, improve production efficiency and enhance quality through the use of advanced machinery (Jacobides & Winter, 2005; Ha’tonen & Eriksson, 2009).

Buy Strategy
Buy strategy or outsourcing refers to any goods and services that are procured from outside suppliers (Mol & Kotabe, 2011). For the decade the buy option has become increasingly significant due to its potential benefits, which firms rely a lot on suppliers as to reduce firm's total costs besides enhance its competitive advantage (Driedonks et al., 2014; Gadde et al., 2010; Hilman & Abidin, 2012; Sundquist, Hulthén & Gadde 2015). Manufacturing firms in Bangladesh get order from abroad or local customers which perhaps not related to firms product line. Thus to meet the order from customers, it is difficult to develop a new product within a firm because of slower and risky method (Wang et al., 2014; Wagner, 2014). A manufacturing firm can considered the buy strategy to meet the order of unrelated products or excessive order of products produce by external suppliers (Abdullah et al., 2011; Wagner, 2014).

Competitive Strategy
Competitive strategy represents that firm’s business strategy orientation toward external environmental conditions that include competitors and customers (Abdullah et al. 2009; Dadzie, Winston & Dadzie, 2012; Hitt, Ireland & Hoskisson, 2015). To gain a competitive advantage, it is the “Holy Grail” of strategic management research (Helfat & Peteraf, 2009). The literature suggested that resource-based view (RBV) and market-led view are useful but considered as oversimplify choices firms make to use resources and assets, identifying external opportunities, either new and existing markets or market niches of globally connected economy that create opportunity to establish competitive advantage and achieve strategic fit for competitive firms (Barron & Hollingshead, 2004; Espino-Rodríguez & Lai, 2014; Hilman & Mohamed, 2011; Hilman & Warokka, 2011; Kang, Wu, Hong & Park, 2012; Porter, 1985).
Cost leadership strategy
Cost leadership strategy is an integrated set of actions taken to produce goods with unique features that are sold to customers at the lowest cost compared to competitors or at reduced cost to achieve superior profitability (Teeratansirikool, Siengthai & Badir, Charoenngam, 2013). Manufacturing firms striving to reduce production cost and cost reduction is recognized by far as the main driver for sourcing (Hätonen & Eriksson, 2009). Firms following a cost leadership strategy try to obtain the lowest costs in their environment, offer good prices to its customer, obtain profits and remain competitive (Dadzie et al., 2012; Espino-Rodríguez & Lai, 2014; Hitt et al., 2011; Porter, 1985; Spanos et al., 2004).

Cost leadership is one of the Porter generic strategies that firms pursue does not directly affect firm performance, it does so indirectly and significantly by having the lowest cost in the industry and allow firms to remain competitive (Anon, 1988; Espino-Rodríguez & Lai, 2014; Hilman & Abidin, 2012; Porter, 1980; Powers & Hahn, 2004; Solberg & Durrieu, 2008; Teeratansirikool et al., 2013).

Differentiation strategy
Differentiation strategy develops a competitive advantage by creating strategy as unique or alleged to be product/services which driven from internal resources that comprised capabilities, knowledge, and skills (Dadzie et al., 2012; Hilman & Mohamed, 2011; Porter, 1980). Prior researchers have refined and conceptualized the differentiation strategy across several dimensions, including product differentiation, marketing differentiation, quality differentiation, service differentiation and innovation differentiation strategies.

We have conceptualize differentiation strategy in this study as a competitive strategy because it is the most commonly used strategy in most sectors (Dadzie et al., 2012; Espino-Rodriguez & Lai, 2014; Hilman & Abidin, 2012; Kang et al., 2012; Ortega, 2010).

Firms use differentiation strategy can charge a higher price for their products uniqueness (Allen et al., 2008; Murugesan et al., 2012; Schoenherr, 2012; Wiengarten et al., 2011). Efficient firms are able to respond to uncertain changes to provide customers with desired products or address problems associated with a rapid surge in demand besides ensuring its competitiveness (Jacobs & Chase, 2010; Lee et al., 2015). Thus, a firm recognizes for its differentiation for unrelated product to fulfil customer demand need to build capabilities securing competitive advantage based on flexibility (Jacobs & Chase, 2010; Lee et al., 2015).

Sourcing Relationship Quality
Strategic management literature have focused and recognized the significance of buyer–supplier relationship enlargement in successful economic exchanges between firms (Bastl, Johnson, & Choi, 2013; Yang, 2013; Wang, Li, Ross, & Craighead, 2013). Manufacturing firms considering the relationships quality might have several advantages such as; enhancing efficiency and innovation (Revilla & Villena, 2012), improving new product development (Salvador & Villena, 2013), boosting firm performance (Stewart, Zacharia, & Artis, 2012), and reducing opportunism and uncertainty (Wang, Li, Ross, and Craighead, 2013). Previous literature suggested that, given differences in strategic priorities, there are differences in the types of characteristic firms look for in supply chain partners quality, relationship and integration (Anderson et al., 2011, Roh, Min, & Hong, 2011; von Massow & Canbolat, 2014). Therefore, this study conceptualizes the sourcing relationship quality to measure the moderating influence over sourcing strategy and firm performance relationship.

Organizational Performance
Organizational performance is defined as outcome of a firm’s attempt to leverage relevant strategies and techniques to achieve organizational goals. The method by which it is measured is dependent upon (a) the industry in which the firm operates, and (b) the parameters of the research model used to typify it. Typically, firms gauge organizational performance using financial and non-financial outcomes related to
certain aspects of the quality and operations they employ (Lee et al., 2015). To promote organizational performance, manufacturing firms may seek to improve product quality, limit costs, and improve operational efficiency. Performance measures provide a set of mutually reinforcing signals that direct managers’ attention to the important strategic areas that translate to organizational performance outcomes (Dixon et al., 1990). Firm performance is the final outcome that is observed across the literature. It refers to the success of a firm in fulfilling its business goals (Yamin et al., 1999; Li et al., 2006).

**METHODOLOGY**

**Industrial Economics**
Typically, IO suggests that firms can earn above-average returns by producing either standardized goods or services at costs below those of competitors (a cost leadership strategy) or by producing differentiated goods or services for which customers are willing to pay premium price (a differentiation strategy) (Hitt et al., 2015). Firms performance generally can be increased only when they operate in an industry with highest profit potential and use their resources to identify and implement strategy best suited with required by the industry’s structural characteristics (Brauer & Wiersema, 2012; Posen, Lee, & Yi, 2013). Proponents of IO economics hold industry structure is central determinant of firm performance and firm differences are considered against industry background (Porter, 1980). According to Bain (1968), IO economics is concerned with the economy and wide complex of firms of various functions as suppliers, sellers, or buyers, of goods and services.

**Transaction Cost Economics**
According to Williamson (1985), Transaction Cost Economics (TCE) focuses on transactions and the costs incurred via completing transactions by one institutional mode rather than another. The transaction either make or buy a product, is the unit of analysis in TCE, and the means of affecting the transaction is the principal outcome of interest (Tadelis & Williamson, 2012). TCE suggests that the costs and difficulties associated with market transactions sometimes favour hierarchies (make) and sometimes favor markets (buy). Based on TCE, manufacturing firm makes decision either to produce a product through market based contract if this transaction cost is lower than producing internally (Jaklič et al., 2012, Lin et al., 2015; Mohiuddin & Su, 2013). Therefore, TCE provides the theoretical basis to conceptualize the sourcing strategy for manufacturing firms either to make or buy the products.

**Resource Based View Theory**
This view appeared in the 1960s and 1970s when organizational theorists combined research on inter-organizational relations and political economy of organizations. This theory defines resources as tangible and intangible assets that are tied semi-permanently to a firm (Wernerfelt, 1984). According to RBV, firms are viewed as collection of various types of resources and capabilities; such as, internal factors that are semi-permanently linked to the organization, and these resources and capabilities are suggested as forming the basis of a firm’s superior performance and competitive advantage (Barney, 1991; Wernerfelt, 1984). In the RBV of the strategic management pays specific attention to the genesis and development of the organization’s internal resources and capabilities as a source of sustainable competitive advantage firm (Barney, 1991, 1996; Grant, 1991; Hall, 1992; Teece, 1997). The constitution of the resource-based view of the firm has over the decades shifted its focus from more or less general resources and their firm-specific combination and use towards the generation and use of intangible assets such as capabilities and competences (Espino-Rodríguez et al., 2014; Hitt et al., 2015).

**Social Exchange Theory**
Social Exchange Theory provides a potential perspective in understanding the nature of relationship between outsourcing providers and their clients (Bottom, Holloway, Miller, Mislin, & Whitford, 2006; Emerson, 1976; Homans, 1958). Emerson (1976) defined SET as regarding actions that are contingent on rewarding reactions from others. This theory, with roots traceable in the 1920s, has remained very
powerful in conceptualizing workplace behavior and has been used in diverse fields as anthropology, social psychology, and sociology, and in different settings like social power, networks, board independence, psychological contracts, and leadership (Cropanzano & Mitchell, 2005).

In sum, evolution and continuance of outsourcing partnership may be described in terms of a social exchange process between two or more firms conceptualized as collective actors. Partners will be interdependent through socialization and will exhibit reciprocal behavior because they will be morally obligated to serve each other’s purpose (Kingshott, 2006).

DISCUSSION

Sourcing practices in the era of global supply chains, products are bought from multiple companies and across multiple continents in their path from material suppliers to the final consumer (Shmueli, 2011). According to Teece (2009), if the outside independent supplier has the capability of meeting the buyer’s demands and can convince the buyer that a high degree of quality service is an exclusive property, then the buyer will continue to outsource instead of internally perform the activity. However, it requires firms to coordinate its interdependent activities as to ensure buy or sourcing strategy function as intended (Clark & Stoddard, 1996; Jarvenpaa & Stoddard, 1998; Tang & Rai, 2012; Shapiro & Varian, 1999). Outsourcing remains a common management practice, even though “significant questions arguably remain as to the adequacy of the typical framing of the outsourcing decision to achieve the performance of a manufacturing firm.

Transaction Cost Economics (TCE) focuses on transactions and the costs incurred via completing transactions by one institutional mode rather than another. The transaction, to produce a product is the unit of analysis in TCE, and the means of affecting the transaction is the principal outcome of interest for a manufacturing firms (Tadelis & Williamson, 2012, Williamson, 1985). On the other hand, TCE emphasizes the relationship between characteristics of isolated transactions, focusing primarily on the role of efficient management and analyzing why firms exist, while RBV focuses on the search for competitive advantage through resources and capabilities analysis (Espino-Rodríguez & Lai, 2014; Hilman & Abidin, 2012; Tadelis & Williamson, 2012; Williamson, 1985).

A firm may fail or stuck in the middle in selecting the most appropriate generic strategy (Porter, 1980). To avoid such inconsistency of the generic strategy, a firm can consider to mix, hybrid, or combine these generic strategies base on the firm resources, capabilities and strategic choices of make or buy (Acquaah & Yasai-Ardkani, 2008; Espino-Rodriguez & Lai, 2014; Hilman & Warokka, 2011; Spanos et al., 2004). Henceforth, in this hyper competitive environment firms are being forced to determine the best strategic fit of strategic factors to remain competitive and secure better organizational performance (Barney et al., 2011; Hilman & Mohamed, 2011, Wang et al., 2015).

Therefore, this study contributes to the literature by developing a research model based on a multi-theoretical perspective for manufacturing firms. This study has enlighten the literature to provide the link between competitive strategy and sourcing strategy and their relationship with performance of manufacturing firms. Moreover, sourcing relationship quality construct developed in this study as a moderator to investigate that how it affects or influence the firm’s performance. Figure 1 shows the conceptual model of this study.
CONCLUSION

Previous researches have conceptualized sourcing in terms of its evident governance modes or forms but little attention has been given to its underlying processes or the mechanisms that govern the relationships in question. Relationship quality assesses the extent to which a business relationship between sourcing firms involves commitment and cooperation from both parties, and performance targets that are less clearly specified. However, the literature is not conclusive on whether contractual relation between buyer and supplier reduce goal misalignment therefore mitigate the risk and uncertainty in market. These perspectives, the construct of sourcing relationship quality in this study represents the longer-term business relationship between buyer and supplier impacted to enhance performance.

The corresponding goal of this study was to address the quotation on how manufacturing firm can achieve better performance. To fill the gap of time until today, this paper conducts a thorough overview and confirms that especially in developing country like Bangladesh suggest prevailing and high-performing strategic choices in the ever-increasing body of empirical evidence. Various approaches and multiple strategies can deal with the competitive environment and contribute to achieve desired objectives of the firm. As an integrated approach of this context, competitive strategy, sourcing strategy, and relationship quality ensure firms to adapt in a competitive environment and help to enhance firm performance.

Model proposed in this study helps firms in the manufacturing sectors to decide whether products to make through internal effort, or solicit from outside independent suppliers (buy) with a high degree of economies-of-scale to enhance efficiency and productivity (Espino-Rodríguez & Lai, 2014; Hilman & Mohamed, 2011; Lafontaine & Slade, 2007). Efficiency and productivity thru reducing costs, maintain high quality, flexibility, improved delivery dependability, and prompt quick response enable a manufacturing firm to achieve competitiveness and performance (Su & Gargeya, 2012).

We have addressed the key issues and existing gaps in the literature related to the relationship of competitive strategy, make or buy (sourcing) strategy on firm performance in the manufacturing sector. However, there is still much to investigate concerning the conceptualization of proposed model as strategic choice of enhancing firm performance. Future research can be conducted in service sector. Moreover, to dwell the sourcing strategy, firm size, length of the relationship with supplier can be influenced the proposed framework.
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Innovativeness and Sustainability: Difference and Antecedent Relationship

Keywords: Innovativeness, Sustainability, Construction Industry, Antecedent Relationship, Conceptual Studies

INTRODUCTION

The relationship that exist, and a clear understanding of the difference between innovativeness and sustainability is imperative for researchers, policymakers and managers of large, medium and small contracting firms within the construction industry. This is especially so because innovation ideals heralding sustainable outcomes is of increasing interest in many societies, among businesses, academic circles and policy makers who, according to Liddle and El-Kafafi (2010), are becoming more and more sensitive to global trends and changing attitudes. A dearth of rigorous distinction and understanding between these two constructs may, however, distort findings resulting from innovation and sustainability studies. Thus, it is important that researchers as well as others with stakes in innovation/sustainability studies recognize the distinction between them and how they are related.

According to Kamaruddeen, Yusof, and Said (2010), innovation research becomes proliferated in the early 1960s. And by the 70s, its primary focus was on conceptualization and theory building. Albeit descriptive in nature, researchers were able to analyze associations that exist between various contextual factors and organizational features. Subsequently, interests became shifted to widening the basis and theoretical underpinnings with a view to developing more innovative institutions and organisations. Khilji, Mroczkowski & Bernstein (2006) equally acknowledged that early models and theories of innovation emphasized technology in product development, while ignoring the interplay of supply and demand (the market forces), environment and sundry sustainability considerations.

This paper, first and foremost recognizes that firms requires innovation as a driver to gain success and competitive advantage, and for ultimate survival in the hyper-turbulent competitive market environment (Auh and Menguc, 2005; Hultink, Griffin, Robben & Hart 1998; Vorhies & Morgan, 2005; Crespell, Knowles & Hansen, 2006) and that it is capable of influencing not only organisational productivity and profitability, but also a vital procedure in sustainability adoption in organizations (Chan & Liu, 2012). Thus, the paper provides explanations of the concepts of innovativeness and sustainability within construction organization from the extant literature. It then presents a brief argument about the antecedent relationship between the constructs. The difference between these constructs is then presented. Definitions offered in this paper are construction industry-specifics. They may; however be applicable to related industries.

METHODOLOGY

This on-going research is still at the initial stage; therefore, the information presented in this paper is primarily based on the thorough review of the relevant literature within the scope of construction industry.
sustainable and innovativeness. Wisconsin (2008) identified that a literature review is a “critical analysis of a segment of a published body of knowledge through summary, classification, and comparison of prior research studies, reviews of literature, and theoretical articles.” Through the literature review, the definition, conceptual and relationship between sustainability and innovation in the construction industry is examined and highlighted. At the same time, the difference and antecedent relationship between innovativeness and sustainability in the construction practice will be discussed as well. All the data and information gathered directly from libraries, books, articles and other printed materials searched in the international and national journals and proceeding. This literature review is very important and helpful in the process of developing for the theoretical sections of the actual research.

**LITERATURE REVIEW OF INNOVATIVENESS AND SUSTAINABILITY**

**Innovativeness**

**Concept of Innovativeness.** In conventional sense, innovativeness relates to the degree of novelty, especially within the new product development literature, which is dependent on the targeted entity to which the new product serves (Hansen, Bullinger & Reichwald, 2011). However, Garcia and Calantone’s (2002) long-standing innovativeness reviews show that the targeted entity could range from macro to micro, where changes to the world, a particular industry, a scientific community, or marketplace are considered macro levels of innovativeness; and innovativeness within firms are considered micro. This study, thus focuses on micro level of innovativeness (firms within construction industry) with emphasis on adoption or generation of novel ideas in terms of services rendered, product design and production techniques, operation procedure or a new approach to management strategies (Liao, Fei & Liu, 2008).

Thus, studies that have advanced our understanding of the term innovativeness in recent times include: Nihat and Torlak (2014); Peters and Naicker (2013); Uzkurt, Kumar, Kimzan and Sert (2012); Kocher, Kaudela-Baum and Wolf (2011); Wang and Ahmed (2004); Salavou (2005). Even though these studies address innovativeness in specific areas, few (for example Postružnik & Moretti, 2012; Seaden, Guolla, Doutriaux & Nash, 2003; Winch, 2000) specifically addressed innovativeness in the construction industry. Again, considering the fact that research in innovativeness measurement has not been well developed, offering definition mostly depends on what a particular research sets to achieve, thereby making measurement approaches to differ across studies (Pallas, Böckermann, Goetz & Tecklenburg, 2013).

However, some key areas of innovativeness were identified by Wang and Ahmed (2004). In their analysis, innovativeness is defined in terms of firm’s “overall innovative capability of introducing new products to the market, or opening up new markets, through combining strategic orientation with innovative behaviour and process” (Wang and Ahmed, 2004 p. 2). In this definition, product, market, process, behavioural and strategic innovativeness dimensions were specifically itemized, where innovativeness is perceived as firm’s willingness, propensity and capability to undertake and give support to innovative researches, ideas and processes that is likely to produce products, services, or technological procedures that are new to such firm.

Similarly, Knowles, Hansen, and Dibrell (Knowles, Hansen, & Dibrell, 2008) submitted that organisational innovativeness is “the propensity of firms to create and/or adopt new products, processes, and business systems” (Knowles et al., 2008 p. 1). Their conceptualization, however did not capture new technology dimension of firm innovativeness in spite of several studies linking technology adoption to innovation (Seaden, Guolla, Doutriaux, & Nash 2003; Kock, Gemünden, Salomo & Schultz 2011).

In this study, however, organisational innovativeness is defined as construction firm’s drive or capacity to adopt innovation in construction products, processes or concepts, business and technology that are new to the construction company or the industry in order to attain competitive advantage, meet customers’ needs
Innovativeness and Sustainability: Difference and Antecedent Relationship

and for sustainability considerations (Kamaruddeen et al., 2012). In the subsections that follow, the four dimensions of organisational innovativeness (product, process, business system, and new technology innovativeness) are explained.

**Product Innovativeness.** According to Damanpour (2010), product innovativeness is a distinct phenomenon that contributes to organisational growth and competitiveness. And it is becoming almost impossible for firms nowadays to ignore innovativeness in production considering the outpouring of its importance and the rate at which companies rely on them for competitive advantage (Salavou, 2005). Thus, product innovativeness is pursued in response to customers’ demand for new products or executives’ desire to penetrate new markets. Several authors (Hilmi, Ramaya, Mustapha & Pawanchik 2010; Akgun, Keskin, Byrne & Aren, 2007; Wang & Ahmed, 2004), suggested that product innovativeness implies the uniqueness of new products that is being introduced to the consumers in an appropriate period. Thus, the innovativeness of a new product is important for several reasons. Aside the fact that it presents great opportunities for firms in terms of growth and expansion into new areas, substantial product innovations is also known to establish firm’s competitive dominant positions, and afford newcomer firms a strong leverage within the industry (Danneels & Kleinschmidt, 1999).

Product innovativeness is also explained in terms of the degree of newness of the product when compared with the earlier products churned out by the firm. This newness is categorized into newness to the developing firm and newness to the market (Booz, Allen & Hamilton, 1982). In other words, new-to-world products are new to both the firm and the market and are the highest level of product innovativeness. Thus, innovative construction products should satisfy customer choices, flexibility of construction type adaptable to users’ changing needs, uses reduced materials and lesser energy during material transportation and actual on-site construction, including functionality of construction components (Dammann & Elle, 2006).

In this study, product innovativeness refers to construction firm’s willingness to introduce innovative construction products or materials to the market, or adopt same within a reasonable timely fashion.

**Process Innovativeness.** Process innovativeness refers to innovation in the production mode. Whilst new products development are often regarded as innovation cutting edge within the marketplace, process innovativeness also plays a very important and strategic role by its ability to make products (technological or management related) no one else can, or fashion it in such a way that it is seen better than anyone else. According to Tidd, Bessant and Pavitt, (2003), this portends a powerful source of advantage for firms. Within construction, process innovativeness is characterized by innovations that occur leading to the sequence of operations to achieve an outcome or end-product, even though, there is no requirement for the process innovation to affect the nature of the end product. Process innovativeness, being an “optimization and getting the bugs out of the system”, empowers firms by reducing operational costs, and its adoption is assumed to be determined by certain environmental and organizational factors (Damanpour, 2010).

Process innovativeness is important within construction, being an industry with certain peculiarities. Construction, according to Sexton and Barrett, (2003), is an industry driven by single and unique projects. Thus, it is expected that the construction firms consider the uniqueness of each project and deploys methods within the context of client’s requirement and demands. Thus, Gann, Wang and Hawkins, (1998) suggests that process innovativeness in the construction industry involves the concept of lean thinking and agile production within business process design. These concepts will allow firms to meet the market objectives in different perspectives, and will also require them better understand customers’ needs, minimize waste, and reduce defects during the production process. In this study, however, process innovativeness is construction firm’s willingness to introduce innovative construction process in order to
gain more competitive advantage within the industry, meet customers’ needs and for sustainability considerations.

**Business Innovativeness.** Business innovation focuses on innovation in management thinking and primarily aims at value and wealth creation for all stakeholders with a view to improving economic prosperity (Lorente, Dewhurst & Dale, 1999). Factors such as environmental changes, customers, competitors, suppliers and employees further stimulate business innovation. Thus, it was argues that business innovativeness implies firm’s adaptive capability to environmental changes is important to gain competitive advantage. More importantly, firm’s good strategies alone are not enough for them to cope in the present dynamic business environment. It is expected that firms will be able to evolve and synchronize with the environment by applying business innovativeness ability (Hilmi & Ramayah, 2008). Therefore, without a strong business direction, innovators will fail to either deliver - or to capture - value from their innovations. Thus, Van de Ven (1986) concluded that firms are expected to excel in business model design options, customer needs and technological trajectories in order to achieve outstanding business innovativeness.

**New Technology.** New technology innovativeness in this study is defined as firm’s tendency to adopt and also apply a technology which is new to such firm. And it is one of the various approaches used by innovation scholars (Robertson & Wind 1983; Van de Ven 1986; Subramanian & Nilakanta 1996; Dooley & O’Sullivan, 2000; Kocher et al., 2011) for measuring organisational innovativeness. According to Salavou (2010), to create more unique and innovative products for the market, firm’s orientations should be tailored to current technology adoption, which constitutes a key organisational capability.

The challenge, however lies in dealing with the implications of the newly introduced technology within organizations, the effects of which may lead to a fundamental changes in various sectors of the firm. So, it is not enough for firms to substitute existing applications with a new technology as this may unlikely solve an impending problem. Consumer’s preference for alternative technology may stem from reduced costs, better performance, dependability, or just fashion.

**Sustainability Concept.** Sustainability is a term that is based upon the axiom of reciprocity principle, a simple veracity proclaiming “…do onto future generations as you would have them do onto you”. Although, Nushi and Bejtullahu (2012), argued that the literature is replete with complex and sometimes conflicting definitions of the term, sustainability came up as a concept in response to the negative social and environmental effects of the prevalent approach to economic growth in the 1980s. In other words, it emphasised averting environmental and social collapse by sustaining the existence of the modern society and that of the future generations (Du Plessis, 2007). In this scenario, human/environment relationship is influenced by certain factors which are outlined by Du Plessis (2007, p 70) as the “interpretation of quality of life” held by a particular society; and the choices made in terms of the technological, political, economic and other systems adopted by human society. This view is supported by Atkinson, Dietz and Neumayer, (2007) who argued that there should be an analysis of the rate of momentous impacts of human actions against the environmental values. This implies that if some environmentally threatened human actions are unchecked for generations; there would be a struggle between the current lifestyle of the present individuals and that of the future population.

This study defines sustainability as the construction development which is capable of being sustained, in other words, the amount to which the earth’s resources may be exploited for construction purposes, without harmful effects to man and the environment both presently and in the future, bearing in mind the
triple bottom line of environmental responsibility, social awareness, and economic profitability. In the next section, the three dimensions of sustainability within construction industry is explained.

**Environmental-Related Definition of Sustainability.** This dimension came up owing to construction’s environmental-damaging effects, in terms of various forms of environmental pollution, resource depletion, biodiversity loss on a global scale, and the popular fact that building and construction activities worldwide are responsible for 3 billion tons of raw materials each year (World-watch Institute, 2003; Ofori *et al.*, 2000).

The aim of addressing environmental sustainability, therefore, is to reduce energy consumption, increase energy efficiency and make the construction activities create a healthy, non-toxic environment, as well as eco-conscientious communities (Darwish, 2014; Abidin, 2009; Scheuer, Keoleian & Reppe, 2003; Stansfield, 2001; Ofori *et al.* 2000; Hill & Bowen, 1997). Environmental-related sustainability in construction refers to firm’s adoption of environmental protection principles in project execution for the safety of both present future populations.

**Social-Related Definition of Sustainability.** Perhaps, the most challenging aspect of sustainability in construction is the social justice perception, and Hill and Bowen, (1997) argued that achieving global social sustainability is indeed a remarkable mission. According to Opoku and Fortune, (2011), social sustainability in construction deals with legal, moral and ethical requirements of construction firms towards the intending users and other stakeholders. And as part of social obligations of the construction industry, it must balance human needs with the carrying capacity of the natural and cultural environments, such that human life quality is improved, skills training and capacity building for the less-privileged are introduced, and a fair distribution of construction social benefits is ensured while also observing an intergenerational justice (Sev, 2009; Shen, Li Hao, Tam & Yao, 2007).

Social sustainability considerations are defined in this study, following Abidin, (2009) as the construction firm’s adoption of social well-being principles in project execution for the safety of both present future populations.

**Economic-Related Definition of Sustainability.** There is always a misgiving in the understanding of sustainability in construction in the sense that construction ecological impacts are often underestimated, whereas the perceived associated costs of sustainable construction are exaggerated (Samari, Ghodrati, Esmaeilifar, Olfat & Shafiei, 2013). In actual sense, economic-related dimension in construction sustainability deals with the opportunity of savings and commercial advantage through good practice behaviour, as greater part of the savings from sustainable construction are through maintenance and utility costs because, sustainable construction had, from the initial stage, externalized health and environmental costs connected with air pollution associated with non-renewable sources of energy (Kats & Capital, 2003). Thus, economic-related sustainability in construction refers to construction firm’s adoption of the principles of economic prosperity in project execution for the safety of both present future populations.

**DISCUSSION**

**Antecedent of Innovativeness and Sustainability**

In this section, the relationship between the two constructs under study as regards the one that precedes the other within the context of construction firms is discussed. This argument is best resolved through working definitions of these terms. Thus, innovativeness definition adopted in this study emphasised firm’s drive or capacity to adopt innovation in products, processes or concepts, business and technology that are new to the firm or the industry in order to attain competitive advantage, meet customers’ needs and for sustainability considerations (Kamaruddeen *et al.*, 2012). This implies that sustainability considerations is apparently one of the goals whenever innovativeness is adopted, especially when
Innovativeness and Sustainability: Difference and Antecedent Relationship

Construction sustainability is firm’s adoption of the principles of sustainable development in project execution by striking a balance between environmental protection, social well-being and economic prosperity for the safety of both present future populations (Abidin, 2009). Thus, it is logical to argue that innovativeness is an antecedent to sustainability.

Again, in recent times, firms are increasingly under intense pressures from regulatory authorities and other stakeholders to divert attentions from just economic and technological innovations alone, but to take practical steps further towards greater sustainability where environmental friendliness and social wellbeing form part their core values in product development and service delivery (Seebode, Jeanrenaud, & Bessant, 2003; Hansen, Bullinger & Reichwald, 2011). The main challenge towards inculcating greener, cleaner and more equitable development, according to Bleischwitz et al., (2009) requires that innovation is not only addressed from economic viewpoint, but also to consider, at the same time, social and environmental elements. This requirement is in accordance with the triple bottom line model of sustainability, implying that innovativeness should be environmentally socially and economically sustainable, the integration of which is likely to pose certain difficulties (Hines & Marin, 2004).

**Innovativeness vs Sustainability**

There is a difficulty in capturing the interface that exists between innovativeness and sustainability, because both fields are almost horizontal in terms of policy frameworks (Gjoksi, 2011). Although, innovativeness is defined in this study as firm’s propensity and capability of firms to adopt novel products, processes, business or technology for competitive advantage, meet customers’ needs and for sustainability considerations. The sustainability dimension has always been alien to the concept of innovation, whose primary objective has always been economic issues. In recent times, however, the recognition of environmental cum societal pressures, and also the significant economic opportunities offered by these consideration have prompted a paradigm shift towards sustainability inclusions (Seebode et al., 2012), because new concepts like eco-innovation, social inclusions are increasingly regarded as a “window of opportunity” for the markets and society to move towards societal progress with an equal, low carbon and knowledge economy.

**CONCLUSION**

Innovativeness and sustainability are obviously two different constructs that are always addressed differently irrespective of the research fields and dimensions. While firm innovativeness reflects firm’s drive or capacity to create or adopt new products, process or new business, sustainability implies adopting sustainable development principles in project execution by striking a balance between environmental protection, social well-being and economic prosperity for the safety of both present future populations. And going by working definitions of these concepts (innovativeness and sustainability within the construction firms) this study suggests that innovativeness is antecedent to sustainability.

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Innovativeness and Sustainability: Difference and Antecedent Relationship


AGBA 12th World Congress
Page 714 of 1173
Innovativeness and Sustainability: Difference and Antecedent Relationship


Takaful, is a risk protection mechanism based on Islamic principles which is built on a system that seeks to avoid the illegal elements of ribal interest), gharar (uncertainty) and maysir (gambling or unjust enrichment) (Billah, 1996). Persons who share a common need to be protected against loss come together and pool their resources into a common fund from which they indemnify each other. Thus it is a system modeled on the framework of mutual insurance or ta’awun (solidarity or brotherhood) (Maysami & Kwon, 1999; Kwon, 2007; Fisher, 2013; Yazid et al 2012; Dusuki & Buheraoua, 2011; Arifin et al, 2013). This pool is usually managed by a company referred to as the takaful operator which is remunerated for its services.

The takaful operator may be a company specifically incorporated for that purpose and will offer only Islamic compliant (takaful) products and services or, as it permitted in some jurisdictions, takaful may be provided by a conventional insurer through the use of window operations. This implies that the conventional insurer should have a unit specially dedicated to the provision of takaful products and services. The objective of this paper was to examine the practices of such window operations for shari’ah compliance based on aspects of takaful operations that must be established to ensure shari’ah compliance as identified in previous studies.

Therefore this paper is divided into five sections. After this introduction comes a review of literature which highlights facets of shari’ah compliance in takaful operations. The next section presents the basic set-up of takaful window operations and analyzes same against these identified facets while the fourth section presents observations. The last section provides a summary, recommendations and avenues for further research.

LITERATURE REVIEW

The takaful contract presents a special relationship between the contributors (participants) to the takaful pool on the one hand and the manager (takaful operator) of the pool on the other. While the participants mutually contribute to the fund which will provide indemnity to members in the event to of a loss, the takaful operator receives the contributions and manages same, with utmost good faith, in such a manner that the fund adequately takes care of claims from participants. In return for this service, the takaful operator becomes entitled to be remunerated by the fund. There must be compliance with the provisions of Islamic law regulating every aspect of takaful operations from investment of funds to the contract of indemnity and the position of all parties to the contract (Ahmad, 2012).

First, the method of remuneration of the takaful provider is determined by the operating model chosen to regulate the contract between the takaful provider and the participants. The takaful fund is usually managed by the operator who is paid for the service based on one of the modes of financing applicable in Islamic law which are mudarabah (profit sharing), murabaha (profit and loss sharing), wakala (agency) or through the establishment of a waqf (endowment fund). However, in either of these situations there must be conformity with the basic principles of Islamic financial law which are the avoidance of ribal (interest).
E-Strategy Adoption and Implementation: 
Re-examining the Concept

(Kazi and Halabi (2006; Qur’an 3:130; 2:275-281; (Ahmad & Hassan, nd; Obaidullah, 2005; Khan, 2007; Ayub, 2007; Anwar, 2003), maysir (gambling, speculation) and gharar (uncertainty) (Saleh, 1992; Ayub, 2007; Gamal, 2000) in investments. The takaful fund must also be invested in shari’ah complaint avenues and must avoid areas that are considered out-rightly unlawful such as alcohol or pork or questionable such as the supply of arms and drug trafficking (Hussein, 2011).

Secondly, because Islamic financing is based in the concept of risk sharing, the investor gets a return on his investment only when funds are used productively in the economic environment (Obaidullah, 2005) and is only entitled to a return if he is also ready to share in the risks of the enterprise (Askari, 2011). This means that the takaful operator must also comply with the provisions of Islamic law regulating its mode of financing. One important feature of this concept is that the exact amount or return is not predetermined. Rather, what is fixed is the sharing ratio or percentage (Errico & Farrahbaksh, 2001; Gamal, 2006; Iqbal & Mirakhor, 2007).

To ensure this compliance regulation must be created which caters to the special requirements of takaful separate from those of conventional insurance (Dikko, 2014). Takaful must also be provided by persons who have adequate knowledge of both the basic underlying principles and substantive laws regulating such transactions (Dikko, 2011). Such persons include management, marketing, product development and shari’ah supervisory staff.

Also, due to the fact that the ownership of the takaful fund remains with the participants regulations require a strict segregation of takaful funds from the assets of the TO (Bank Negara Malaysia; Ahmad & Auzzir, 2012). However, the takaful fund is used for the settlement of claims and where this proves to be insufficient, the TO is required to provide a qard hasan to the fund which will be paid back from future surplus (Archer et al, 2009; Kwon 2007; Bakar, 2009). This loan is given form the shareholders’ funds of the takaful operator (Ismail, 2010).

Daud (2012) argues that shari’ah compliance for a takaful operator entails ensuring that core Islamic values are reflected in every facet of takaful operations. This can be achieved by ensuring workers in the industry approach the provision of takaful as ibadah (worship) to God and should advance and educate others in the religion of Islam. In essence, they must through marketing, work values, products and services create a good reflection of the religion itself. Finally, shari’ah compliance has to extend to retakaful. This means that the takaful operator must ensure that it obtains reinsurance from a retakaful provider which has also established shari’ah compliance in its activities, products and services (Billah, 2011).

Takaful Window Operations and Shari’ah Compliance

Window operations are obtained where takaful products and services are provided via a subordinate office of a parent conventional company which office remains attached and answers to the parent. In the global takaful industry, there are over 80 takaful operators and over 200 window operators (AbdulRahman, 2009). Countries which allow window operations include, among others, Pakistan, Indonesia, the United Kingdom, Nigeria and Thailand. This section examines window operations against the backdrop of facets of shari’ah compliance already identified.

In the first place, funds for the establishment of the windows are provided by shareholders of the parent company (Section 24 Pakistani Takaful Rules, 2012). These funds do not have to pass the test of shari’ah compliance relating to investment avenues and the avoidance of ribal, gharar or maysir (AbdulRahim, 2006; Jaffer et al 2010). This in itself may not be a problem if the takaful fund itself continues to observe shari’ah compliance but where the takaful fund runs into a deficit and there is the need to provide a qard hasan (benevolent loan), this will be done from the same shareholders’ fund thus the possibly infusing non shari’ah compliant funds into the takaful pool.

AGBA 12th World Congress
Page 718 of 1173
In addition, though most jurisdictions where takaful windows are allowed insist on the segregation of the takaful funds from those of the conventional business (for example section 3.27 Nigerian Takaful Guidelines), this may not always be the practically possible as most companies usually retain and share accountants, auditors and investment managers.

Also, to establish window operations, most conventional insurers co-opt staff already within their payroll to into their takaful units. These staff may not necessarily have knowledge of and/or experience in Islamic finance particularly as it relates to takaful as it one of the problems already facing the industry is the dearth of suitably qualified personnel. In fact, even where specific persons are allocated as management of the takaful unit, this may not be so for marketing staff (Ali, 2006). Therefore takaful products may be marketed alongside conventional products by any and all marketers. This is further compounded by the fact that while legislation in some countries insists on minimum educational requirements and training for eligibility to engage in takaful management and marketing (section 28 Pakistan Takaful Rules, 2012) others are silent.

Lastly, an important aspect of the shari’ah compliance of takaful is the establishment of adequate retakaful. This must be done with an equally shari’ah compliant retakaful provider. However, due to the lack of sufficient retakaful providers in many jurisdictions, scholars have allowed for the use of conventional reinsurers though they are encouraged to first look for a retakaful company (AbRahman, 2015). takaful window operators, based on this concession, may be inclined to use the same reinsurer for both conventional and takaful products particularly where the takaful business has not achieved a lot of retention.

SUMMARY, OBSERVATIONS AND RECOMMENDATIONS

Islamic financial services differentiate themselves form the conventional mainly because they are grounded and inseparable from the principles of Islamic law. In fact, the success of an Islamic financial product is in its ability to provide a desired service without deviating from the fundamental and basic principles of the law. This paper, while highlighting aspects of establishing shari’ah compliance in takaful operations also identified areas of possible deviation from compliance where takaful is provided via window operations.

In essence it was observed that strict compliance with Islamic financial law in investments may be difficult where a company is also involved in conventional investments and is using the same personnel to oversee both sides of its operations. Also, to achieve shari’ah compliance, persons involved in all aspects of takaful operations must have adequate knowledge in the basic underlying of Islamic financial law relating to takaful and the provisions of any and all regulations relevant to takaful. This knowledge may be obtained through formal education of through sustained in-depth training for personnel. Obtaining this may also be difficult to where members of staff are merely coopted into managing and/or marketing takaful.

Furthermore, a reflection of core Islamic values in both management and marketing can be lost where conventional products and takaful are sold by the same marketer. Where a potential customer shows the slightest disinterest in takaful, he is in a position to promptly whip out and offer a conventional counterpart. This may create confusion as to the difference and exclusivity of takaful.

In addition, though scholars have agreed that the source of initial funding to begin a takaful operations, they are unanimous that the funds must from that time henceforth be shari’ah compliant in investments and the avoidance of those elements which are considered unlawful vis ribal, maysir and gharar. In fact, scholars have devised various formulae for the purification of Islamic wealth where unavoidable
investments are made in non-compliant avenues. The shareholders’ funds of a takaful operator are not subjected to any test of shari’ah compliance therefore the acceptance of a qard hasan from a parent conventional insurer may effectively be a deviation from shari’ah compliance for the takaful fund.

Therefore, while the reasons given for the adoption of window operations are acknowledged as cogent, in that windows allow for faster and wider reach for takaful products as they are leveraged on the already existing network of the conventional insurer. Also, capital requirements for full-fledged (stand-alone) companies may be high thus making it difficult to establish and in some cases, there is reluctant to venture into takaful at all based on the fact that takaful is majorly an Islamic product and companies may be afraid to go out on their own if the target customers are not predominantly muslims or the industry has not been tried previously. However, it is still recommended that window operations be considered merely as the first step towards the provision of takaful and should gradually be phased out from the industry completely.

Moreover, though takaful is an Islamic based product, its underlying principles of brotherhood and communal help make it also an ethical product which appeals to persons of other religions. But this can only be obtained if it distinguishes itself from conventional insurance and this can only be done through complete shari’ah compliance.

Therefore, it is humbly recommended that first, regulators provide strict minimum formal educational and training requirements for all takaful personnel where windows are permitted. Also, there should be clear demarcation of members of staff from management to marketing and product development between the conventional and takaful business. This should also extend to accounting auditing and investment advisers.

Furthermore, regulators must insist on presentation of proof of a retakaful arrangement with a shari’ah compliant retakaful provider before licence is issued to commence window takaful. Finally possible areas for further research may include investigation into how to purify funds that are to be used for the provision of qard hasan before passing it in to the takaful pool.

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INTRODUCTION

The majority of e-business solutions have focused on individual business improvement programs and strategies (Turban & King, 2012; Cunningham, 2002). Hamel (2002) cites an example where this new approach has both worked and at the same time created disruption within an industry whilst referring to Charles Schwab and Fidelity (both are American financial institutions) have changed the manner which customers deal with their savings resulting in mainstay US banks losing almost half of their market share to new online business models such as them. Robert and Racine (2001) conclude that there is a gap between convention and practice in this new area of commerce. They contend that in order for firms to transform from a conventional business model to an e-business model which is highly dependent on the Internet, firm’s need to understand how IT systems are developed and deployed. Unfortunately, to most CEO’s this is foreign terrain and the primary area of resource allocation is delegated to a project team with the mandate to develop a miracle plan (Robert and Racine, 2001).

FINDINGS

IT enables firms to achieve operational, tactical and strategic needs more effectively and efficiently (Cooper and Zmud, 1990). Sadly, many technology-centred products and services fail to reach their expected purpose, and some are just abandoned (Burton-Jones and Hubona, 2006). This thought process has meant that an ever increasing number of organizations have begun investing in IT predominantly believing that remaining relevant requires IT investment as well. Herein, is the problem because investments in IT have to be well thought out and must fulfil the strategic needs of the organization which intends to adopt (Laudon, K.J., and Laudon, J.P., 2012).

When decisions on IT investments are not strategically thought out, the inclusion and purchase of new technologies by organisations has not provided the expected returns for firms (Tieman and Peppard, 2004). It should be noted here that the disappointing returns on investment have in many cases been attributed to the difficulties involved in implementing IT operationally and by far much critically due to a notable lack of understanding of technology and its strategic implications by senior executives within the firm (Laudon, K.C. & Laudon, J.P., 2014; Robert & Racine, 2001).

IT adoption failure is by no means uncommon within firms (Robert and Racine, 2001) especially because of unplanned and slipshod adoption. This usually happens at the implementation phase (Tan & Sutherland, 2004; Legris, Ingham, & Collerette, 2003; Umble, J., Haft & Umble, M., 2003; Rogers, 1995; Sauer, Southon, & Dampney, 1997; Szajna & Scamell, 1993) and ranges from underutilization to outright rejection (Venkatesh and Davis, 2000).
Businesses must learn to appreciate the fact that e-business is the operationalization of the E-strategy that has been identified by the firm to enhance its reach. You cannot adopt an e-business strategy without first identifying the environmental factors that are shaping the business environment (this must happen at the strategic level of the organization), from this a deliberate decision to expand electronically (electronic strategy) which may be through e-commerce or the more expansive e-business models. As stressed above, this strategy needs to be addressed at the highest levels of the firm to negate any resultant technology adoption failure.

The use of strategy in firms to achieve the objectives of the firm is not something that is extraordinary. What is important is that firms recognize that with the ever increasing use of technology the means with which the strategic direction of the firm will be achieved has seen a paradigm shift. This requires that firms seeking to broaden their customer base electronically (through the Internet platform) need to understand E-strategy (Cunningham, 2002).

E-strategy is the adoption of an electronic strategy to achieve the objectives of the firm in its environment with the primary intention of achieving effectiveness. Cunningham (2002) likens E-strategy as a means of developing and changing the manner a firm operates by utilizing e-business tools and techniques as the primary lever.

E-commerce is the conduct of business over an Internet platform and particularly the web (Chaudhury and Kuilboer, 2002). This was rather restrictive as the over simplification of the meaning of e-commerce has further evolved since then. A more inclusive definition by Turban and King (2012), which is more reflective of the OECD (2013) summation state that e-commerce is the mechanism of purchasing, retailing, or swapping products, services, or exchanging any information via a network whilst e-business can be said to be more holistic version which includes not only the purchasing and retailing of goods and services but is inclusive of the servicing of customers, collaborating with the firm’s partners, and carrying out network based transactions within the firm.

The advent of e-commerce has changed a business’s functional areas and their primary tasks. E-commerce has attracted significant attention in this millennium. This attention has required a need to look at strategies (Varshney & Vetter, 2002; Kalakota & Robinson, 2000; Afshar, Khaksar, Paghaleh and Kachardas, 2011).

E-commerce will change the way competitive intelligence will be gathered and influence how small businesses could benefit from such a tool (Cronin, Overfelt, Fouchereaux, Manzvanzvike, Cha and Sona, 1994). It is common knowledge that they have been proven right by the sheer number of Internet based firms that exist today. Examples vary from Amazon.com and Priceline.com to Zalora.com.my in Malaysia.

E-business includes all processes that a firm utilizes (usually employing a computer network) to conduct its operations (Kroenke (2014); Baltzan & Phillips (2014); Laudon, K.P. & Laudon, J.C. (2013); Stair & Reynolds (2013); Haag & Cummings (2012). A more comprehensive definition would be the culmination of a firm’s transformation activities and it’s delivery through the use of technology thereby adding value to its customers so as to enhance the customer experience within the confines of the digital economy (Turban and King, 2002).

Where e-commerce links the firm with its suppliers and retailers and its customers, e-business takes it further by enabling the firm to carry out this action and linking it to the internal processes of the firm in the fulfilment process (Haag and Cummings, 2013). What is meant here is that information and communication technology (ICT) is used to enhance the operations of the firm with the intended outcome of providing value to the customer (Laudon, K.P and Laudon, J.C., 2012). An all-encompassing
definition is provided by Holsapple and Singh (2000) which was gathered from an array of diverse printed and electronic, as well as academic and managerial sources which comprised the five views of e-business which included trading, information exchange, activity, effects, and the value-chain. E-business is the approach used to achieve business goals where (computer-based or networked) technology is used for exchanging information and thereby enabling or facilitating the rendering of activities within the value chain or the supply chain which includes the ability to support decision making support that supports these activities (Haag & Cummings, 2012, Ha & Stoel, 2009; Holsapple & Singh, 2000).

The processes that are needed to enhance the firm’s e-business capability require covering the full spectrum of operations from procurement and production to the delivery of the finished product or services. This must also include the payment mechanisms in place and the electronic links between suppliers and retailers (Kroenke, 2014; Baltzan & Phillips, 2014; Stair & Reynolds, 2013).

Only efficient and effective companies succeed where competition is intense and in most cases are very rough and tumble. Competitive advantage is achieved by the ability of businesses to enhance their shareholder value by forcing the firm’s managers to identify, formulate and implement the relevant strategies required to outperform their competition or rivals. They also state that strategy must be viewed as a tool that organizations needs to win and link it to competitive advantage or in other words to establish its presence in competitive rivalry. They also believe that this will allow a firm to be placed in a unique position of being a winner or survivor.

David (2009) emphasizes the need for addressing the external and internal environments within the operating environment suggesting that strategic management is a process involving formulation, implementation and evaluation of the actions taken which will ensure that the firm will achieve its stated objectives. It is often said that strategic management is usually for overall operations of the firm with a view towards quarterly, biannual or annual achievements.

This point on competitive advantage is extremely important for businesses. Haag and Cummings (2013) strongly point out that successful businesses in order to gain competitive advantage and be successful must define the nature of products or services and distinctly know who your customers are, understand their needs and how they perceive your products and services. The authors clearly state that it is the customer who should be targeted especially in the B2C environment where businesses must formulate effective business strategies based on the value the firm expects their customers to place on them. Value here is meant to be the influence a firm can impart upon the customer to choose their product or service. E-strategy and its adoption straddle all businesses, business models, industries from the very small to the very large multi-nationals. A representation of these links is given in Figure 1 below.
Figure 1: Relationship between E-strategy, E-business and E-commerce

This perspective is widely accepted especially with regards to the strategic thinking process of organizations and the implementation of such strategies can be measured by their performance or the end results of an activity (Wheelen and Hunger, 2010). This may also be implied towards the adoption of E-strategy. It will be useful and highly significant to establish whether the adoption of the E-strategy was done because ‘others’ are doing it or has it been done deliberately to improve and expand the customer base of the organization to enhance its effectiveness and lastly to see if it has been successful. Mintzberg, Lampel, Quinn & Ghoshal (2003) reinforce this when they contend that strategy is merely a plan and a deliberate predetermined line of action with a set of guidelines effectively intended to handle a situation.

They espouse two key characteristics in that it is made in advance to the actions it is applied on and it is deliberately and purposefully acted upon. The importance of IT in achieving strategic goals of the organisation was highlighted by Konsynski and McFarlan (1990) and further expanded with the inclusion of a definition by Keen (1991) which emphasized the present need to use IT to gain competitive advantage because IT according to him has transcended its traditional unseen role and has evolved into a more dynamic strategic role incorporating the capability to not only support chosen business strategies, but being able to drive the creation of new strategic business initiatives.

The delivery of the postulated strategy by an organization through electronic means is E-strategy. As mentioned earlier, E-strategy encompasses a multitude of applications from e-government to e-business. A brief outline of the flow and application of the discussions above is provided in Figure 1 below which includes an example of what a firm has to do to take advantage of an available opportunity. The conventional strategic management process is drawn from Wheelen and Hunger (2010), Abdullah (2006), Parnell (2008) and Harrison and John (2008). The same process is also detailed by other authors such as Hill and Jones (2012), David (2009), Pearce and Robinson (2009) and most other prominent strategic management authors. The process and actions that the firm needs to do however, is presented by this author with an example of the appropriate actions that must be taken by the firm in order to achieve (in this case) the growth strategy of the firm. The growth here is designed to happen through electronic means (thereby E-strategy) and how it may morph into an e-business model to be decided by the firm.

Figure 2 on the next page presents a view of E-strategy and its implementation that is driven by the environment. The opportunity here has been drawn from the external environment (high Internet penetration rate and high computer literacy among consumers). This then lends to the appropriate corporate level strategy (grand strategy) to be adopted. In this case a growth strategy for the firm could be adopted and this is to be achieved electronically (E-strategy).

The choice of the type of E-strategy to be employed may be e-commerce or the more comprehensive e-business depending on the objectives of the firm. For instance if the choice is e-commerce then the customer experience will be paramount and the resources of the firm need to be mobilized to achieve this. The various applications of e-commerce such as B2B, B2C or C2C would all be options. If e-business is to be adopted then the same modes can be utilized but the internal processes of the firm need to be enhanced. The choice of business level or competitive strategy as proposed by Porter (1998) to be adopted would be either competing based on cost, differentiation or focus. The choice or mode of E-strategy to be employed would either be e-business or e-commerce depending on the capability of the firm to incorporate the infrastructure that is required.
Finally the operational level strategies for product or service delivery by businesses must be identified so that the E-strategy that has been adopted will come to fruition. The firm needs to deal with customer-focused processes including all aspects of promotion and marketing, delivering over the web, payment and purchase order processing, and online support for the customers. This must also include internal management actions or processes which enhance efficiency and other employee based services when dealing with customers, employee training, firm wide information-sharing etc. (Kroenke, 2014; Baltzan & Phillips, 2014; Stair & Reynolds, 2013).

CONCLUSION

The primary reason that an understanding of the concept of E-strategy is so important is because when it is addressed at the strategic level then the importance that can be accorded to it will become more focussed. This will also enable the resources of the firm to be better identified, planned and employed to achieve the objectives of the firm. The tendency to just adopt e-business by any firm without a proper understanding of this concept might lead to losses for the firm as IT investment is quite expensive. In most cases such investment is usually capital expenditure which requires appropriate returns. When such a plan is implemented and directed from the very top of the firm then the employees within the firm will understand the importance of carrying it out effectively.
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INTRODUCTION

The highly competitive atmosphere in which organizations operate today, achieving and sustaining competitive advantage is increasingly becoming the central theme for firm’s survival (Flint & Golicic, 2009). Specifically, recent trend of knowledge based economy has questioned the traditional method of utilizing only financial and other tangible resource may not provide sustainable competitive advantage for organizations (Lan, Lu, & Chen, 2013). The role of organizations human capital resource is increasingly becoming imperative in the successful implementation of organizations policies and activities aimed at ensuring competitiveness in the marketplace (Díaz-Fernández, López-Cabralés, & Valle-Cabrera, 2014). By implication, firm’s economic activities are undergoing a paradigm shift towards knowledge and intellectual based dimension.

This development makes knowledge asset replace and take the lead among other production factors available to business firms (Delgado-Verde, Martín-de-Castro, Navas-López, & Cruz-González, 2011). In addition, strategy and human resource management literature has long proposed human capital as important element that enhances firm’s performance and long term profit in knowledge based economy (Hsu & Fang, 2009). This resource is developed and maintained in organizations human resource and it is highly movable within the factor market (Sydler, Haefliger, & Pruksa, 2014). This is because human resource with large stock of human capital can easily quit their current job if it does not meet their requirement (Teece, Pisano, & Shuen, 1997). The tendency of human capital mobility has shifted attention of scholars to focus on development of firm specific human capital (Barney, 1991; Wright, 1992).

In line with resource based view perspective, Penrose, (1959) posit that firms can gain competitive advantage based on two basic pillars i.e. firms resource heterogeneity and firms resource immobility. This prompt contribution from other scholars such as Barney (1991), where he introduced value, rarity, inimitability and non-substitutability as not only requirement but necessary conditions for sustainable competitive advantage. Moreover, as studies in human resource and strategic human resource management lean toward investigating and advocating for internal resource utilization through unique human capital configuration, little is known about the most suitable level at which this resource can be developed. In addition, understanding human capital development through general or firm specific skills has recently become debatable. These suggest that, the appropriate strategy still remain vague. Therefore in this paper we review relevant literature focusing on human capital. We argue that both firm specific and general human capital depend on a given firms’ situation.
OVERVIEW OF HUMAN CAPITAL

Human capital is an intangible organizational asset that has a direct influence on organizational performance (Abdullah & Sofian, 2012; Sharabati & Nour, 2013; Bontis & Chua Chong Keow, W Richardson, 2000). The relationship between human capital construct has been linked with organizations financial performance (Curado, Guedes, & Bontis, 2014). In particular, within the banking industry, many studies have established a link between the components of intellectual capital and financial performance (Bontis & Fitz-enz, 2002; Stovel & Bontis, 2002; Mavridis, 2004).

In addition, organizations human capital resource involve the collection knowledge, skills and abilities facilitates employee innovation capacity, creativity, problem solving technique and competence (Hormiga, Batista-Canino, & Sánchez-Medina, 2011; Hsu & Fang, 2009) and the task of identifying and evaluating source of competitive advantage through employee talent and innovation is of strategic importance to organizations (McGuirk, Lenihan, & Hart, 2015). Therefore, organizations human capital resource plays significant role in the successful implementation of organizations strategic policies and activities which ensure competitiveness in the marketplace (Díaz-Fernández et al., 2014).

FIRM SPECIFIC AND GENERAL HUMAN CAPITAL

The concept of human capital has been classified as firm specific or general human capital (Chowdhury, Schulz, Milner, & Van De Voort, 2014). Firm specific human capital is obtained and measured through the extent of education and experience in human resource current firm which is not transferable to other firms (Feeny & Wilcocks, 1998). While, general human capital are those skills with general applicability across firms (Chowdhury et al., 2014). The value of firm specific human capital eventually erode as employee switch between one organization and another (Balmaceda, 2006). While many scholars believe that, firm specific human capital experience improvement in their present work, knowledge, skills and expertise (Gathmann & Schoenberg, 2010; Zarutskie, 2010). It has been argued that, firms that develop firm specific skills on core events may be difficult to monitor (Masters & Miles, 2002). In this paper we argue that, relevance of developing firm specific or general human capital may depend on a given situation. Because the highly competitive market in which businesses operate today may often times require that firms diversify to new product or markets. In this situation, applicability of such firm specific knowledge in the new product area or markets may be constraint by firm’s unique configuration of Human capital.

HUMAN CAPITAL AND FIRM COMPETITIVENESS

Human capital resource, involve knowledge pool and knowledge utilization are positively associated with organizational performance (Kim, Lee, Paek, & Lee, 2013). However, there is still inconsistency in the literature concerning the effect of human capital on performance. Appropriate configuration of human capital is believed to transmit effect on employee skills and eventually to organizational performance. These unique skills provide an avenue through which firms’ can gain competitive advantage which is sustainable. But this study is based on the argument that, the human capital itself does not always have significant effect performance. This is because many studies on human capital have established insignificant association in its relationship with organizational performance (Khaliique, Shaari, Abdul, Isa, & Ageel, 2011). Conversely, another study on the effects of intellectual capital on organizational performance through organizational learning capability revealed that human capital is significantly and positively associated with organizational performance (Darvish, Ahmadi, Kafashzadeh, Farid, & Nejatizadeh, 2013). This finding contradicts the previously reported results where human capital was found to be insignificantly related with organizational performance (Khaliique, Shaari, Isa, & Ageel,
2011). Therefore, based on inconsistency in the findings, we call for more empirical investigation of this construct. Such investigations can be conducted in order to clarify current findings through the use of moderators.

Moreover, human capital resource can provide level of return of an individual employee, with respect to his or her organizations, on many employment related practices and results (Babin & Boles, 1998). This makes scholars increasingly recognize that employee assume a crucial part in conveyance of capital, maintaining satisfied and loyal customers is increasingly becoming prevalent among scholars (Chi & Gursoy, 2009). Therefore, maintenance of employee who can contribute positively to performance in the working environment is vital to firms success (Karatepe, 2013). Therefore, attaining a competitive advantage for business is vital and firms scholars should try to explore the means through which such advantage can be sustained. This can be done through either general or specific configuration.

COLLECTIVE HUMAN CAPITAL

Collective human capital resource can be seen as the collective level of return of an individual employee, with respect to his or her organizations on many employment related practices and results (Babin & Boles, 1998). The recognition that employee assume a crucial role in conveyance of structural capital, maintaining satisfied and loyal customers, recovery and maintenance of fulfilled and faithful customers is prevalent among scholars and experts (Chi and Gursoy, 2009; Guchait et al., 2012). Therefore, maintenance of human resource who can significantly contributes to performance is vital to business success and customer loyalty to business firms (Karatepe, 2013). Moreover, employee in service related employments are believed to deal responsively with caution and relied upon their expertise to manage customer job demands and issues in a responsive and obliging way.

In view of the fact that structural capital and consumer loyalty to a great extent relies on employees’ service delivery and behavior (Bettencourt, Brown, & MacKenzie, 2005). The level of an accomplishment to which an employee’s satisfies the organizational mission and objective at working environment is called performance. The job employee is collectively developed by level of accomplishment of a specific target or mission, mission, objectives or goals that describes the limits of performance (Cascio, 2006). As noted by former Siemens CEO Heinrich von Pierer, "whether an organization values its workforce in hundreds or many thousands, its prosperity depends exclusively on individual performance" (Bisoux, 2004). Collective human capital therefore involves a collection of knowledge, skills, Abilities and other characteristics. This has been treated as a singular construct in the literature (Nyberg, Moliterno, Hale, & Lepak, 2014).

According to Jung & Yoon, (2014) revealed that desired behavior from the employee during service delivery is necessary in enhancing quality and competitiveness business firms, and it is one of the indicators of employee performance. The fact that collective employees in the frontline perform an essential part in delivery of structural capital, successful service delivery, and retention of satisfied and faithful customers is predominant among researchers and practitioners (Chi & Gursoy, 2009; Guchait et al., 2012). Therefore, attracting and retaining the right pool of employees who are capable of making significant contribution toward enhancing quality of service and efficient service delivery is as significant towards ensuring that firms’ succeed. This will ensure customer loyalty which is the means through which firms’ can improve their profitability (Karatepe, 2013). In this regard, specific configuration of such skills may not be necessary since employees the ultimate goal of the firm is productivity improvement. Whether, such productivity emanates from unique skills or extent of team spirit, it is the end result that matter. In essence, unique configuration of skills may limit the possibility of knowledge sharing among employees.
CONCLUSION

Firms’ human capital embedded in employees often it is called intangible firms’s resource, (Mehralian, Rasekh, Akhavan, & Ghatari, 2013; Ployhart & Moliterno, 2011). However, firms’ human capital incorporates knowledge of firms’ restrictive innovation or social setting which is available to firms. Employees may take such capital with them when they leave, but firm specific human capital is incompletely deployable in the new firms’ (Campbell et al., 2012). It is used to refer to employee level knowledge, skills, and abilities that have constrained applicability outside his present firms’ (Becker, 1964). It can be perceived that human capital means one of essential production component which can create improved values through inputting it (Dae-Bong, 2009). The ownership of human capital may give a clarification and guaranty sustainable advantage, in in view of the fact that value, rarity, inimitable and non-substitutable knowledge, skills and abilities (KSA’s) is developed in a path dependent manner, (Crook, Todd, Combs, Woehr, & Ketchen, 2011).

Therefore, for firms’s to sustain, maintain and retain any competitive performance advantage linked to human capital, then competing firms’s should not have the capacity to buy the asset in strategic factor market, (Crook et al., 2011). Human capital if properly configured is most essential for achievement if it comprises of current knowledge and skills related to task, (Unger, Rauch, Frese, & Rosenbusch, 2011). Firm specific human capital resource involve the collection knowledge, skills and abilities that facilitates employee innovation capacity, creativity, problem solving technique and competence (Hormiga, Batista-Canino & Sanchez-Medina, 2011; Hsu & Fang, 2009).

The task of identifying and evaluating source of competitive advantage through employee talent and innovation is of strategic importance to firms’s (McGuirk, Lenihan & Hart, 2015). Thus, firm specific human capital is unique skills, knowledge and innovative abilities that the firms’s develop and maintained as a benchmark for workers participation in the process of realizing overall objective. However, the firm specific advantage provides source of rent its current firm. But closer examination of this advantage may turn out to be adverse for the firm whose resources are specifically configured.

To understand this scenario, a typical economic law of diminishing return can be used to exemplify this phenomenon. For instance, firms’ current demand for a particular product or market may rise and eventually reach its peak. By the time it reaches peak diminishing return will set in by experiencing declining demand for its product. This decline in demand may be caused by among other factors introduction of new product, development of new technology or entry of well entrenched competitor into the market. This development may compel firm to either diversify by introducing a new product or move into a new market. Particularly firm specific human capital may not be useful when firm move into new markets. Therefore, while firm specific human capital provides a source of competitive advantage, such advantage may not be sustainable in the long run.

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Work Time Demand and Job Satisfaction of Geographically Dispersed Team: The Mediating Role of Organizational Support

Keywords: Job satisfaction, Work Time Demand, Organizational Support, Geographically Dispersed Teams, Temporal Dispersion Separation

INTRODUCTION

Kirk is a skilled knowledge professional located in Cyberjaya, Malaysia who works for a Multinational Corporation (MNC). His teammates are located at different parts of Asia, Europe and America. Although he values the vast diversity, rich culture and expertise in his geographically dispersed team (GDT), he finds the virtual aspect of his job challenging. Most of his co-workers and his immediate supervisor are located in different countries. They rarely meet face-to-face and rely heavily on asynchronous communication which is often frustrating due to lack of clarity, misinterpretation and false assumption. In order to establish more effective communication, the team meets three times a week for phone chat. Due to the 8 hour offset between Malaysia and regions in communication, meetings are held in the late evening Malaysian time. During these hours, Kirk would forgo his evening social and family enrichment activities attending conference calls until way past bed time of his family. In addition to work-family conflict, these interactions exert strain that often lead to tension and job dissatisfaction within the team.

The working life as experienced by Kirk is not new for GDTs located in Malaysia, As global working becomes more entrenched, virtual teams are becoming a norm for modern business (Duke, 2015). The scarcity of resources exacerbates the issue of global working where individuals of these teams are expected to work independently with minimum supervision. This requires self-motivation and disciplined. A global survey conducted by Accenture (2014) reveals that job satisfaction of virtual teams has decreased to 44% from 52% in 2013 attributed mainly to feeling underpaid, long work hours and high role demand. Yet, other surveys such as JobStreet (2012) cited relationship with supervisor, long work hours and lack of co-workers support as the main reasons for their dissatisfaction.

It is apparent from these surveys that work time demand from spatiotemporal effect of global collaboration, and organizational support from the aspect of co-worker support, supervisory support, and decision latitude (Woo, 2009) play a crucial role in the affective and cognitive emotion of a GDT employee. It raises the question of how work time demand influence employee job satisfaction and would organizational support improve employee job satisfaction in the relation with the time demand of work? This study explores the questions from Malaysian GDT perspective through a quantitative survey undertaken in the Multi-super Corridor (MSC) flagship town of Cyberjaya.

LITERATURE REVIEW

Studies by Tang, Zhao, Cao, and Inkpen (2011), and Olson and Olson (2000) found evidence of challenges in active collaboration across GDT sites. It is especially problematic in time zone differences of eight or more hour offset forcing affected teams to work extended hours beyond typical work hours for inter-region real time communication. This mode of communication is essential as studies have shown
that using asynchronous communication is ineffective due to cross-cultural conflict, differences in communication style and unreliable collaborative devices that generates the feelings of “dissatisfied”, “being behind” or “missing out” among GDTs (Klitmøller and Lauring, 2013).

Although having real time communication alleviates some of the collaboration issues, it exacerbates others. As Malaysia is located in the Far East 8 hours ahead of Greenwich Mean Time (GMT +8), Central European Time is an hour ahead of GMT (GMT+1) and US Central Standard Time is 6 hours behind GMT (GMT -6), real time communication between Malaysian GDT and their counterparts in America and Europe takes place either in early morning or late evening. Individuals often sacrifice their evening social hours with their family attending conference calls resulting in work-family imbalance. Greenhaus, Collins, and Shaw (2003) in their assessment of the various components of work-family balance found that individuals who spent less time on family experience lower quality of life. It was reported that individuals working under such conditions have a higher tendency of suffering from health related problems. Raediker, Janssen, Schomann and Nachreiner (2006) in his study on working condition found a consistent relationship between length of working hours and its effects on workers ranging from dysfunctional families, divorce cases to psychology problems. Collectively, these factors impact an employee job satisfaction depicted by his behaviour, cognitive and affective traits (Hulin and Judge, 2003).

As most virtual organization expects GDTs to operate independently with shared purpose across space, time, and organization boundaries, a certain level of decision latitude and job control would be given to the team. In contrast organizational support can be challenging in temporal dispersed environment. Studies (Chinowsky and Rojas, 2004; Varner and Beamer, 2009; Klitmøller and Lauring, 2013) have shown that co-workers in different virtual teams face coordination problems due to lack of trust and intercultural believes and attitudes. Lack of overlapping work hours also contributes to the coordination problems. Supervisory support may also be lacking due to different focus (Klitmøller and Lauring, 2013).

Job Demands-Resources (JD-R) model postulates that organizational support is a form of motivational process that buffers the impact of work demand and restore job satisfaction (Bakker and Demerouti, 2007; Willems, De Jonge, Smit, Depla, and Pot, 2012). However, JD-R model was proposed by Demerouti in 2001 at the period when firms were expanding their operations offshore in the 2000s (New York State Department of Labor and Empire State Development, 2010) and global working was in its infancy. As shared service and outsourcing (SSO) became more entrenched, the effect of spatiotemporal became more apparent. Although past studies on global working were carried out such as temporal dispersion barriers (Rao, 2004; Beulen, 2012; Carmel, 2012), job resources (Idris, Dollard, and Winefield, 2011; Wickramasinghe, 2010; Malhotra and Chadha, 2012) and job demand (Harrington and Ladge, 2009; Malhotra and Chadha, 2012), these studies did not address the spatiotemporal issue of fixed scheduled GDT employee located in time zone differences of 8 or more hour offset. In addition, it would be interesting to understand the application of JD-R model in the context of GDT. Specifically, whether organizational support have the same mitigating effect in buffering work time demand and restoring job satisfaction that form the core objective in this study.

**METHODOLOGY**

**Conceptual framework**

Job satisfaction is determined by an employee’s quality of work life (QWL) attributed to the two factors of extrinsic hygiene factor and intrinsic motivators (Herzberg, 1966). The strength two factors have on QWL depends on their complexity and importance. For instance, individuals having high emotional work demand and low job control would most likely experience lower QWL and job dissatisfaction. Work demand as defined in JD-R model is considered a health impairment process (Bakker and Demerouti, 2007). In this regards, we categorize work demand using traditional occupational stress as that involving
work overload, emotional demands and role reorganization and inject findings from Karasek (1979) that without proper occupational control would result in emotional exhaustion. As time demand of work from the effect of spatiotemporal increases, it exerts unresolved strain on an individual causing psychosomatic ailments invariably leading to depression, exhaustion and ultimately low QWL. This phenomenon establishes a correlated link between the pressure of work time demand and employee job satisfaction.

JD-R model conversely treats job resources as motivational process in reducing work demand and simulating personal growth (Bakker and Demerouti, 2007). Woo (2009) suggested that job resources in the form of perceived organizational support is examined from three perspectives of support from management, support from supervisor and co-workers support. However, organizational support should not be restricted to only organization but also support from supervisor and the employees’ co-workers. The support from peers can influence employees positively which in turn influence employees’ perception of support from organization. The positive outcome of these relations establishes a positive link between organizational support and QWL therefore promoting job satisfaction. These suppositions would theoretically assume organizational support having a similar intervening effect on work time demand in restoring job satisfaction. Based on these arguments, the conceptual framework (Figure 1) was developed that is used to test the assumptions made in this research.

**Hypotheses**

The first hypothesis was based on JD-R model that proposes high job strain exhausts employees’ mental and physical resources leading to burnout and job dissatisfaction. Literature review has shown that collaboration across GDT sites is especially problematic in eight or more hour offset forcing professionals to work extended hours in their attempt to augment overlapping work hour window. The long irregular work hour leads the study to hypothesize that global time demand of work as those experienced by GDT has a profound effect on employee job satisfaction.

H1: Global work time demand (WTD) negatively affects satisfaction (JS) of GDT employees.

The second hypothesis is to address the research question on the influence of organizational support in restoring job satisfaction in the context of GDT. This assessment was based on the level of decision latitude, supervisory and co-worker support experienced by Malaysian GDTs and the satisfaction derived from such support.

H2: Organizational support (OS) predicts employee job satisfaction (JS).

The third hypothesis is to test whether organizational support has mediating effect on the relation of global work time demand and job satisfaction. This hypothesis support JD-R model of having organizational support buffering impact of work demand and restoring job satisfaction.
H3: The impact of job satisfaction is increased when organizational support is included, indicating the latter assumes a mediating role in the relation of work time demand and job satisfaction.

**Population and sampling technique**
This study is targeting fixed schedule knowledge workers working in MNCs who are providing shared services and offshore outsourcing (SSO) support. Overall, 306 usable responses from 14 MNCs located in multi-super corridor flagship town of Cyberjaya were collected from the online survey.

**RESULTS**
Measurement model was used for confirmatory factor analysis (CFA) followed by specification and estimation of the models. Initial assessment of the hypothesized model could not be accepted. Unidimensionality testing and dataset evaluation were then carried out to improve the model and confirm the underlying structure on the basis of theoretical ground. This results in the removal of indicator JR9 “People I work with are competent in doing their jobs” from measuring OS because of large standardized residual covariance with other indicators. The final respecified model (Table 1) was analyzed to have possessed all necessary good fit requirements.

<table>
<thead>
<tr>
<th>Table 1: Respecified measurement model fit indices</th>
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<tbody>
<tr>
<td><strong>Fit Values</strong></td>
</tr>
<tr>
<td>Chi Square</td>
</tr>
<tr>
<td>Df</td>
</tr>
<tr>
<td>Chi Sq/df</td>
</tr>
<tr>
<td>p-value</td>
</tr>
<tr>
<td>Goodness-of-fit index</td>
</tr>
<tr>
<td>Adjusted goodness-of-fit</td>
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<tr>
<td>Tucker-Lewis index</td>
</tr>
<tr>
<td>Comparative fit index</td>
</tr>
<tr>
<td>Normed fit index</td>
</tr>
<tr>
<td>Root mean square residual</td>
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<tr>
<td>Root mean square error of approximation</td>
</tr>
</tbody>
</table>

**Structural regression analysis**
There is a significant and negative regression path between JS ← WTD indicating a strong and inverse relation between the two constructs (Table 2). It supports the first hypothesis that WTD negatively affects JS of GDT employees reaffirming JD-R model health impairment process that increasing work time demand would result in higher job strain and lowers job satisfaction.

<table>
<thead>
<tr>
<th>Table 2: Hypothesis Testing</th>
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<tr>
<td><strong>Hypothesis</strong></td>
</tr>
<tr>
<td>H1</td>
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<tr>
<td>H2</td>
</tr>
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Conversely, the significant and direct causal linkage between JS ← OS established the criticality of organizational support in improving employee motivation. It lends weight to the second hypothesis that OS is a predictor of JS. Figure 2 shows 34% of the variance of job satisfaction is accounted by the regression model.
Mediation Test
The mediation assessment of OS in relation to WTD and JS was carried out following Baron and Kenny (1986) approach. To eliminate the possibility of Type 1 error in Baron and Kenny approach, percentile bootstrap method was added to the test (Krause, Serlin, Ward, Rony, Ezenwa, and Naab, 2010). The result (Table 3) shows that when mediator OS was introduced in the second step (Step B), the path estimate dropped to -0.189 with both critical ratio (C.R = 3.66) and p-value (<0.001) remained significant indicating partial mediation has taken place. Percentile bootstrap confirms the outcome of second step. As such, hypothesis (H3) is partially supported.

<table>
<thead>
<tr>
<th>Step</th>
<th>Regr. Path</th>
<th>Est.</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Direct effect without mediator OS</td>
<td>JS &lt;-- WTD</td>
<td>-</td>
<td>0.260</td>
<td>0.060</td>
<td>-4.360 ***</td>
</tr>
<tr>
<td>B.</td>
<td>Direct effect with mediator OS</td>
<td>JS &lt;-- WTD</td>
<td>0.189</td>
<td>0.052</td>
<td>-3.659 ***</td>
<td>Partially Mediated</td>
</tr>
<tr>
<td>C.</td>
<td>Indirect effect</td>
<td>JS &lt;-- WTD</td>
<td>0.012</td>
<td></td>
<td></td>
<td>Partially Mediated</td>
</tr>
</tbody>
</table>

DISCUSSION
The study suggests that spatiotemporal impact on Malaysian GDT employees is immutable as long as the need for global team collaboration and alignment exist. It leads to employees working long irregular hours in their attempt to augment overlapping work hour window. This is supported by a high percentage of respondents claiming that they work long hours and often until late in the night. The job strain (time pressure) from attending evening conference calls at the expense of social leisure and family enrichment activities cause workers to suffer psychosocial stress and eventually job dissatisfaction.

In line with the JD-R model health impairment process, responses given to “satisfaction with work” inversely and significantly correlates with “working long hours”. In line with JD-R model, it is pertinent to also acknowledge the contribution of organizational support as the motivational process in restoring job satisfaction. Unlike co-locate teams (CLT) where meetings are held face to face, GDT does not have the same operating ability. The window for synchronous communication is just sufficient for task oriented discussion. This type of virtual working erodes social interactions among co-workers and supervisor that
is fundamental in team bonding. Respondents in the survey acknowledged high organizational support as essential in promoting job satisfaction. The need for organizational support is greater felt in GDT environment where job strain from high work time demand. Regular positive reinforcement and intimate knowledge of team member characteristics, sociocultural and family background would create better understanding and empathy in fostering closer team dynamics, cognitive and affective emotional bases of behaviour among individuals in the team.

However, team should be aware of the paradoxical effect on the time spent in promoting non-work related activities. Due to geographical, distance and temporal effect of GDT, the lack of overlapping work hours can serve as an impediment that can be counter-effective if too much time is spent on team dynamics that could otherwise be utilized for family enrichment activities or other social activities. For the Malaysian GDT, having less team interactions in the late evening would alleviate work time demand, creates better work life balance and quality of work life. However, too little interactions would equally have an adverse effect on employee job satisfaction. Therefore a fine line is drawn between spending time on organizational support and reducing work time demand that GDT has to juggle to sustain job satisfaction. It explains the partial mediation of organizational support on job satisfaction in the face of work time demand.

Limitations and suggestion for future research
The study was carried out in Malaysia which is eight hours ahead of GMT. A location study based on a single time zone would not allow the study to generalize the findings over larger temporal dispersion variances. One suggestion is to expand the study over wider geographical locations and time zones such as Australian Eastern Standard Time (GMT +10) to understand variability of geographical, distance and temporal dispersion on the variance of work time demand and GDT employee job satisfaction.

CONCLUSION
Despite the study indicating that Malaysian GDTs are generally satisfied with their work environment, the observed staff turnover rate remains high. This is particularly concerning as the inability of MNCs to retain talent would not allow firms to sustain competitive edge especially on knowledge and experience that is critical to driving high performing SSO organization. This is attributed mainly to the vibrant growth of SSO in Malaysia that creates abundance job openings and the GDT working conditions that are driving graduates to shun the SSO industry. Addressing the talent pool will be one of the keys in growing the SSO industry and enticing more foreign direct investment. The other possibility given the resource constraint is to move up the value chain from being a low value service provider to participating in niche areas such as big data analytics, cloud computing, risk-based security and high value business processing outsourcing (BPO) services. Having the right policy and staff retention strategies would help grow the industry and entice more foreign direct investment drawn into the country.

ACKNOWLEDGEMENTS
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Creating Winning SMEs and Surviving in the Midst of Crisis: A Conceptual Framework

**Keyword:** Small and Medium Enterprises, Mathematical Models, Firm Performance, Conceptual Research

**INTRODUCTION**

Industry and trade sectors are among the most important factors in the economy of a country. They serve as the driving force of an economy and a source of livelihood and community development. Since September 2008, the global financial crisis has dramatically impacted the economy of most countries around the world. To turn such adversity to opportunity, firms are required to increase their efficiency, reduce waste and consistently invest in innovation (Financial Crisis Inquiry Commission [FCIC] Report, 2011; Honohan, 2010). Furthermore, continuous performance in an organization is crucial as it determines whether a firm pre-determined targets can be achieved or vice versa (Goffin & Perkins, 2009). The issue was the measurement of performance in the context of corporate culture and finding out the link between the success of an organization and corporate culture. To ensure the efficacy of an organization of securing long-term sustainable development and dealing with the changes, it is of utmost importance to optimize their performance significantly (Babeľová & Vaňová, 2014).

Babeľová and Vaňová, (2014); Armstrong (2000) described the essence of performance management as an effort to obtain the best results by means of performance within a framework on planned goals, standards and attribute requirements or competence that has been mutually agreed. Considering the study of Mathis and Jackson (2005); Trebuňa (2011) which states that the process of performance management system is comprised of employee’s performance reward and improvement, measuring, evaluation, encouraging and identifying. The definition of performance management according to Auginis (2007) is an on going process of developing, measuring and identifying the performance of an individual and teams and then matches it to the organizational strategic goals. Grant (1996) advises that the analysis of organizational knowledge gives insight into the relationship between organizational capability and competitive advantage, and he sees organizational capability as the outcome of knowledge integration. Meanwhile John Whitmore in Coaching for Performance (1997) regarded performance management as performance is the implementation of functions that are required from an individual; performance is an act, an achievement, and a public exhibition of skill. Small and medium enterprises (SMEs) are considered to be the backbone of many economies and contribute greatly to a country’s wealth (Lazányi 2014). Indeed, these enterprises represent an essential source of economic growth and development in advanced industrialized countries, just as they do in emergent economies (Robu 2013). The paper is concluded with a presentation of an integrated conceptual framework for Creating a Winning SMEs and Survive in the Midst of Crisis.

**LITERATURE REVIEW**

This section covers literature and theories that shaped the development of the conceptual model of SME wealth creation presented in the next section. Theories considered were informed by literature relating to
dimensions associated with SME performance. To create an appropriate broader theoretical framework to explain wealth creation, the authors considered theories associated with the creation of competitive advantage, the contextual culture required to create an entrepreneurial orientation, as well as theories explaining how SMEs could adapt to the ever-changing micro and macro environments in which they operate. Considering the foundation of the resource-based view (RBV) theory, it is widely accepted that organizational growth, competitive advantage and sustainability are concomitant with distinguishable sets of productive resources and capabilities (Chiang and Yan, 2011).

The Domain Human Resources Capability

In the last decade, there are a growing number of academics and practitioners seeking to examine the association of Human Resource (HR) and organizational performance to determine how HR is affecting the market value of the firm (firm's market valuation), though the effects may not be shown in a company's financial statements (Lev, 2001; Micah, Ofurum & Ihendinihu, 2012). Porter (1990) stated that a company will gain competitive advantages if it is able to attain resources that are difficult to be imitated by competitors. This allows organization to achieve superior performance and gain competitive market. In fact, traditional assets of a company such as natural resources, technology and economies scale can progressively decreased competitive value. The human resource is capable in becoming the source of competitive advantage. Therefore, hiring appropriate human resources must relate to the needs of the company (Wright, McMahan, & Mc Williams, 1994; Walsh, Sturman & Longstreet, 2010). Qualified human resources enable an organization to address market needs better in terms of quality of products and services produced, product differentiation and technological innovation (Alnaqbi, 2011).

HR is not seen as mere resource, but rather as capital or assets of an institution or organization. As a major valuable asset, their values can be multiplied and developed (compared to portfolio investment) and not vice versa as a liability (burden, cost). Therefore, human resource is regarded as an investment for an institution or organization to be more prominent (Greer: 1995; Mohammed, Bhatti, Jariko & Zehri, 2013). On the other hand, there are various definitions of leadership. Some view that leadership is an important component of group dynamics (Green & Mitchell, 1979) while others viewed it as a process of influence (Nahavandi, 2009). Others are interested in leadership and perceived it as a mean to achieve success (Greenleaf, 1998; Alnaqbi, 2011).

Regardless of the theoretical differences, there are three most common and basic elements. First, leadership is a group phenomenon, second, leadership is goal directed, and third, leadership is assumed in terms of group hierarchy (Nahavandi, 2009: Leon & Javier, 2012). According to Nahavandi (2009), by combining the three elements, leader can be defined as someone who affects individuals and groups within an organization, by helping them to set goals and guiding them to achieve those goals.

According to Stoner & Wankel (1986), Terry, George & Franklin (1982) and Werther, William & Davis (1993), human resource is one of the resources that an organization holds. If compared with other elements, the human element is the most dynamic and complex (Dessler, 2008; Ijose, 2010; Breznik, 2014).

Ulrich (2013) also found company resources include of human resources, such as experience, capabilities, knowledge, skills, and judgment of all company employees, organizational resources such as process and enterprise systems, including corporate strategy, structure, culture, management material purchasing, production/operations, finance, research and development, marketing, information systems and control system, and physical resources such as plant and equipment, geographical location, access to material distribution network and technology.

Furthermore Oei (2010) discovers most HR researches seek to uncover factors related to employment of organizations. Generally, theme of the study concerning employees job satisfaction, loyalty and
teamwork, relationships with superiors like style of leadership, relationship with subordinates such as performance appraisal, valuation of companies such as organizational culture and corporate policies (Ding, Lu, Song, & Lu, 2012).

The Domain Production Planning System
Production planning systems are part of an organization that produces the products of an organization. This is an activity where resources, flows in the system is defined, combined and modified in a controlled way to add value in accordance with the policy communicated by management (Kumar and Suresh: 2008). According to Bufaa and Sarin (1987), production system refers to a set of resources and procedures involved in converting raw material into products and delivering them to customers. Heizer and Rander (2011) coined it as operations management.

Planning production systems is a sub part of production management or operations management, which aims to produce good and services of right quality and quantity at right time and right manufacturing cost (Heizer & Render, 2011; Jarkas & Bitar, 2011; Sarjono, 2014). Good planning of production systems will be able to transforming inputs into a good outputs to achieve organizational goals (Schank & Abelson, 2013; Simons, 2013).

In general Simons (2013) described scope of operations management includes three main aspects; 1) Production planning system. Production planning production system includes product planning, planning location factory, factory layout planning, planning work environment, and planning production standard. 2) Production control system. Includes control of the production process, materials, labor, cost, quality and maintenance. 3) Information system of production; includes organizational structure, production on the basis of orders, mass production.

These three aspects can work well if done too good management process that includes (planning, organizing, directing, coordinating, and controlling) (Heizer & Render, 2011).

Production management is an activity whereby resources, flowing within a defined system, are combined and transformed in a controlled manner to add value in accordance with the policies communicated by management (Cummings & Worley, 2014; Drees & Kummer, 2013).

The production system has the following characteristics (Heizer & Render, 2011):
1. Production is an organized activity, so every production system has an objective.
2. The system transforms various inputs to useful outputs.
3. It does not operate in isolation from the other organization system.
4. There exists a feedback about activities, which is essential to control and improve a system performance.

Production of any commodity or service is the volume of output irrespective of the quantity of resources employed to achieve the level of output. Production in an industry can be increased by employing more labor, installing more machinery, and putting in more materials, regardless of the cost of production (Heizer & Render, 2011; Kristal, 2013).

However, the increase in production does not necessarily mean an increase in productivity. Higher productivity results will be obtained when we incorporate the efficient use of resources into the production system. Put a combination of a number of factors such as soil, materials, machinery, capital, and labor will produce output in industry. Therefore, it is necessary to have good production planning system of all the factors as the company's assets in order to raise productivity of company (Heizer & Render, 2011; Rolstadas, 2012).
As described by Purce (2014) that planning system of production / operations are part of resources of company which has strengths and weaknesses to produce performance of organization, then in next sub-chapter will describe variable production planning system.

The Domain Technology
Considering the study of Khurana (2013) then the definition of technology can be the knowledge, usage and making of systems, machines, crafts, tools, techniques and methods used by an entity in order to solve an issue or perform a particular function. The collection of procedures, tools and machinery like these can also refer to it.

During the last few years, industries have undergone a series of changes through financial reforms, advancement of communication and information technologies, globalization of financial services and economic development (Epetimehin, 2011).

According to economists, the technology is defined as knowledge or ideas, which helps in production of output from inputs. If the technology is available in large number, more output will be produced with a particular amount of inputs (Simon & Shallone, 2013).

Technology plays a very important role especially in a very competitive market. Technology improves competitive advantage through its role in determining product cost or creating differentiation. Technology is also a tool to increase productivity of human resource in order to exploit, control, and develop natural resources (Kadiman, 2008: Simon et al., 2013).

Similarly, Calori and Sarnin (1991) claimed that technology enable an organization to create innovation process, product innovation, and adapt to new market segments that will lead to increase market share and market size. Furthermore, increased in size and market share will also results in increased economies of scale and learning effects which later lead to reduction of costs. In the manufacturing sector, the pivotal importance of technological innovation to improve resource productivity and environmental performance has become particularly apparent (Hollen, Van Den Bosch, and Volberda, 2013).

Dolinšek and Štrukelj (2012) viewed technology as a phenomenon that most people intuitively regard as rather important for their lives and purposes. Technology has a profound impact on our lives. On the one hand it is the source of many benefits and most of our wealth. On the other hand it is disturbingly disruptive. To harness it effectively requires pervasive understanding, managerial skill and good luck.

According to ESCAP (in Harits: 2005) the technology is a combination of physical equipment and all knowledge relating to manufacture. Meanwhile Pieterse (2001) described technology as a triangle consisting of three components that interact with each other and are interdependent. These components composed of human, science and physical tools.

A firm’s technological capability is the ability to exploit modern technology. This includes the required skills such as technical, managerial and/or organizational skills, which enable firms to use equipment and information efficiently (Pietrobelli 2006). Technology is thus a collection of equipment, skills, knowledge, aptitudes and attitudes that confer the ability to operate, understand, change and create production processes and products (Marcella 2013). Technology therefor encapsulates three subgroups, namely physical investment (including information, equipment and infrastructure); human capital (including skills, knowledge, aptitudes and attitudes) and technological efforts (including production capabilities, linkage/collaborative capabilities and learning mechanisms) (Pietrobelli 2006; Oluwale, Ilori and Oyebisi 2013).
The Domain Organizational Culture
The term ‘organizational culture’ was first introduced by Andrew Pettigrew (1979). The notion of organizational culture, according to him is a system of meaning that is publicly and collectively accepted which is valid for a certain time for a certain group of people. The organizational culture stands out as one of the components that are important to sustaining performance, and competitive advantage, and a good reason for becoming a great company (Madu, 2012).

The shared values, beliefs, expectations, assumptions and norms make an organizational culture that keeps the system and people together (Schein 2010). The sense of communication, identity, initiative, and facilities commitment is provided by organizational culture and it ensures basis for control, direction and stability. These elements help members and stakeholders to adapt and integrate external and internal environment.

According to Denison (1990), the definition of organizational culture is the underlying principles, values and beliefs which works as the basis for the management system of an organization and also as a set of behaviors and practices for management that both reinforce and exemplify those basic principles. The organizational culture can be the foundation for crisis management as it is an important dimension present at institutional level (Wang, Hutchins & Garavan, 2009).

Hartnell as basis for initiation identifies 84 studies and others are not included in their sample (e.g., Balthazard, Cooke, & Potter, 2006; Bezrukova, Thatcher, Jehn, & Spell, 2012), 31 studies were identified which are explicitly investigating both performance and culture (O’Reilly, Caldwell, Chatman & Doerr, 2014).

Although previous studies of culture and objective firm performance have yielded mixed results, we find clear associations between organizational culture and firm performance in terms of financial performance, market valuation, reputation, analysts’ recommendations, and attitudes among employees.

This current study proposed organizational culture as mediating variable in the framework. All these factors have effects organizational performance more specifically.

CONCEPTUAL CREATING A WINNING SMEs AND SURVIVE IN THE MIDST OF CRISIS

The conceptual model Creating a Winning SMEs and survive in the midst of crisis comprises human resources capability (x1), production planning system (x2) and technology (x3 as illustrated in Figure 1.

And the mathematical model Creating a Winning SMEs and survive in the midst of crisis is:
\[ Y= f(X) \] and \[ X=f(X1, X2, X3) \]

The variables used depends on the strategy adopted by the SMEs.
Sustainable competitive advantage of a company can be achieved through quality of product/services that are superior or capable to satisfy customers. Figure 1.2 below illustrates the framework of this research. As mentioned earlier this study investigates the effects of these factors; human resource, production system and technology towards in contributing to a better organizational performance.

CONCLUSION AND FUTURE RESEARCH DIRECTION

Future research could empirically verify our model, drawing data from the interrelatedness of the identified variables and their overall effect with Creating a Winning SMEs and survive in the midst of crisis. The inherent assumption for the statistical testing and the model building could also be investigated. Moreover, the variables that contribute to Creating a Winning and survive in the midst of crisis in large firms could be investigated and the identified domains in this study could be used for the large firms to see whether the same result would be obtained. The Creating a Winning and survive in the midst of crisis model could help SMEs to survive the dynamics and unpredictability of the environment, thus reducing their failure rate. It could also solve the problem of resource poverty among new small firms, helping them to identify the best way to enter the industry of their choice, taking cognizance of the relevant variables that can facilitate creation a winning and survive in the midst of crisis.
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INTRODUCTION

Strategy execution, a term that is commonly associated as the subsequent process of strategic planning (Bourgeois & Brodwin, 1984; Cater & Pucko, 2010) is now widely regarded as the most important problem in the field of strategic management (Speculand, 2009). Recent statistics shown that the success rate for strategy execution stands between 10% to 30% (Farsight Leadership Organization, 2007; Raps, 2004). Such poor success rate of strategy execution indicates that there is much to be explored about strategy execution. The effort to better understand strategy execution, however, is not without hurdles. Okumus & Roper (1999) postulate that one of the few reasons prohibiting the clear understanding of strategy execution is due to the different views and perceptions on strategy execution. Scholars from different disciplines are said to have different views and perceptions in conceptualizing strategy execution in their respective areas.

Given the aforementioned hurdles in conceptualizing strategy execution, it is not surprising to see that there has been a period of paucity in researching strategy execution. Nonetheless, recent arising awareness on the importance of strategy execution as well as issues surrounding it in the practicing world, has once again, result in strategy execution becoming the center of strategic management scholar’s research attention. There has been consensus among strategic management scholars that strategy execution is now under-researched (Creasap, 2011; Crittenden & Crittenden, 2008; Gottschalk, 2008; Yang, Sun, & Martin, 2010) and much needs to be done to better understand strategy execution because poor strategy execution weakens subsequent strategic planning efforts (Crittenden & Crittenden, 2008).

This study sets to answer call for more research on strategy execution by revisiting the support-execution model of strategy execution. Building on prior literature, this study introduces a new concept: “strategy engagement” as a mechanism to better explain the support-execution relationship. Rendering the concept of “engagement” as well as theory of engagement (Kahn, 1990, 1992), this study remodeled the support-execution model such that strategy engagement is now a construct that intervene the relationship between organizational support and strategy execution.

In addition to that, this study also examines the effect of strategy communication on the integrated model of strategy execution. On the basis of Craig (1999) communication theory, we argue that communication plays a role in strategy execution such that when communication is high and frequent, managers executing a strategy would perform better. Following through, a moderated mediation model which jointly examines the mediating role of strategy engagement and the moderating role of strategy communication were developed to facilitate this study.
LITERATURE REVIEW

Organizational Support
Existing literature on strategy execution across various fields (e.g. marketing, information system, strategic management) had avowed the importance of top management support in strategy execution or implementation (Bradford & Florin, 2003; Qi, 2005; Ragu-Nathan, Apigian, Ragu-Nathan, & Tu, 2004; Ramaseshan, Ishak, & Rabbanee, 2013). It is said that support from top management facilitates effort towards realization of organizational benefits and lend credibility to functional managers who are responsible for strategy execution (Bradford & Florin, 2003). Likewise, without top management support, business strategies may not be executed optimally (Kearns, 2006).

Nonetheless, the view that top management support is a focal antecedents for strategy execution success has recently been challenged. Study conducted by Sull, Homkes & Sull (2015) reveals that 84% of their respondents who receive support from top management, failed to execute the strategy successfully. When asked about the impediments for execution success, 30% of the respondent cited that it is due to failure to coordinate across unit resulting in insufficient support from other units.

While we concur that top management support can be a focal antecedents for strategy execution, we are as well alert that in reality, top management support alone itself does not warrant the success of strategy execution. As (Qi, 2005) advocates, not all means of support are directly under the influence of top management (p.64). Resources such as effective feedback system, supportive culture as well as appropriate structure for strategy execution do not entirely dependent on top management solely. It involved the interdependency between top, middle and even line management across departments within an organization. This interdependency between and across level of management implies that support from all levels of management rather than just top management, is crucial in determining execution success.

Hence, in the context of this study, organizational support is deemed as a better term to illustrate the support given to middle level managers, from all levels of management in the organization, when executing their company's strategy. Accordingly, organizational support is define as "the extent to which the organization is involved in, participates in, comprehends and support the execution of a well-planned strategy" (Elysee, 2012; Ragu-Nathan et al., 2004).

Strategy Engagement
The concept of strategic engagement derives from Kahn’s (1990) notion of engagement which denotes that individuals can use varying degree of their selves, physically, emotionally and cognitively, in work role performance (Kahn, 1990; p.692). In the context of strategic management, strategy engagement is used to represent how strategy executors can use varying degree of their selves, physically, emotionally and cognitively when executing a strategy. At present, Kahn’s (1990) notion of engagement has received enormous research attention from psychological and behavioral related field of research (Macey & Schneider, 2008; Maslach, Schaufeli, & Leiter, 2001; Schaufeli, 2012; Shuck & Wollard, 2010). Engagement in strategy execution process, however, is still relatively new and hence postulates a gap that worthwhile to be addressed.

In his theory generating ethnographic research, Kahn’s (1990) view of engagement is that it can be observed through behavioral investment which includes the investment of physical, emotional and cognitive energy into work role related performance. In the context of this study, it is believe that the imputation of these three energies when executing a given strategy, would lead to desired outcome, that is, successful strategy execution (Kahn, 1992; Rich, Lepine, & Crawford, 2010).
While acknowledging the importance of investigating the causal-effect relationship of strategy engagement on strategy execution, it is also worth to note that throughout its development, the concept of engagement has been claimed to have overlapped with other motivational and behavioral construct such as the concept of commitment and involvement (Kahn, 1990, 1992; Macey & Schneider, 2008; Maslach et al., 2001; Rich et al., 2010; Saks, 2006; Welch, 2011). Nonetheless, recent literature and theoretical advancement suggest that while these term can be highly associated, they tends to be different from one and another (See: Macey & Schneider, 2008; Meyer & Maltin, 2010; Rich et al., 2010; Saks, 2006)

**Theory of Engagement and Organizational Support**

Kahn’s (1990) theory of engagement suggested the fulfilment of three psychological conditions that facilitate engagement, namely: psychological meaningfulness, psychological safety and psychological availability. Kahn believes that the presence of these three psychological condition will stimulate a person’s physical, emotional and cognitive presence in the work role. He then further explained that the presence of these three conditions regulates how individuals habituate and engage in their work role which in turn, leads to performance.

Based on Kahn’s (1990) theory of engagement, it is believed that support for strategy execution creates the three psychological conditions that would facilitate strategy executors’ engagement in strategy execution processes, thus leading to successful strategy execution. For example, psychological meaningfulness denotes the feeling that one is receiving in return on investment of physical, cognitive or emotional energy (Kahn, 1990).

When organization provides full support for strategy executors, it creates a sense of meaningfulness towards the strategy executor in his role as strategy executor. It is believed that this sense of meaningfulness will then foster the strategy executor’s engagement.

Psychological safety, on the other hand, denotes as "feeling able to show and employ one’s self without fear of negative consequences to self-image, status or career” (Kahn, 1990). With that said, comprehending Kahn’s notion of psychological safety means that when support is fully exhibited towards strategy executors, it create a sense of safety such that the strategy executor no longer in fear with uncertainty encountered during the strategy execution process. When a strategy executor feel safe to express him/herself in the strategy execution process, this will undoubtedly motivates him/herself to be fully engaged in the strategy execution process.

Lastly, psychological availability denotes as “the sense of having the physical, emotional or psychological resources to personally engaged in a particular moment” (Kahn, 1990). In this context, physical resources for strategy execution such as supplies, budget and manpower (Harter, Schmidt, & Hayes, 2002; Wagner & Harter, 2006) are vital in influencing strategy executor’s engagement. The level of availability of these resources will determine the level of engagement illustrated in the strategy execution process.

**The mediating role of strategy engagement**

Kahn’s (1990) theory of engagement provide solid arguments that engagement can be identify as a proximal motivational mechanism that can account for the distal relationship between a variety of characteristics and organizational factors towards organizational outcomes, such as performance (Rich et al., 2010).

A study conducted by Rich et al. (2010) demonstrates how engagement mediates the relationship between perceived organizational support, value congruence and core self-evaluation on job performance. Drawing from such findings as well as theoretical support, it is believed that strategy engagement can be an proximal construct that intervene the relationship between organizational support and strategy execution. Given the foregoing arguments, we propose the following hypothesis:
Hypothesis 1: Strategy engagement mediates the relationship between organizational support and strategy execution.

The moderating role of strategy communication
Though widely regarded as an important element in the strategy execution processes (Alexander, 1985; Rapert & Wren, 1998), the lack of empirical evidence and the vague effect of strategy communication on strategy execution related literature suggests that strategy communication is still under-researched (Forman & Argenti, 2005; Yang et al., 2010).

Rapert, Velliquette, & Garreston (2002) advocated that strategy communication is important for strategy execution processes as it convey shared understanding (consensus) of strategic decision across not only top management but as well as functional level (p.303). On the basis of aforementioned importance, it is believed that strategy executors who have easy and frequent assess to strategy communication will tend to outperform strategy executors who are in a more restrictive communication environment (Rapert & Wren, 1998).

Westley (1990) on the other hand, postulate that superior-subordinate strategic conversation would have a very strong impact on middle-level managers’ motivation during strategy execution process while (Heide, Grønhaug, & Johannessen, 2002) suggest that communication problem constitute the barrier for strategy execution.

The renewed interest on researching engagement yields an interesting research area that examines the function of communication on engagement. Welch (2011) and MacLeod & Clarke (2009) postulated that communication is an important tool in enhancing performance through engagement.

Given the aforementioned literature and theoretical support, this study tends to examine the novelty of the impact and effect of strategy communication on strategy execution process. It is believed that when sufficient support and communication is provided, strategy executors tends to perform better. In the same vein, it is also believed that sufficient support and communication also allows strategy executors to engage better thus leading to higher chances of success in executing strategy. Subsequently, the following hypotheses are proposed.

Hypothesis 2: Strategy communication moderates the relationship between organizational support and strategy execution

Hypothesis 3a: Strategy communication moderates the relationship between organizational support and strategy engagement.

Hypothesis 3b: Strategy communication moderates the first stage of the mediated relationship between organizational support and strategy execution via strategy engagement.

Hypothesis 4a: Strategy communication moderates the relationship between strategy engagement and strategy execution.

Hypothesis 4b: Strategy communication moderates the second stage of the mediated relationship between organizational support and strategy execution via strategy engagement.

METHODOLOGY
This study was conducted using sample respondents selected from the Malaysian External Trade Development Corporation (MATRADE) services directories. Sample respondents comprises of middle
level managers in a corporation. Past literature collectively emphasize that the most important individual who determines the effectiveness of strategy execution is the mid-level managers (Barton & Ambrosini, 2013; Slater & Atuahene-Gima, 2004; Thorpe & Morgan, 2007). Questionnaires were distributed to the respondents through mail and online survey. At the end of the survey, 224 usable responses were collected. Items in the questionnaire were measured with a 7 point Likert Scale except for item related to demographic factors. Items in the questionnaire measuring all related key variable are derived from prior literatures (Bradford & Florin, 2003; Noble & Mokwa, 1999; Rich et al., 2010; Vandenbergh, Richardson, & Eastman, 1999). Hayes (2013) PROCESS macro for SPSS was used to examine all 4 hypotheses in this study.

Theoretical Framework

![Theoretical framework for the Moderated Mediation Model.](image)

FINDINGS

The descriptive statistics of respondents are presented in Table 1. Table 2, on the other hand, reports on the bivariate correlations as well as the Cronbach’s alpha for all the variable in this study. We conduct collinearity test to assess multicollinearity issue before performing the regression analysis. All VIF value were lower than the suggested threshold value of 10 (Mooi & Sarstedt, 2014) and 5 (O’Brien, 2007; Peter A. Rogerson, 2001) indicates that multicollinearity is not an issue in this study. The assessment of common method bias using Harman's single factor test reveal that common method bias is not an issue such that the single factor test result of variance explained (43%) is below the cutoff value of 50%.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>134</td>
<td>59.8</td>
<td>59.8</td>
</tr>
<tr>
<td>Female</td>
<td>90</td>
<td>40.2</td>
<td>100.00</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 – 24 years</td>
<td>15</td>
<td>6.7</td>
<td>6.7</td>
</tr>
<tr>
<td>25 – 29 years</td>
<td>68</td>
<td>30.4</td>
<td>37.1</td>
</tr>
<tr>
<td>30 – 34 years</td>
<td>38</td>
<td>17.0</td>
<td>54.0</td>
</tr>
<tr>
<td>35 – 39 years</td>
<td>33</td>
<td>14.7</td>
<td>68.8</td>
</tr>
</tbody>
</table>
Enhancing the Support-Execution Model of Strategy Execution: A Moderated Mediation Effect of Strategy Engagement and Strategy Communication

<table>
<thead>
<tr>
<th>Years of Business Management Experience</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 4 years</td>
<td>86</td>
<td>38.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 – 8 years</td>
<td>42</td>
<td>18.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 – 12 years</td>
<td>29</td>
<td>12.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 – 16 years</td>
<td>26</td>
<td>11.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 – 20 years</td>
<td>21</td>
<td>9.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 – 24 years</td>
<td>11</td>
<td>4.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 – 28 years</td>
<td>5</td>
<td>2.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29 – 31 years</td>
<td>1</td>
<td>0.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32 years and above</td>
<td>3</td>
<td>1.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Types of Industry

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Services</td>
<td>161</td>
<td>71.9</td>
</tr>
<tr>
<td>Financial</td>
<td>28</td>
<td>12.5</td>
</tr>
<tr>
<td>Franchise</td>
<td>11</td>
<td>4.9</td>
</tr>
<tr>
<td>Information and Communication</td>
<td>24</td>
<td>10.7</td>
</tr>
</tbody>
</table>

Table 2: Descriptive Statistics and Bivariate Correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Organizational Support</td>
<td>4.973</td>
<td>.828</td>
<td>(.892)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Strategy Engagement</td>
<td>5.331</td>
<td>.708</td>
<td>.595**</td>
<td>(.953)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Strategy Communication</td>
<td>4.755</td>
<td>.894</td>
<td>.826**</td>
<td>.482**</td>
<td>(.888)</td>
<td></td>
</tr>
<tr>
<td>4. Strategy Execution</td>
<td>5.055</td>
<td>.738</td>
<td>.792**</td>
<td>.626**</td>
<td>.769**</td>
<td>(.828)</td>
</tr>
</tbody>
</table>

Note: Figures in parentheses are Cronbach’s alpha

**p < .01

The first hypothesis postulates that strategy engagement mediates the relationship between organizational support and strategy execution. The mediation analysis was conducted using bias corrected bootstrapping procedure that was implemented in Hayes (2013) PROCESS macro for SPSS. The result for the mediation analysis is depicted in Table 3. The mediation effect was significant at 95% confidence interval with both lower and upper limit of the CI did not straddle a 0 in between. This results suggest that the indirect effect of organizational support on strategy execution through strategy engagement is positive and significant (β = .16, p < .05). It can be concluded that strategy engagement mediates the relationship between organizational support and strategy execution.

AGBA 12th World Congress
Page 757 of 1173
Table 3: The Mediation Results (n = 224)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Model 1 Strategy Engagement β (SE)</th>
<th>Model 2 Strategy Execution β (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Support</td>
<td>.501 (.045)**</td>
<td>.570 (.043)**</td>
</tr>
<tr>
<td>Strategy Engagement</td>
<td></td>
<td>.294 (.051)**</td>
</tr>
<tr>
<td>R²</td>
<td>.595</td>
<td>.815</td>
</tr>
<tr>
<td>Bootstrap indirect effects on execution (through engagement)β</td>
<td>β (SE)</td>
<td>LL 95% CI</td>
</tr>
<tr>
<td>Strategy Commitment</td>
<td>.125 (.033)*</td>
<td>.0688</td>
</tr>
</tbody>
</table>

Note: LL = Lower limit; UL = Upper Limit; CI = Confidence Interval. Unstandardized regression coefficients are reported with standard error in parentheses.

*aDirect and total effect. bBootstrap sample size = 5000.
*p < .05; **p < .01

Table 4: The moderation and moderated mediation results (n = 224)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Model 1 Strategy Engagement β (SE)</th>
<th>Model 2 Strategy Execution β (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Support (OSU)</td>
<td>.582 (.166)**</td>
<td>-.159 (.168)</td>
</tr>
<tr>
<td>Strategy Engagement (EG)</td>
<td></td>
<td>.695 (.175)**</td>
</tr>
<tr>
<td>Strategy Communication (SCOM)</td>
<td>-.014 (.171)</td>
<td>.380 (.146)**</td>
</tr>
<tr>
<td>OSU*SCOM</td>
<td>-.006 (.032)</td>
<td>.098 (.034)**</td>
</tr>
<tr>
<td>EG*SCOM</td>
<td>-</td>
<td>-.099 (.039)*</td>
</tr>
<tr>
<td>R²</td>
<td>.603</td>
<td>.845</td>
</tr>
<tr>
<td>Conditional direct effect on strategy execution at three levels of strategy communicationβ</td>
<td>β (SE)</td>
<td>LL 95% CI</td>
</tr>
<tr>
<td>Organizational Support</td>
<td>.220 (.068)*</td>
<td>.0865</td>
</tr>
<tr>
<td>Mean (.00)</td>
<td>.307 (.064)*</td>
<td>.181</td>
</tr>
<tr>
<td>+1 SD (.828)</td>
<td>.395 (.075)*</td>
<td>.248</td>
</tr>
<tr>
<td>Conditional indirect effect on strategy execution (through strategy engagement) at three levels of strategy communicationβ</td>
<td>β (SE)</td>
<td>LL 95% CI</td>
</tr>
<tr>
<td>Organizational Support</td>
<td>.173 (.061)*</td>
<td>.066</td>
</tr>
<tr>
<td>Mean (.00)</td>
<td>.123 (.033)*</td>
<td>.070</td>
</tr>
<tr>
<td>+1 SD (.828)</td>
<td>.073 (.043)*</td>
<td>.003</td>
</tr>
</tbody>
</table>

Note: LL = Lower limit; UL = Upper Limit; CI = Confidence Interval. SD = standard deviation; M = Mean. Unstandardized regression coefficients are reported with standard error in parentheses.

*aDirect and total effect. bBootstrap sample size = 5000. *p < .05; **p < .01

Table 4 present the outcome of moderation analysis. This outcome were used to assess both moderation and moderated mediation hypothesis as stated in hypothesis 2, 3a, 3b, 4a and 4b. As depicted in Table 4,
it is found that hypothesis 2 ($\beta = .098, p < 0.05$), 4a ($\beta = -0.99, p < 0.05$) and 4b ($\beta = .123, p < 0.05$) were supported while hypothesis 3a ($\beta = .073, n.s.$) and 3b ($\beta = .073, n.s.$) are not supported.

In assessing the moderated mediation relationship, the conditional indirect effect output as per illustrated in Table 4 is referred. Both hypothesis 3b and hypothesis 4b examines the moderated mediation effect of strategy communication. Since hypothesis 3a was found to be insignificant, hypothesis 3b will no longer be examined. Hypothesis 4b however, will be tested since hypothesis 4a is significant.

The results of the assessment suggest that strategy communication moderates the mediated relationship of organizational support and strategy execution via strategy engagement at three levels of strategy communication: the mean (.00), one standard deviation above the mean (.828) and one standard deviation below the mean (-.828). The mediated relationship is positive and significant at three levels of strategy communication low ($\beta = .173, p < 0.05$), mean ($\beta = .123, p < 0.05$), high ($\beta = .073, p < 0.05$). Hence, we can conclude that hypothesis 4b is supported.

**DISCUSSIONS**

Overall, the research findings yield a mixture of results. Consistent with Kahn’s theory of engagement, it is found that strategy engagement mediates the relationship between strategy commitment and strategy execution. This implies that strategy engagement is an important mechanism in explaining the relationship between organizational support and strategy execution. The use of theory of engagement permits a more detailed explanation on how organizational support can results in successful strategy execution through strategy engagement. Prior literature (Kearns, 2006; Ragu-Nathan et al., 2004) examines only the relationship between organizational support and strategy execution which, in our point of view, deem insufficient to explain the overall strategy execution process. On the basis of theory of engagement, this study demonstrates how organizational support foster engagement which in turn, leads to the outcome of strategy execution.

This study also gathers support for the moderating effect of strategy communication. These results are consistent with prior literature that employees who are exposed to an open and supportive communication climate tend to outperform employees who function in a restrictive communication climate (Rapert & Wren, 1998).

**CONCLUSION**

Strategy engagement is relatively new in the strategic management literature even though its core term “engagement” has been widely debated in the field of work psychology as well as human resource development. The purpose of this study is to incorporate strategy engagement into the support-execution model of strategy execution such that the knowledge on what constitutes successful strategy execution can now be improvised. The integration of strategy communication into the model permits the investigation of the interaction effect between strategy communication, organizational support and strategy engagement on strategy execution. Depicted this way, the integrated moderated mediation model provides insights on the simultaneous interaction of these variables, denoting a significant addition to knowledge of past studies that use mediation or moderation independently.

**REFERENCES**


General Population Sampling in Malaysia: A New Approach

Keywords: Urbanization, Domestic Migration, Random Sampling

INTRODUCTION

According to the 1980, 1991, 2000 and 2010 Population and Housing Censuses conducted by the Malaysian Statistics reveals that the surge of towns in Malaysia has mushroomed from 72 in the 1980’s to 220 in the 2010’s. This increase in the number of urban centres and the urbanization process is directly related to the spatial re-distribution through domestic migration (Hasan and Nair, 2014).

Urbanization is the unbroken population concentration process into cities and highly developed metropolitan areas representing critical economic catalysts enveloping peripheral socio-economic development as well as its modernisation (UN, 1982). As is the case in the majority of South-east Asian countries, rural Malaysian migrants often are attracted to big cities and large urban centres and not to rural towns where opportunities are meagre (Mc Gee, 1975). This momentum in urbanization and expansion of urban areas as growth centres is the result of government policies designed to restructure society. It is also related to modern infrastructure and employment opportunities which encourage the influx of people to urban centres (Lo and Yueng, 1996).

This concept coupled with postal sampling (Rafferty, 2013) will enable the researcher to establish effective measures for analysis because the respondents (in this case from urban centres) actually represent a cross-section of society within states as well as nationally. Simply put, the data that is collected is a good measure of population tendencies and can be used for generalization.

FINDINGS

In Malaysia the process of urbanisation and the town centre expansion is predominantly driven by generic growth and domestic migration. Thus, urban expansion is a result of increasing economic opportunities in the urban centres which spurs such migration. Internal migration plays a very critical role in the redistribution of populations and spurring development. Improvements in national productivity and human resources redistribution are often associated with such migration (Tey, 2014). However, these phenomena may also occur as a result of rural locality reclassification into urban areas, including urban centre growth through the annexation of surrounding as well as the redrawing of urban centre boundaries (Khoo and Van 1996). This prevailing situation is not unique to Malaysia but is apparent in most other countries lending to rapid urbanization.

The expansion of these urban centres is not only because of the gazetted boundaries but the effect of spill-over into the peripheries of the urban centres. In Malaysia, a combination of economic modernisation and the urbanisation process has happened in a concurrent manner thereby creating an urban society comprising both urbanites and domestic migrants (Hassan, 2009). Government led strategies for economic development and rural transformation through its ongoing five-year development plans has
further added impetus to the ongoing expansion and growth urban centres in Malaysia. However, the unique state-centred historical development which lends to movement to the capitals of these states has exerted important influence on the urbanisation process and lends to the demographics of the cities (Hassan, 2009).

The strong link between the developmental patterns and the growth of the national economy has further spurred the levels of urbanisation which is seen by the fact that by 1990 more than half of Malaysia’s population lived in these urban areas. In 1991, the central region of Peninsular Malaysia comprising Kuala Lumpur, Selangor, Malacca and Negeri Sembilan was the most urbanised. This concentration spurred the growth of industrial, commercial, financial and administration activities within the Kuala Lumpur conurbation areas (Ho, 2008).

The National Physical Plan (NPP) and the National Urbanisation Policy (NUP) sets forth a hierarchy for extended urban areas (or conurbations) where each conurbation contains a core city centre with satellite towns. The spread of urban development comprises regional conurbations that include Georgetown, Ipoh, Alor Setar, Johor Bahru, Kuantan, Kangar, Kuching and Kota Kinabalu, each having its own unique character. These well laid plans are aimed at creating attractive and enjoyable cities that are compact and efficient (Malaysia, 2011).

Urban areas typically include the gazetted areas that cover whole administrative districts. It also includes the areas lying on both sides of primary (main) roads linking existing towns. Areas that were gazetted before the implementation of the restructuring exercise by local authorities (Local Government Act/Ordinance) in Malaysia and their adjacent built-up areas with a combined population of 10,000 persons or more are classed as urban areas. In order to be classed as urban, these areas must have a built-up area of more than 5 km with a population above 10,000, with 60% of the population (aged 15 years and over) who are not involved in agriculture (Hasan and Nair, 2014).

Urban centres (as of 2000) as shown in Figure 1 on the next page, with a population of 150,000 and above in Peninsular Malaysia were Kuala Lumpur, Klang, Subang Jaya, Petaling Jaya, Ampang Jaya, Shah Alam, Selayang Baru, Kajang and Sungai Chua, Bt.9 Cheras/Sg.Raya/Taman Suntex in Selangor, Johor Bahru in Johor, Ipoh and Taiping in Perak, Alor Setar and Sungai Petani in Kedah, Melaka Bandaraya Bersejarah in Melaka, Seremban in Negeri Sembilan, Georgetown and Bukit Mertajam in Penang, Kuala Terengganu in Terengganu, Kota Bharu in Kelantan and Kuantan in Pahang (Hasan and Nair, 2014). Kangar in Perlis also falls into this category as its population exceeds 10,000.

Malaysia’s overall (population growth) urbanization levels are shown in Figure 2 below. The national average is 71% as of 2010. This average has most probably risen even further in 2015. In tandem with Malaysia’s rapid development, the proportion of urban population increased to 71.0 per cent in 2010 compared with 62.0 per cent in 2000 (see Figure 2).
Figure 1: Distribution of Urban Centres by Population, Size Class and State, Malaysia 2010

<table>
<thead>
<tr>
<th>State</th>
<th>500,000 and more</th>
<th>150,000-499,999</th>
<th>75,000-149,999</th>
<th>50,000-74,999</th>
<th>25,000-49,999</th>
<th>10,000-24,999</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johor</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>14</td>
<td>29</td>
</tr>
<tr>
<td>Kedah</td>
<td>-</td>
<td>3</td>
<td>3</td>
<td>-</td>
<td>6</td>
<td>9</td>
<td>21</td>
</tr>
<tr>
<td>Kelantan</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>7</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Melaka</td>
<td>-</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>8</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Negeri Sembilan</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Pahang</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>5</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Perak</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>8</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Perlis</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Penang</td>
<td>-</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>Sabah</td>
<td>-</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td>Sarawak</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>Selangor</td>
<td>3</td>
<td>5</td>
<td>6</td>
<td>2</td>
<td>8</td>
<td>14</td>
<td>38</td>
</tr>
<tr>
<td>Terengganu</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Federal Territory of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Kuala Lumpur</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>- Labuan</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>- Putrajaya</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 2: Malaysia Levels of Urbanisation

Kuala Lumpur and Putrajaya are 100% urbanised. Of the other 14 states, the states with a high level of urbanisation were Selangor and Pulau Pinang with 91.4 % and 90.8 % respectively (see Figure 3).
states with low urbanisation levels were Kelantan at 42.4%, Pahang at 50.5% and Perlis at 51.4% (ranked 3rd among the other states). Kedah has a median level of urbanisation at 64.6% (ranked 7th among the 14 states) and Perak at 69.7 (ranked 9th).

![Figure 3: Level of Urbanisation by States in Malaysia](http://www.statistics.gov.my)

Drawing from the effects of urbanization as discussed earlier the following population and samples can be drawn and implied to represent the whole of Malaysia. Figure 4 below provides the population levels for the targeted cities in the states of Perak (2,446,600); Penang (1,647,300); Kedah (2,012,500) and Perlis (240,200). Following this Figure 5 presents the postcodes of the targeted cities as drawn from Pos Laju which is a part of Pos Malaysia.

<table>
<thead>
<tr>
<th>City</th>
<th>Population</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ipoh</td>
<td>657,892</td>
<td>(37.5%) 144</td>
</tr>
<tr>
<td>Georgetown</td>
<td>510,996</td>
<td>(29.2%) 112</td>
</tr>
<tr>
<td>Alor Setar</td>
<td>357,176</td>
<td>(20.4%) 78</td>
</tr>
<tr>
<td>Kangar</td>
<td>225,590</td>
<td>(12.9%) 50</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>1,751,654</strong></td>
<td><strong>(100%) 384</strong></td>
</tr>
</tbody>
</table>

![Figure 4: Population Size and Sample Size](http://www.statistics.gov.my)

Sources:

Any intended research may look at urban dwellers within the city centres of the states of Perak, Penang, Kedah and Perlis. The choice of these states is based on the levels of urbanization that has happened within each. The choice of cities within these states can then be chosen. In this case the samples are
drawn from the cities of Ipoh, Georgetown, Alor Setar and Kangar as published by the Malaysian Statistics Department from the census conducted in 2010.

The postcode based systematic random sampling survey will allow everyone an equal opportunity to participate. This can be achieved by an outsourced postcode based interval approach to allow the maximum number of respondents to participate. A sample is “a smaller (but hopefully representative) collection of units from a population used to determine truths about that population” (Field, 2005). It must also be noted here that response rates between the 17%- 28% ranges are acceptable. This has been established by a number of articles published in journals worldwide (Jarvenpaa & Staples, 2001; Ravichandran & Rai, 2000). The questionnaires can be distributed by either postmen or independent surveyors appointed by the researcher to cover the postcodes in the cities concerned based on Table 5 below.

<table>
<thead>
<tr>
<th>Postcodes</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>30000-30999</td>
<td>Ipoh</td>
</tr>
<tr>
<td>10000-10999</td>
<td>Georgetown</td>
</tr>
<tr>
<td>05000-05999</td>
<td>Alor Setar</td>
</tr>
<tr>
<td>01000</td>
<td>Kangar</td>
</tr>
</tbody>
</table>

Figure 5: City Postcodes

This can then be followed by a distribution mode that covers certain percentages of the population within the cities. To achieve this, the following modes can be utilized (see Figure 5).

<table>
<thead>
<tr>
<th>City</th>
<th>Population</th>
<th>Sample Size</th>
<th>No. of Questionnaires</th>
<th>Distribution Interval</th>
<th>Total Population Covered</th>
<th>% of Population Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ipoh</td>
<td>657,892</td>
<td>114</td>
<td>(25.3%) 450</td>
<td>Every 20th unit</td>
<td>9,000</td>
<td>1.37%</td>
</tr>
<tr>
<td>Georgetown</td>
<td>510,996</td>
<td>112</td>
<td>(24.8%) 450</td>
<td>Every 20th unit</td>
<td>9,000</td>
<td>1.76%</td>
</tr>
<tr>
<td>Alor Setar</td>
<td>357,176</td>
<td>78</td>
<td>(26%) 300</td>
<td>Every 20th unit</td>
<td>6,000</td>
<td>1.67%</td>
</tr>
<tr>
<td>Kangar</td>
<td>225,590</td>
<td>50</td>
<td>(25%) 200</td>
<td>Every 20th unit</td>
<td>4,000</td>
<td>1.78%</td>
</tr>
</tbody>
</table>

Figure 5: Questionnaire Distribution Modes

CONCLUSION

The sampling method is designed to enable the researcher to generalize the findings as representative of the whole of Malaysia. The choices of states may be changed to suit the objectives of the research. It is opined here that the findings are representative of the whole population of Malaysia. There is another option that can be used i.e. the use of cities within each state to represent the state and the other being the method as explained above to represent Malaysia. This proposed sampling procedure may be applied to any type of research where the constraints of time and cost are inhibitive.

REFERENCES


Equity Valuation Multiples of Listed Firms in Nigeria: Principal Component Analysis Approach

Equity Valuation Multiples of Listed Firms in Nigeria: Principal Component Analysis Approach

Keywords: Principal Component Analysis, Equity Valuation Multiples, Nigerian Stock Exchange, Nigeria

INTRODUCTION

In conducting research, sometime researchers faced the problem of variables that are correlated with each other. Inference drawn on variables could result to biases in the interpretation of such result; hence the methods that solve this type of problems are the factor models. Factor models are data reduction methods used in situations wherever a researcher has amount of variables that are closely related with each other and the most important one or more variables are needed to represent others. Factor models are used to decompose a group of series to common factors to all series and a proportion that is explicit to every series identified as idiosynchratic deviation (Brooks, 2008). Brooks (2008) documented that, factor models are classified into two; the macroeconomic model, and the mathematical model. In macroeconomic model, all factors are observable, but, factors are unobservable in mathematical model and principal component analysis signify mathematical factor model. Principal component analysis (PCA) is a device that is suitable in condition where variables are related closely.

The principal component analysis is a factorial technique where fresh variables are created, as mixtures of the initial displays, having no relationship between them with maximum variance. In the Principal component (PC) total variance of the variables is explained (Opris, Demeter, & Palade, 2014). Mathematically, PCA technique creates uncorrelated components where each of the component is a true weighted combination of the original variable (Vyas & Kumananayake, 2006). Principal component analysis transforms variables that are originally related to new unassociated variables with full depiction of the original variables (Kim, 1986). A statistical instrument designed to reduce inter-relationships between correlated variables is the principal component analysis and one of its drives is to group variables to a lesser factors sample that preserve full information contained in the original variables (Chen & Shimerda, 1981).

Previous researches used the PCA to condense number of interrelated variables that comprises maximum depiction of the original for real and efficient explanation of results (Ittner & Larcker, 2001; Libby, 1975; Miller & Bromiley, 1990).

Equity valuation multiples (EVM) on the other hand, are generally used as investment appraisal methods to value earnings for investment decision. Equity valuation multiples represent the summary methods, which express about the market’s assessment of a firm’s market valuation of equity holders value (Penman, 2006). Hence, valuation of equity shareholders entitlement is an important feature of investment decision for stock analysts, investors, buyers and sellers of company shares. EVMs represent the common methods used in share valuation (Shahed, Barker, & Clubb, 2008; Jing Liu, Nissim & Thomas, 2002;
Fairfield, 1994; Aras & Yilmaz, 2008; Liu, Nissim, & Thomas, 2007). Equity valuation multiples comprises, price-earnings (P/E), price-book value (P/B), price-sales (P/S) and price-cash flow (P/C) multiples (Schreiner, 2007). Using firm market price of shares as the numerator differentiates the equity valuation multiples (EVMs) from normal financial accounting ratios (growth ratio, liquidity ratio, profitability ratio, (Sehgal & Pandey 2010). Due to use of price as the numerator for the equity valuation multiples, correlations exist amongst the multiples. This study thus, used the principal component analysis approach to reduce the four EVMs of firms listed on the Nigerian Stock Exchange (NSE) to relevant component that have all the features of the original variables for exact explanation of the multiples.

PREVIOUS STUDIES OF PCA AS DATA REDUCTION TECHINQUE

Principal component technique is widely used by many studies to condense the number of interrelated variables to new variable that are not correlated. For example, Ittner and Larcker (2001) used the Principal components methodology to reduce 12 factors of corporate organizational strategy and company environment usually used to quantify strategy and environmental improbability to thirteen (13) factors. Similarly, Larcker & Richardson (2007) applied the principal components analysis technique approach to reduce 39 measures of company corporate governance (CG) to fourteen (14) factors in order to see their impact on company accounting outputs and performance of organizational. In addition, Libby (1975) studied 60 firms sample assessed by the numbers consisted of thirty (30) nonfailed and thirty (30) failed, used principal component analysis (PCA) to reduce 14 accounting ratios to five (5) ratios, while predicting failure in comparative to ratios. Equally, Dey (2008) apply exploratory principal components analysis (PCA) to 22 separate company governance mechanisms (CGM) and obtained seven (7) distinct corporate governance variables signifying the structure and operation of the company board of directors, executive directors compensation (EDC), stock-based compensation (SBC) for directors, independence of the auditor, structure and functioning of the company audit committee, and control of the company financial reporting quality by board of directors.

In addition, Bird and Casavecchia (2007) used the principal component analysis approach in order to form a number of joint variables that greatly explain the deviation in earnings per share EPS across firms during the period, after that the condense variables were used as the explanatory variables in the regression model intended to predict the overlook of a specific stock. Also, Ammann, Oesch, and Schmid (2011) adopted the principal components to condense 64 corporate governance variables to seven variables. Furthermore, Boone, Casares, Karpoff, and Raheja (2007) on their part, used the principal components analysis to transform the set of alternate variables for each of dissimilar corporate governance mechanism into a condensed number of structures that have equal value. To conclude, Miller and Bromiley (1990) using 493 firms that appeared in both selection time periods, used principal component analysis to reduce nine (9) corporate risk methods of management research to three (3) variables.

Thus, this research used the principal component analysis method to condense the four (4) equity valuation multiples (EVMs) (price to book value, price to earnings, price to cash flow, price to sales) to produce components that represent all the equity valuation multiples. Taking from Ashton, Cooke, Tippet and Wang (2003) combination theorem of market value and equity valuation, thus;

\[
EVM \ (\eta) = \beta_0 + \beta_1 x(t) + \beta_2 b(t) + \beta_3 c(t) + \beta_4 s(t) + \epsilon(t)
\]

Where EVM is the firm’s equity valuation multiple, x(t) is the price-earnings valuation multiple, b(t) is price-book value valuation multiple, c(t) price-cash flow valuation multiple, s(t) is price-sales valuation multiple, and \(\beta(s)\) are the coefficients of valuations related with every component of reduced valuation model, and \(\epsilon\) signify error term of the regression model.
METHODOLOGY

The study used secondary data from published financial reports of firms listed on the Nigerian stock Exchange (NSE). The data are collected from individual firm’s financial report covering the period of five (5) years (2009-2013). The period is considered important because it is characterized by the loss of large volume of money by almost all stockholders across the globe due to severe decrease in the equity prices. The loss in the value of stock has affected virtually both the local and the external investors in different nations of the world, Nigerian inclusive. The research population comprises of publicly Nigerian listed firms and 100 among them are drawn as sample representing all the sectors based on the availability of information in the firms. Principal component analysis (PCA) technique was then used to condense the equity valuation multiples with maximum representation of the original/initial variables.

Variable Definition and Measurement

<table>
<thead>
<tr>
<th>EVM Variables</th>
<th>Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price to earnings (P/E)</td>
<td>Firm price per share divided by earnings per share</td>
</tr>
<tr>
<td>Price to book value (P/B)</td>
<td>Firm price per share divided by book value per share</td>
</tr>
<tr>
<td>Price to cash flow (P/C)</td>
<td>Firm price per share divided by cash flow from operation per share</td>
</tr>
<tr>
<td>Price to sales (p/s)</td>
<td>Firm price per share divided by gross revenue/sales per share</td>
</tr>
</tbody>
</table>

PRINCIPAL COMPONENT ANALYSIS RESULT

This section presented the result of principal component analysis of the equity valuation (price-earnings, price-book value, price-sales and price-cash flow) multiples. The results are presented in two separate tables, table 2 presents the Principal components/correlation and table 3 presents the Principal components (eigenvectors). The interpretation of the results and the subsequent implication was also discussed.

<table>
<thead>
<tr>
<th>Component</th>
<th>Eigenvalues</th>
<th>Difference</th>
<th>Proportion</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comp1</td>
<td>2.49083</td>
<td>1.90813</td>
<td>0.6227</td>
<td>0.6227</td>
</tr>
<tr>
<td>Comp2</td>
<td>0.582702</td>
<td>0.0733121</td>
<td>0.1457</td>
<td>0.7684</td>
</tr>
<tr>
<td>Comp3</td>
<td>0.50939</td>
<td>0.0923132</td>
<td>0.1273</td>
<td>0.8957</td>
</tr>
<tr>
<td>Comp4</td>
<td>0.417077</td>
<td>0.1043</td>
<td>1.0000</td>
<td></td>
</tr>
</tbody>
</table>

Number of observation: 493
Number of components: 4
Trace: 4
Rho: 1.0000
Table 3: Principal components (eigenvectors)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Comp1</th>
<th>Comp2</th>
<th>Comp3</th>
<th>Comp4</th>
<th>Unexplained</th>
</tr>
</thead>
<tbody>
<tr>
<td>PB</td>
<td>0.4795</td>
<td>0.7966</td>
<td>0.1107</td>
<td>0.3512</td>
<td>0</td>
</tr>
<tr>
<td>PC</td>
<td>0.5246</td>
<td>0.0735</td>
<td>-0.3497</td>
<td>-0.7727</td>
<td>0</td>
</tr>
<tr>
<td>PS</td>
<td>0.5025</td>
<td>-0.4641</td>
<td>-0.5056</td>
<td>0.5258</td>
<td>0</td>
</tr>
<tr>
<td>PE</td>
<td>0.4923</td>
<td>-0.3804</td>
<td>0.7809</td>
<td>-0.0554</td>
<td>0</td>
</tr>
</tbody>
</table>

Number of observation 493

The tables 2 and 3 above presented principal components analysis (PCA) panels of results for all the four equity valuation multiples. The first table presents panel results lists of correlation matrix (CM) eigenvalues arranged from large to small number. The corresponding eigenvectors are detailed in the second panel. These principal components (PC) have unit distance; for example the column wise summarized the squares for loadings 1 ($-0.0554^2 + 0.5258^2 + -0.7727^2 + 0.3512^2 = 1$), therefore, principal components analysis (PCA) tend to show principal components (PC) normed to the correlated eigenvalues instead of 1. The eigenvalues add up to the summation of the variance of the variables in the analysis the “total variance” of the variables.

The individual variables are stable to have component variance; consequently our total variance is four (4) in this situation. The eigenvalues denote the variances of the principal components (PC). For instance the first principal component has variance of 2.49, explaining 62 percent (2.49/4) of the total variances in the variable. The following principal component has variance of .583 or 15 percent (.583/4) of the overall variable variance. Principal components analysis (PCA) values are uncorrelated with one another. To verify the assertion; for instance 0.4923 (0.4923) - 0.3804 (0.5025) 0.7809 (0.5246) -0.0554 (0.4795) =0. Consequently, we can say that combination of the first and second principal components (PC) explained separately the following component variances of 62% and 15% respectively or 62+15 = 77% of the total variance. This consequently suggests that using the first and the second components explained 77% of the total variance of the equity value multiples. Had the components are interrelated; they should have partly represented the identical data, so the contained data in the mixture would not have stayed equal to the sum of the information of the components. All the 4 principal components jointly explained entire variance that exist among the variables; hence, the unexplained variances computed in the second panel result are zeros, and Rho is equally 1.00 as obtained in the first panel result above. The first and the second principal components contained more than 77% of the total variances. When we extend our components to three, the variance of the principal component will be 90% approximately.

The implication for component result indicate strong correlation between the equity valuation multiples (EVM) and all of them if combined together can be condense to only three factors. A cross look at the table above shown that, the 3 component have satisfactorily explained 90% of the total variation indicating that three component can be apply to represent equity valuation multiples of the Nigerian listed firms. To further confirm our assertion, result of the Keiser-Meyer measure of sampling adequacy KMO is presented below.

Table 4: Keiser-Meyer Measure of Sampling Adequacy

<table>
<thead>
<tr>
<th>Variable</th>
<th>KMO</th>
</tr>
</thead>
<tbody>
<tr>
<td>PB</td>
<td>0.8074</td>
</tr>
<tr>
<td>PC</td>
<td>0.7580</td>
</tr>
<tr>
<td>PS</td>
<td>0.7830</td>
</tr>
<tr>
<td>PE</td>
<td>0.8091</td>
</tr>
<tr>
<td>Overall</td>
<td>0.7872</td>
</tr>
</tbody>
</table>
The table 4 above has shown that, principal component analysis (PCA) is created based on the equity valuation multiple (EVM). The data as employed in the research presented the Kaiser-Meyer-Olkin (KMO) for sampling adequacy of equity valuation multiples. The total KMO sampling adequacy is 79 for all the four equity valuation multiples suggesting a strong correlation of the valuation multiples. This implies that principal component analysis can reasonably be applied to equity value multiples for data reduction of the Nigerian listed firms. The 79% overall KMO is high and any inference drawn on individual valuation multiples may suffer multicollinearity problem making the result to be biased.

CONCLUDING REMARK

As deliberated above, the vital idea of the principal component analysis (PCA) is to reduce the dimensionality of data set comprising interrelated variables by extrapolating the latent factors among the underlying variables. This study has achieved this objective by transforming the initial equity valuation multiples of Nigerian listed firms to new set of uncorrelated variables. The principal components (PC) are arranged in associations to those that explained the largest proportion of the difference in the original valuation multiples variables. The 4 equity valuations multiples are condensed to 3 components offering 90% explanation of the variation in the initial variables. Therefore, the research concludes that a perfect correlation exist amongst the equity valuations multiples and the important way to explain them jointly is through the use of principal component analysis method. The study thus recommends the use of principal component analysis in trying to explain the equity valuation multiples of Nigerian listed firms collectively instead of only studying the valuation multiples independently and later aggregating them to one valuation multiple.

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Demographic Factors Consideration in Stress Level Determination in Tertiary Educational Institution in Nigeria

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Demographic Factors Consideration in Stress Level Determination in Tertiary Educational Institution in Nigeria

Keywords: Stress, Tertiary Institution, Demographic Factors, Emotional, Physiological

INTRODUCTION

Transition of students from secondary schools environment to tertiary education environment is a process that could cause them a psychosocial, academic and social shock, because this education system has great differences comparatively (Azila-Gbettor, Atatsi, Danku, & Soglo 2015). Tertiary institution environment has entirely different working surroundings usually stressful (Oyerinde, 2004). These changes make the students often to face new methods of teaching-learning and new academic requirements serving fundamentally as new stressors as well (WHO, 2002). This is coupled with new type of relationship between students and lecturers and even the relations among students from different ethno-religious-tribal affiliations. This is not devoid of having contact with some stressors (Agolla and Ongori, 2009; Agolla, 2009; Rees and Redfern, 2000).

In Nigeria, most of our tertiary educational institutions are mixed in nature (male & female) be it University, Colleges of education and Polytechnics or any monotechnics. Academic environments by virtue of their demand are considered as stressful atmosphere (Marshall, 2007; Cedillo and Scarone, 2005; Cooper, 2005). Put in another way, due to the expected changes, students can potentially experience different types of stress that can affect their mental, social and physical health and their academic achievement (WHO, 2002). Stress can be regarded as one of the main aspects of our modern life, resulting from the rapid and dynamic changes in human life; hence the present age can be called ages of stress.

Supporting this assertion Ongori and Agolla (2008) and Agolla (2009) opined that stress has become an imperative issue in studious sphere as well as in our civilization, because students suffer from academic stress resulting from testing, giving of home works, other assignments and other school requirements which may exceed their abilities.

Parents too have their own stress resulting from child education, unemployment and modern life hassling, to the extent that the same person may suffer from different types of stress (Kaplan and Sadock 2000). For our educational system to achieve the much desired goals/objectives, it is necessary to assess and identify the levels of stress and evolve strategies to tackle the issue among students in tertiary institutions.

LITERATURE REVIEW

A large number of researches had been conducted assessing the levels of stress of students as well as looking at the relationship of stress factors among these students at tertiary institutions of learning and its effect on student’s academic performances (Ongori & Agolla 2008; Agolla 2009). Stress can be defined as a “state of mental or emotional strain or suspense experienced by an individual” and also it could be
seen as “a number of usual reactions of the body to certain interaction (mental, emotional and physiological) for self preservation, defense or achievement” (Ahmed et al., 2013; Thawabieh, and Qaisy, 2012; Atindanbila, 2011; Agolla and Ongori, 2009; Chen, 2009). Researchers like that by, Vermunt and Steensmen (2005), and Topper (2007) all have defined the term stress as “the perception of discrepancy between environmental demands (stressors) and individual capacities to fulfill these demands”. While Moronkola and Okanlawon (2003) citing Communications Research Machines (1974) viewed stress as any stimulus that disturbs the biological or psychological equilibrium of an organism. Ensor, Means and Henkel (1985) believed that the word stress is used often to describe man’s reactions to the demands of modern and complex lifestyles. Although, the word stress connotes a negative reaction, it is not the pressure of living conditions of life but response to those pressures. The body reacts to excessive demand by attempting to maintain equilibrium among its internal processes. Stress is an indispensible and inevitable concomitant of human existence – indispensible in the sense that without some stress, we would be listless and apathetic creatures and inevitable because it relates to an external event, that has to do with pleasurable or anxiety producing conditions (Purna & Gowthanmi 2011). When a student responds to a stressor so that it produces positive results, then you have coped well and experienced the feeling of success. A student response to a particular stressful situation makes a stress good or bad (positive or negative). When there is a good response (Eustress) to a stress then you are on the positive side and when there is a harmful or bad response (Distress) to a stressor, then the students are on the negative side. A student’s ability to cope with life situations may make the same stressor to be either positive or negative (Moronkola & Okanlawon, 2003).

Giving credence to this assertion, Ahmed, Riaz and Ramzon (2013) expressed that stress in academic institutions can have both constructive and pessimistic consequences if not well managed. Stress can exert effect in two dimensions, in a positive or negative way. When stress leads to positive outcome it enhances student’s performance, give confidence and lead to an excellent results. But when stress moves in a negative direction, it affects student’s performances and practice. It at the same time intrudes into the student’s physical and psychological well-being (Thawabieh, and Qaisy, 2012).

Academic stressors include the student’s acuity of the general knowledge base and the acuity of inadequate time to develop (Ahmed et. al, 2013). Other stressors are numerous assignment to tackle, antagonism with other students, disappointments, insecurity in the campus, failures and poor relationships with other students or lecturers, family or problem at home (Fairbrother & Warn, 2003). Student encountered with some institutional happenings could be stressors such as each semester loaded with academic stress as continuous assessment, projects demanding money to execute, examinations, grade completion and large contents of subject matter to cover and master (Yahya, Abdullahi,& Hadiza, 2013). Other possible stressors students have to navigate are crowded lecture halls, semester system pressure and insufficient resources to execute academic work (Ongori. 2007). Thus that force desire to achieve well in the examination or time for examination and continuous assessment preparation are key stressors or environmental stress in academic institutions (Erkutlu & Chafra, 2006). Indeed fear of academic failure related to these tasks is a definite stressor itself. Thus, academic, financial, time or health-related and self-imposed stressor can affect a student at a glance not withstanding whether male or female (Cowman, 1993; Moronkola & Okanlawon, 2003).

Several researchers like Malach-Pines and Keinan, (2007), Ongori, (2007), Ongori and Agolla (2008), and Moronkola and Okanlawon (2003) had identified the following signs and symptoms of stress among students: loss of appetite, lack of energy, taking over the counter mediation, high blood pressure, loss of sleep, fidgeting, forgetfulness, frequent urination, over or less eating habits, prefer loneliness, having headache or backache, shouting or weeping, feeling depressed, difficulty in concentration, agitation, nervousness, experimenting with or excessive smoking, drinking of alcohol and or use of psychoactive drugs among others.
The consequences of stress effects on students can be multi-dimensional (Ongori & Agolla, 2008, Yahya, Abdullahi, & Hadiza 2013). A number of scholars classify these stressors in relation to their intensity, regularity or duration of the stress (Hussein & Hussein, 2006). Thus, the effects can be classified as suggested by (Sulaiman, Hassan, Sapian, & Abdullah, 2009; Talib, & Zia-ur-Rehman, 2012). (i) social or relational (inside and outside the institutions), which directly distress life in terms of accomplishing the actual target of being in the school, (ii) the psychological consequences of stress on students can be based on individual interpretation of what goes on around him/her, leading to internal conflicts, perception of life and expectation and values.

Here the individual laces great demands on the extent that state of helplessness or no control sets in. (iii) the physiological and health-related effect affects the emotion and cognitive body functioning of the individual in many ways that could leads to some common stress-induced diseases like diminished immunity, headache, anxiety, decreased sex derive, digestive problem, insomnia, hypertension, heart disease, etc. (iv) the academic effects may include decline in performances in GPA, truancy and absenteeism, inability to do and submit assignment and projects, etc. All these conditions are presents at almost the same degree in both male and female students (Smith, Anderson & Lovrich, 1995).

In tertiary institution of learning, students are likely to be victims of stress which if not properly managed can lead to burnout phenomena (Talib, & Zia-ur-Rehman, 2012). Coping strategies of stress to students include among other effective time management, collective support, positive re-appraisal and engagement in leisure and recreation pursuits (Sulaiman, Hassan, Sapian &, Abdullah, 2009).

Significance of the study
Research into institutional gender related stress should be regarded as an issue of serious educational importance that effects the student entire population, because it attendant effects could be reflected in student social, (gender segregation) academic and mental health. Thawabieh and Qaisy (2012) reported that stress leads to academic decline, poor relationship with peers (gender) and family members and overall dissatisfaction with life. This periodic research will serve as an assessment tool toward the identification of stressor among students across gender that will help the educational administrators, lecturers, supervisors and guidance and other health-related stakeholder to monitor and control the stress level of students in relation to gender differentiation. Each tertiary institution has to assess it students stress levels based on gender differentiation in order to provide them with the suitable mental health and conducive academic stress-free environment and efficient strategies and techniques to cope with the modern stressful academic life.

Hypotheses of the Study
The following two null hypotheses were formulated and tested in this study. The hypotheses were all tested at 0.05 levels of significance.

\[ H_1: \text{The level of stress attained by the Polytechnic students is not significantly high.} \]
\[ H_2: \text{There is no significant difference between the stress levels of male student and that of the female students.} \]

RESEARCH METHODOLOGY

Research Design
The researchers made use of descriptive survey research deign to gather the feelings and thoughts of representative samples of the accessible population in Kaduna Polytechnic of Nigeria.

Population and samples of the study
The population for this research work comprised of all students who had registered for this current 2014/2015 academic session in Kaduna Polytechnic. The institution is the largest Polytechnic in West Africa, offering about 100 different academic programmes with about 20,000 students population spread
across five Colleges, comprising of 40 departments. The stratified sampling technique was used to select five Schools; thereafter five departments from which the 250 students sample size were randomly sampled reflecting on the proportionate population of each department.

**Instrument for Data Collection**

The researchers made use of the adopt/adapt strategy. A structured questionnaire was adapted to collect data for the study. The research tool is made up of two parts. Section A elicited demographic information of the respondents such as College Units, academic programmes, gender, age brackets while the B part is the internationally and widely used DHFS Wellness Perceived Stress Scale developed by Cohen (1983). This research instrument is a ten-items questionnaire used to measure a person’s perception of stress over the past month and to determine the likelihood of whether perceived stress might be making them more susceptible to stress-induced challenges in relation to their health. It is structured on a five-point rating scale with 0= “Never”, 1= “Almost Never”, 2=“Sometimes”, 3=”Fairly Often” and 4=”Very Often”. Higher perceived stress scale scores are associated with higher levels of stress and indicate a greater likelihood for stress interfering with things like lifestyle changes, vulnerability to comprised health and increased susceptibility to stress-induced illness (Kelly & Percival, 2010). The researchers had calculated Cronbach alpha coefficient of 0.70 for this scale, which is reliable for this study (Nunnally, 1978). This is the interpretation classifications of stress levels as given by the developers of the scale.

<table>
<thead>
<tr>
<th>Total score</th>
<th>Your Perceived Stress Level is:</th>
<th>Health Concern Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-7</td>
<td>Much Lower than Average</td>
<td>Very Low</td>
</tr>
<tr>
<td>8-11</td>
<td>Slightly Lower than Average</td>
<td>Low</td>
</tr>
<tr>
<td>12-15</td>
<td>Average</td>
<td>Average</td>
</tr>
<tr>
<td>16-20</td>
<td>Slightly Higher than Average</td>
<td>High</td>
</tr>
<tr>
<td>21 and over</td>
<td>Much Higher than Average</td>
<td>Very High</td>
</tr>
</tbody>
</table>

**Data Collection Procedure**

The copies of the questionnaire were administered personally by the researchers and assisted by colleague lecturers during their lecture periods in the different department sampled. The students were specifically briefed on what was expected of them during the data collection process which last about ten minutes. This process ensured high return rate.

**Methods of Data Analysis**

The empirical data obtained were collated, cleaned and analyzed using both descriptive and inferential statistics. Before embarking on the analysis, based on the scoring instructions of the scale, questionnaire items numbers 4, 5, 7 and 8 were reverse scored because they are positively worded before summing the items for each respondent. The demographic data were analyzed using descriptive statistics while the four hypotheses were tested using parametric statistical techniques of t-test, and one and two-way analysis of variance (ANOVA). The analyses were facilitated with the use of computer statistical software of Statistical Package for Social Science (SPSS) version 20.

**RESULTS**

**Demographic Variables**

The descriptive statistics of the respondents revealed that out of the 250 samples, Majority of the respondents 187(75%) are offering ND academic programmes, 27(11%) HND and 36(14%) B.ED (Tech). Majority of the respondents 136(54%) are males while the rest 14(46%) are females. Out of the total number of respondents, 113(45%) belong to the age bracket of 21-25 years followed by 49(20%) between 26-30 years, 44(18%) belong to 16-20 years age bracket.
The results of data analyses are presented hypothesis-by-hypothesis.

**HO₁**: The level of stress attained by the Polytechnic students is not significantly high.

The respondent’s scores on the Perceived Stress level questionnaire scale measured by the ten-items were summed up. Based on the scale score interpretation, a level of stress to be considered significantly high should not be higher than 15, out of a maximum of 40 scores (i.e. 4X10 = 40).

The comparison was done using t-test of one sample (also known as Population t-test) the results of data analysis is presented in Table 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Sample SD</th>
<th>Reference t-value</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students stress levels</td>
<td>250</td>
<td>3.52</td>
<td>1.11</td>
<td>15</td>
<td>163.62</td>
<td>.000</td>
</tr>
</tbody>
</table>

**Source**: Field Survey

The data analysis result presented in Table 1 indicated a statistically significant high stress levels ($M =3.52$, $SD =1.11$), $t (249) = 163.62$, $p=.000$ leading to the rejection of the first null hypothesis. This then implies that the stress levels among the students are significantly high in Kaduna Polytechnics. Furthermore Table 2 throws more light showing the distribution of the stress levels of the students based on the scale classifications.

<table>
<thead>
<tr>
<th>Total score</th>
<th>Your Perceived Stress Level is:</th>
<th>Health Concern Level</th>
<th>Freq</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-7</td>
<td>Much Lower than Average</td>
<td>Very Low</td>
<td>18</td>
<td>7</td>
</tr>
<tr>
<td>8-11</td>
<td>Slightly Lower than Average</td>
<td>Low</td>
<td>19</td>
<td>8</td>
</tr>
<tr>
<td>12-15</td>
<td>Average</td>
<td>Average</td>
<td>77</td>
<td>31</td>
</tr>
<tr>
<td>16-20</td>
<td>Slightly Higher than Average</td>
<td>High</td>
<td>87</td>
<td>34</td>
</tr>
<tr>
<td>21 and over</td>
<td>Much Higher than Average</td>
<td>Very High</td>
<td>49</td>
<td>20</td>
</tr>
</tbody>
</table>

H₀₂: There is no significant difference between the stress levels of male student and that of the female students.

The researchers had hypothesized that there is no significant difference between the stress levels of male students and that of their female counterparts.

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>136</td>
<td>15.65</td>
<td>5.24</td>
<td>0.554</td>
<td>.580</td>
</tr>
<tr>
<td>Female</td>
<td>114</td>
<td>16.00</td>
<td>0.940</td>
<td>0.564</td>
<td>.573</td>
</tr>
</tbody>
</table>

**Source**: Field Survey

An independent sample t-test was conducted to compare the stress levels between the males and females. The result indicated on Table 3 shows that there was no statistically significant difference in the stress levels of males ($M=15.65$, $SD =5.34$) compared to the females ($M=16.00$, $SD=4.53$), $t(248) , .554, p=.580$, two-tailed). The magnitude of the difference in the means $=.35$, 95% CI $=1.62$ to $1.57$ was very small, (eta squared $=.001$). With the result of this analysis, the null hypothesis was therefore retained. This implies...
that there is no significant difference between the stress levels of male students and that of the female students in Kaduna Polytechnics.

**DISCUSSION OF FINDINGS**

The first finding of this study is that the stress levels of students in Kaduna Polytechnic are significantly high. This finding is in line with numerous researchers findings indicating that students in tertiary institutions suffer from different level of stress (Ahmed, Riaz & Ramzan, 2013; Ongori, 2007). In fact the result of analysis on Table 2 reveals about 136 (55%) of the students are highly and very highly stressed up based on their cumulative scores. This finding has serious implication for the Management of the institution to mount preventive and palliative stress management techniques before the situation gets out of hand which may affect the health status of the students.

The second finding reveals that there is no much difference between the stress levels of male students compared to their female counterparts. This is contrary to the submission of Chen, Wan, Ran and Gilson (2009) who found that the male students reported higher levels of stress compared to their female counterparts. Similarly this finding is contrary to the submission made by Tajularipin, Vizaya and Saifuddin (2009) revealing that there is a significant difference in the levels of stress attributed to gender on one hand but reported a similar finding indicating that students experience medium stress in most tertiary institution.

**CONCLUSION AND RECOMMENDATIONS**

The researchers recommend that Kaduna Polytechnic Management and other important stakeholders have to provide students with psychological and academic counseling in order to reduce their levels of stress, so that they can achieve and maintain a better state of mental well-being.

As students they should set aside relaxation time, watching movies, sport and games, utilizing relaxation techniques such as Yoga, Meditation and deep-breathing – all these activate the body’s relaxation response, are of restfulness that is the opposite of the stress response.

Institutional management should provide sporting and recreational equipment for mass student participation. Participating in regular exercise plays a key role in reducing and preventing the effect of stress. This can lead to forming a life-long healthy-activity even after graduation.

Students should be encouraged to eat healthy diet in that well-nourished bodies are better prepared to cope with stress. Start your day with a healthy breakfast, reducing caffeine and sugar intake and avoiding alcohol and cigarette smoking.

As students they should be encouraged to get enough sleeping hours. Feeling tired mentally and physically can increase stress by causing you to think irrationally.

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Pay-Performance Relationship: An Empirical Study on Employee Performance in the Context of Nigeria

Keywords: Performance-based pay, organizational benefits, distributive justice, employee performance, compensation.

INTRODUCTION

With the trend of growing globalization, coupled with the uncertainty that clouds the global economic environment, there emerged the need for organizations to enhance their competitive advantage through improvement in productivity and performances of employees who are equipped with the required skills, knowledge and competencies needed for the execution of organizational strategy and planning (Ismail, 2014; Ismail, Abdul-Halim & Joarder, 2015). Research has demonstrated that organizational survival is contingent upon highly productive employee (e.g. Guerrero & Baraud-Didier, 2004; Way, 2002). Organizations with the ability to foreknow their business needs and their workforce needs especially for highly productive workforce- will gain the decisive competitive advantage.

However, employee performance in Nigeria has become a source of worry to organizations. For instance, poor employee performance has caused a setback to the construction industry. This has consequently affected quality of work, duration of projects and firm’s profits (Abdullahi, Bilau, Enegbuma, Ajagbe & Ali, 2011). In the education sector, prevalent poor academic performance of students in Nigeria has been associated with the poor teachers’ performance (Ofoegbu, 2004). Teachers who were rated as ineffective actually produced students of lower academic ability (Adu & Olatundun, 2007; Akiri & Ugborugbo, 2009).

Nigeria, the largest economy in the African continent due to its recent rebased Gross domestic product (GDP) (Punch, 2014), is experiencing industrial turbulence due to incessant compensation-related industrial strikes, low employee job satisfaction, low social relationship with co-workers etc. (Ajayi, 2012; Ellis, Chinedu & Evans, 2011; Punch, 2014).

Human resource with the skills, experience, and knowledge it possesses add economic value to firms (Riordan, Vandenb, & Richardson, 2005). Hence, it becomes fundamental to the achievement of organizational goals. Consequently, it becomes imperative for organizations to put in place strategies to enhance the performance of their workers. One major factor discernible from Nigeria’s industrial scenario is that the hindrances to the enhanced employee performance are compensation based. Industrial strikes are largely caused by the agitation for better pay and incentives.

Although the bulk of literature seems to accept that performance-based pay has a significant effect on employee performance, some studies have demonstrated little doubt about the relationship. Some studies have reported that performance-based pay is least weakly related to employee performance. Some studies
argued that implementation of performance-based pay system is the problem (e.g. Egger-Peitler, Hammer, Chmid & Meyer, 2007; Perry, Engbers, & Jun, 2009). Hence, the findings of the extant research are inconclusive.

Research has established pay-performance nexus in which the productive workers are paid with high pay wages. This practice is strongly based on the scientific management approach which assumes that financial incentives were a motivating factor that stimulate employee performance. The principles of scientific management approach were based upon a foundation of one-sided development of a fair incentive pay system (Ismail, 2006). On the other hand, financial incentives which, according to administrative management approach, reflect fair representations of employee effort would improve efficiency and productivity if employees perceive fairness in it (Dessler, 2005; Hellriegel & Slocum, 1996). To date, there has been support for both arguments. Scientific management approach has formed the basis for many compensation decisions, with many contemporary organizations tying at least part of an individual’s pay to team, work unit or performance (Henderson, 2006; Locke & Latham, 1990a, 1990b). Notably, a careful observation of compensation-performance nexus reveals that the relationship is indirectly affected by perceptions of distributive justice. Thus, investigating distributive fairness is a useful and appropriate contextual variable for this study. Distributive fairness is an organizational context that can positively or negatively influence that behavior (Janssen, 2000; Moorman, 1991).

While a good number of studies and empirical evidences have established the link between, various types of compensation and employee performance (e.g. Agwu, 2013; Ajila & Abiola, 2004; Jalaini, et al., 2013; Mensah & Dogbe, 2011; Sajuyigbe, Bosede, & Adeyemi, 2013), research on the effect of some aspects of compensation such as performance-based pay and organizational benefits on employee performance has eluded the attention of researchers. Also, this kind of research in the context of Nigeria is underscored by the need to motivate human capital through effective reward system since it has the required skills, knowledge and competencies to execute strategy and planning in the organization (Lawler, 2003), the need to address the defective employee performance caused by compensation-related incessant strikes workers, the need to review poor reward system that gives rise to the nonchalant and lackadasical attitudes of Nigerian workers (Ajayi, 2012; Atunbi, 2014), and the need to look into how workers can be motivated through pay, bonuses, and other benefits as suggested by Ajayi (2012) and Atunbi (2014).

In view of the above background, we aim with this study to answer the following research questions:

- Does performance-based pay influence employee performance?
- Do organizational benefits influence employee performance?
- Does distributive fairness mediate the relationships among performance-based pay, organizational benefits and employee performance?

This study is exceptional for being among the very few research that actually link both performance-based pay and organizational benefits to employee performance with the mediation of distributive fairness. Hence contributing immensely to the enhancement of employee performance and the present body of knowledge on performance-based pay, organizational benefits and employee performance. It would also serve as a useful reference for future and continuing studies. This study could be a useful guide for the policy and decision making as well as for academic resources.

LITERATURE REVIEW

Performance-based Pay and Employee Performance
Performance-based pay refers to a method through which individual, group or performance is directly and monetarily compensated (Armstrong, 2005). Mensah and Dogbe (2011) posited that performance-based pay is a scheme that aimed at compensating employee based on his/her performance. Performance
incentive scheme is that of a foundation upon which individual employee and organizations rest. In as much as employee acknowledge when, why and what is expected of him in terms of tasks, then the organizational goals is attainable and employee feel being empowered (Kanji, 2005).

Furthermore, performance-based pay is described as a reward given to employee within a compensation range that is competitive with that paid for similar work in the community and industry. It is also based upon merit as empirically appraised in the firm's performance appraisal program, with a chance to receive above market pay for employees demonstrating exceptional performance (Matsumura & Shin, 2004). On the other hand, employee performance is basically outcomes achieved and accomplishments made at work. Performance refers to keeping up plans while aiming for the results. Although performance evaluation is the heart of performance management (Cardy, 2004), the performance of an individual or an organization depends heavily on all organizational policies, practices, and design features of an organization.

In recent time, organizations have believed in transforming their reward system to performance-based pay system. The basic drive of any performance-based reward system is to relate employees’ salaries directly to their performance. Linking rewards to performance reinvigorates employees to intensify their efficiency. Performance-based reward system entitles employees to a basic income and the chance to get extra reward if their outputs surpass the set standard (Globler, Warnich, Carell, Elbert, & Hatfield, 2006). The relationship between performance and compensation, no matter the pattern of pay, is somehow, inseparable and inextricable. The influence of performance-based pay plans on workers and organizational performance cannot be simply separated from the wider context of a firm’s structures, management strategies, and employees system (Shilongo, 2013).

Robbins (2005) argued that the social sciences have proposed many theories to analyze how payment raise that is linked to performance might excite workforce to add more effort and set that effort on the achievement of organizational performance objectives.

In contrast, some literature have shown less positive links between performance-based pay system and employee performance, while some studies have argued that implementation of performance-based pay system ultimately create the major obstacle in its success. It is not that employees do not like the system (Egger-Peitler, et al., 2007). Perry et.al (2009) added that poor implementation and poor management practices are the common obstacles to performance-based initiatives. Performance-based pay system is considered less acceptable. This is due to the fact that it is largely restricted to one-dimensional monetary information. It had a retrospective orientation, short-term vision, and a fragile strategic content (Bourne, Franco, & Wilkes, 2003; Kanji, 2005).

In addition, Park and Sturman (2012) posited that the effect of performance-based pay strategies on employee future performance can be described by nature of relationship between pay and performance for each strategy and the financial nature of the awards from each strategy. Merit pay and bonus are components of performance-based pay system and they have attracted the attention of researchers. Nyberg, Pieper and Trevor (2013) observed that merit pay, bonus and their cumulative effective overtime positively influence the employee future performance. However, bonus is more effective than merit pay. Another study stated that it is the employees’ perception of the financial incentives that will determine its effectiveness. If the employees find the incentive program supportive, it is likely to motivate them and thus increase performance (Andersen & Pallesen, 2008).

The problem with the implementation of merit pay has to do with performance appraisal issue. This is reflected in three aspects. The first one is setting performance goals or benchmarks while the second is performance evaluation itself and the last one is how to create a connection between pay and performance (Kessler & Purcell, 1992). Mensah and Dogbe (2011) stressed that the motivational influence of merit pay
on performance is hindered by unfair performance appraisal. Five problems affect the relationship between merit pay and performance: evaluation problem; feedback and acceptance of evaluation result; limited desirability of merit reward; system uproar; long delay between performance and reward, and inconsistent use of financial and non-financial rewards (Campbell & Campbell, 1998). The review of literature on Performance pay-performance nexus demonstrated that there is still need for more empirical insights. Therefore, we hypothesize the following:

H1: Performance-based pay positively influence employee performance.

Organizational Benefits and Employee Performance

Researchers have been studying organizational benefit since 1980s and it has attracted different definitions and conceptualizations and empirical studies (Ashkanasy, Wilderom, & Peterson, 2000). Studies agree on the fact that organizational benefits encourage employee commitment, identity, and direction and then enhance performance. Organizational benefits, In fact, otherwise known as employee benefits, refer to a part of reward system given by the organization alongside with other forms of monetary reward (Armstrong, 2010). Realistically, it is the benefits that actually attract and retain talented and high performers.

Organizational benefits include retirement schemes, holiday, pensions, share ownership, paid leave and allowances. Pension as an important element of organizational benefits can induce and retain high performance employee because pension plays a role in the competitive total reward system. Among the advantages of welfare benefits are that it enhances employee wellbeing at work and at home. Welfare benefits include sporting facility, stock purchase, insurance schemes and savings plans. Some welfare benefits are legally required and binding as well. Chung (2006) added subsidized meals, financial assistance, company car, clothing allowance, personal needs, mobile phone credit and petrol allowance etc. as part of organizational benefits.

The range and scope of organizational benefits are developing swiftly and the outcome of the benefits have the possibility to influence on almost every aspect of a worker’s life. For benefits to have a positive influence on an individual employee, it requires individual employee to know and understand the benefits their employer currently offers. On the part of employers, they must understand their employees, what they want from individual products and their motivation to acquire them. This will enable them to identify the merits, scope and possible influence of organizational benefits (Pegg, 2009).

Successfully communicating the advantages, scope and potential effect of benefits presents a real opportunity for employers. Research undertaken by the Chartered Institute for Personnel and Development (CIPD, 2007) indicates that the better benefits are communicated, the more workers appreciate their employers and organizational benefits, the better their commitment and engagement (CIPD, 2007).

Organizational benefits can enhance employee commitment and productivity which is the anticipation of employers in exchange for the benefits they give to the employees. Omario (2011) argued that there is positive correlation between organizations benefits and employee performance. However, researcher observed that there is no sufficient evidence found to have indicated a significant relationship between organizational benefit and employee performance. It should therefore be noted here that little is known about link organizational benefits to employee performance. Therefore, it is sufficed that we hypothesize thus:

H2: Organizational benefits positively influence employee performance.
Distributive Fairness and Employee Performance

Past scholars have indicated that distributive fairness forms an essential part of organizational justice which, in the long run, ensures employees’ satisfaction in the organization (Adams, 1965; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Greenberg, 2004). Justice implies employees’ perceptions of fairness within the organization. According to Janssen (2004), employee would usually investigate the link between the inputs he contributed and rewards he received from organization compared to others to ascertain whether it is fair. Likewise, according to the equity theory of Adams (1965), it is pretty normal that employees would make a comparison between his contributions to organization and the returns received from organization as they would also compare it with others (Adams, 1965; Janssen, 2004). Distributive fairness should not be restricted to fairness of payments; fairness should also reflect in a broad set of organizational outcomes such as promotions, rewards, punishment, work programs, benefits and performance evaluation.

Some theories gave support to the concept of distributive fairness. Equity theory emphasized that employees expect fair outcomes with respect to pay, incentives, benefits, job security, recognition, and perks in exchange for his inputs in terms of education, effort, time, commitment and experiences they put in their jobs. Employee who believes that his inputs surpass what he gets as reward, would undoubtedly not happy, this would affect job satisfaction and consequently affect performance (Adams, 1965). Cole and Flint (2004) stressed further that employee who perceives fairness in the reward given to him, would improve his job outcomes.

Remarkably, studies have established mediating role of distributive fairness in the HRM practices-performance nexus (e.g. Ismail, 2014; Ismail et al., 2015; Ismail, Ibrahim & Girardi, 2008). In Ismail et al.’s (2014) study, it was indicated that there is relationship between career incentives and employee performance with the partial mediation of distributive justice. The study by Ismail, Ibrahim and Girardi (2008) emphasized the mediating role of distributive fairness in the relationship between pay design and job satisfaction. Furthermore, a careful look at the research on compensation-performance nexus divulges that there seems the relationship is indirectly affected by perceptions of distributive justice. Thus, investigating distributive fairness is a useful and appropriate contextual variable for this study since distributive fairness is an organizational context that can positively or negatively influence that behavior (Janssen, 2000; Moorman, 1991). The concern for this study is to investigate whether distributive fairness also mediates the relationship between performance-based pay, organizational benefits and employee performance. Therefore, we hypothesize that:

H3: Distributive fairness mediates the relationships among performance-based pay, organizational benefits and employee performance.

On the basis of review of extant literature, we design the following research model:
METHODOLOGY

Cross sectional survey method is the approach of this study. Research design in this study implies a procedure through which data is collected and analyzed in order to test the proposed hypotheses. The survey instruments were of two parts: demographic information of the respondents, and the variables’ instruments prepared to elicit information. The respondents were given 1 to 5 options for each response using five point Likert scale: Strongly Disagree (SD); Disagree (D); Neutral (N); Agree (A) and Strongly Agree (SA). The Cronbach’s Alpha values of the variables of the study fall between 0.75 to 0.88, which is quite acceptable for social science studies.

The population of the study comprises of Nigerian employees who are currently on study leave for the pursuit of higher study in Universiti Utara Malaysia (UUM). The total population is 278. Simple random sampling technique was used to sample the population. The adoption of this technique is based on the premise that the technique is the most efficient among all the probability designs as every element of the population has the equal chance of being selected and thus would enhance the objectivity of the study’s findings (Yates, Moore & Starnes, 2008). Out of 278 Nigerian professionals, researchers selected, 140 were sampled based on the list provided by the Nigerian Students Community of Universiti Utara Malaysia (UUM).

A set of 140 questionnaires were dispatched in person to the selected respondents, however 120 questionnaires were retrieved back. Unfortunately, 4 questionnaires were not filled up properly, thus removed from the final analysis. Therefore, only 116 responses, representing 83%, were used for the final analysis.

FINDINGS

The descriptive analysis revealed that the senior employees among the respondents were 73.3% while 26.7% were junior employees. This tells that over one third of the respondents were relatively experienced employees in their various places of work. Also, it indicated that 85.3% of the respondents (majority) were permanent staff while 14.7% were temporary staff. In addition, 32.8% of the respondents were new employees and they were at the early stage of the employment with work experience less than a year. However, more than half of the respondents i.e. 52.6% respondents have working experience between 2-5 years in the Nigerian working environment. In terms of educational level, 9.5% have diploma, 30.2% have first degree in various fields of study while 60.3% have postgraduate degrees. This points out that majority of the respondents were highly educated. Most of the respondents i.e. 62.1% were married, and others were either single or divorced/separated or widows. In sum, the respondents of this study were highly educated with longer work experience in the Nigerian context, this signifies that the respondents were quite appropriate because majority were well familiar with reward system process in their respective workplaces.

Table 1: Descriptive Statistics for the Variables

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBP</td>
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<td>1.67</td>
<td>5.00</td>
<td>3.1897</td>
<td>.78786</td>
<td>-.155</td>
</tr>
<tr>
<td>OB</td>
<td>116</td>
<td>1.20</td>
<td>5.00</td>
<td>3.1129</td>
<td>.78514</td>
<td>-.415</td>
</tr>
<tr>
<td>DF</td>
<td>116</td>
<td>1.00</td>
<td>5.00</td>
<td>3.4353</td>
<td>.98639</td>
<td>-.203</td>
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<td>5.00</td>
<td>4.1342</td>
<td>.57739</td>
<td>-1.000</td>
</tr>
</tbody>
</table>

It was indicated in the table 1 (see the appendix) that mean values for the variables ranged between 3.10 to 4.15, indicating that the amount of performance-based pay, organizational benefits, as well as the levels of distributive fairness and employee performance are ranging from moderately high (3.00) to highest (7.00). It also showed that employee performance has the highest mean score which is 4.13 with the standard deviation of 0.58. Distributive Fairness, the mediator, has the mean score of 3.44 with the standard deviation of 0.99 while the mean score of performance-based pay is 3.19 with the standard deviation of 0.79. Organizational benefits have the least mean score of 3.11 while its standard deviation is 0.78. The scale used in measuring the questionnaire items was 1 to 5 Likert scales; strongly disagree, disagree, Neutral, agree, and strongly agree.

### Table 2: Correlation

<table>
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<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
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<tbody>
<tr>
<td>Performance –Based Pay</td>
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<td></td>
<td></td>
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<tr>
<td>Organizational Benefits</td>
<td>.510**</td>
<td>.558**</td>
<td>.558**</td>
</tr>
<tr>
<td>Distributive Fairness</td>
<td>.658**</td>
<td>.369**</td>
<td>.390**</td>
</tr>
<tr>
<td>Employee Performance</td>
<td>.178</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: **. Correlation is significant at the 0.01 level (2-tailed). N = 116.

Regarding correlations among the variables of the study, table 2 (see the appendix) indicated that correlations between the variables held in the expected directions. The dependent variable, employee performance, correlated with performance-based pay, $r = 0.18$, $p = 0.056$; correlated with organizational benefits, $r = 0.37$, $p < 0.01$; and distributive fairness, $r = 0.39$, $p < 0.01$ respectively. Therefore, this indicates initial support for hypotheses 1, 2 and 3. The mediator, distributive fairness, correlated with organizational benefits and performance-based pay, $r = 0.56$, $p < 0.01$ and $r = 0.66$, $p < 0.01$ respectively. Similarly, performance-based-pay correlated with organizational benefits $r = 0.51$, $p < 0.01$. Therefore, all these correlations point out initial support for hypothesis 3.

To appraise the different effects of the independent variables, the model is planned in a hierarchical way. A hierarchical regression analysis allows an assessment of the additional effect of the independent variables, which are placed in each step of the analysis (Vandenabeele, 2011).

Baron and Kenny (1986) recommended that a mediating variable can be acknowledged when it fulfills four conditions: First, the independent variables (i.e. performance-based pay and organizational benefits) should correlate with the mediator (i.e. distributive fairness); second, the independent variables must correlate with dependent variable (i.e. employee performance); third, the mediator must correlate with the dependent variable (i.e., employee performance). Fourth, a previously significant effect of predictor variables decreased to non-significance or decreased in terms of effect size after the inclusion of mediator variables into the analysis. In this regression analysis, standardized coefficients (standardized beta) were used for all analyses (Jaccard, Turrisi, & Wan, 1990).

### Table 3: Hierarchical Regression Analysis

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Distributive Fairness</th>
<th>Employee Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model1</td>
<td>Model2</td>
</tr>
<tr>
<td>Control Variables</td>
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<td>Job Nature</td>
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Pay-Performance Relationship: An Empirical Study on Employee Performance in the Context of Nigeria

<table>
<thead>
<tr>
<th>Education</th>
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<th>.033</th>
<th>.042</th>
<th>.159</th>
<th>.117</th>
<th>.148</th>
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</thead>
<tbody>
<tr>
<td>M/Status</td>
<td>.157</td>
<td>.083</td>
<td>-.101</td>
<td>-.133</td>
<td>-.167</td>
<td>-.161</td>
</tr>
</tbody>
</table>

Independent Variables

<table>
<thead>
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<th>PBP</th>
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<th>.11</th>
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</tr>
</thead>
<tbody>
<tr>
<td>OB</td>
<td>.30***</td>
<td>.33**</td>
<td>.23*</td>
</tr>
<tr>
<td>DF</td>
<td>.42***</td>
<td>.34**</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.06</td>
<td>.14**</td>
<td>.29***</td>
</tr>
<tr>
<td>Adjust R²</td>
<td>.02</td>
<td>.10**</td>
<td>.24***</td>
</tr>
<tr>
<td>F</td>
<td>1.4</td>
<td>3.6**</td>
<td>10.9***</td>
</tr>
</tbody>
</table>

Note: N = 116. Standardized regression coefficients are shown in columns marked Model 1, 2, 3, and 4. *p < 0.05; **p < 0.01; ***p < 0.001.


With regard to hypotheses 1 and 2, organizational benefits have a significant positive influence on employee performance as shown in Table 3 (see the appendix) (β = 0.33, p < 0.001). This points out that organizational benefits make a unique contribution to employee performance. Thus, hypothesis 2 was supported. In addition, performance-based pay has positive influence on employee performance but the influence is insignificant (β=.11, P=.284). This points out that performance-based pay makes an insignificant contribution to employee performance. In this case, hypothesis 1 was supported.

Regarding Hypotheses 3, we hypothesized that distributive fairness mediates the relationship between performance-based pay, organizational benefits and employee performance. The models in the table 3 (see the appendix) was used to explain how or why correlation between independent and dependent variables exist in reality. Table 3 (see the appendix) presented the information on the multiple regression analysis. In doing so, the first step is the adoption of two conditions to test the hypothesis. In the first condition, two models were tested by regression analysis where the dependent variable (distributive fairness was made a dependent variable in the first condition) and the control variables were included in Model 1 while performance-based pay and organizational benefits were then added as independent variables in Model 2.

In the second condition, the dependent variable was employee performance and the control variables were added, performance-based pay, organizational benefits, and distributive fairness were also added as independent variables.

The independent variables (i.e. performance-based pay and organizational benefits) predicted the mediator (i.e., distributive fairness) β = 0.51 p < 0.001; β= 0.30 p <0.001 respectively. Hence, the first condition suggested by Baron and Kenny (1986) was fulfilled.

The second condition was also fulfilled as the independent variables (performance-based pay and organizational benefits) predicted the dependent variable (i.e. employee performance) β = 0.11, p = 0.284; β = 0.33, p < 0.001 respectively. It should be noted here that only organizational benefits correlated significantly with employee performance while performance-based pay correlated with it insignificantly. The third condition was also satisfied as the mediator (distributive fairness) significantly predicted the dependent variable (i.e., employee performance) β = 0.42 p < 0.001.

The fourth condition was also fulfilled. In the model 2 of the condition 2 of the model, before distributive fairness was added, the standardized regression coefficient of the relationship between performance-based pay and employee performance was 0.11; between organizational benefits and employee performance was 0.33 respectively. However, when the variable, distributive fairness was included in Model 4 as the
independent variable, the coefficient between performance-based pay and employee performance was decreased from 0.11 to -0.06 and the correlation between organizational benefits and employee performance decreased from 0.33 to 0.23. In this case, both independent variables fulfilled the fourth condition of Baron and Kenny (1986). Therefore, this result provided full support for Hypothesis 3. Thereby, distributive fairness fully mediates the relationship between performance-based pay, career incentives, organizational benefits and employee performance.

DISCUSSION

This research mainly seeks to investigate the effect of performance-based pay, organizational benefits on employee performance in the context of Nigeria. It equally seeks to investigate the mediating role of distributive fairness in the relationships between these variables. Furthermore, Performance-based pay was found in this study to have insignificant and weak relationship with employee performance. This finding is consistent with the studies of Mensah and Dogbe (2011); Nyberg, et al. (2013); and Park and Sturman (2012).

Logical appeal of performance-based pay as a tool in support of a meritocratic philosophy of remuneration is palpable (Armstrong, 2005). This informs that individual employee roles are indispensable and should replicate in the pay given to individual employee. This also indicated a positive role of performance-based pay in improving employee performance. However, the result of this study demonstrates that there exist some logics in the other empirical evidences that indicated that performance based-pay does not really predict employee performance.

Some studies have argued that implementation of performance-based pay system ultimately create the major obstacle in its success. It is not that employees do not like the system (Egger-Peitler, et al., 2007). Perry et.al (2009) added that poor implementation and poor management practices are the common obstacles to performance-based initiatives. Performance-based pay system is considered less acceptable. This is due to the fact that it is largely restricted to one-dimensional monetary information. It lacked a strategic focus, and it had a retrospective orientation, short-term vision, and a fragile strategic content (Bourne, Franco, & Wilkes, 2003; Kanji, 2005).

The research whose findings have indicated doubtful relationship between performance-based pay and performance induced some reasons for this. One of these reasons is the ensuing challenges in the management of performance-based pay which is connected to performance appraisal. The relationship between performance-based pay schemes and individual appraisals should be based on three dimensions: establishing performance objectives or criteria, reviewing performance and developing the connection between pay and performance (Kessler & Purcell, 1992). It is worthy of note here that the tendency to exaggerate the rating of employees has cultural connotations in the African setting (Nigeria inclusive). It is the situation where raters are generally reluctant to make negative appraisal of employees in the workplace, particularly on the issues of pay (Blunt & Popoola, 1998). The reason is that strict appraisal was postulated to be the cause of low remuneration of staff in their organizations. This kind of situation could give rise to inter-divisional conflict and supervisor-employee contention (Margerison, 1997).

Furthermore, the result of this study has also indicated a positive significant relationship between organizational benefits and employee performance. This result is in line with the findings of Nzuve (2010) and Omaro (2011). This points to the fact that employee can be inspired and consequently develop his performance if the organization provides some benefits such as home allowance, educational allowance, transport allowance et cetera. This also reveals the fact that majority of the respondents were sponsored to further their educational career by their organizations. Hence, organizational benefits combined with basic pay should constitute a competitive total remuneration package, with a target to improve and enhance employee performance.
The result of the hierarchical regression analysis reveals that distributive fairness fully mediates the relationship between performance-based pay, organizational benefits and employee performance. This demonstrates that employees would feel satisfied and motivated if they perceive fairness in the distribution of performance-based pay and organizational benefits in their organization compared to other organizations.

Generally, the findings of this study are in consistent with two compensation theories namely; equity theory and expectancy theory. Adams (1965) posited that employee will be energized; if he receives a fair reward for the work he does compared to other colleagues. This is also consistent with equity theory, performance is achieved when employees feels his inputs and the corresponding rewards are equal to that of his colleagues (Ali & Mohsen, 2008).

Equity theory posits that fairness and equity should be entrenched in the reward system in order to acknowledge the inputs of the workers. The inputs consist of employee’s efforts, time, education, and experience. Employee who perceives fair treatment compared to his colleagues would feel motivated but if he perceives otherwise, he would feel demotivated. Similarly, employee who perceives commensuration between his inputs to the organization and the pay he receives from the organization would do more. The implication is that employee can be encouraged to put more effort by providing a competitive reward system which include good pay, good incentives and benefits. Employees would prefer an organization that offers better reward system to other organizations that do not offer such.

CONCLUSION, IMPLICATIONS AND FUTURE RESEARCH DIRECTIONS

Empirical studies have emphasized the significance of improving employee performance. Also, numerous researchers have studied the importance of performance-based pay in improving performance while some other researches have proven weak and doubtful relationship between performance-based pay and employee performance. Hence, the findings of this research area are inconclusive. Furthermore, there are few studies that linked organizational benefits to employee performance while, to the best of our knowledge, this is the first research to examine the influence of performance-based pay and organizational benefits on employee performance with the mediation of distributive fairness. Hence, this study is unique on its own.

Going by the findings of this study, organizations are exhorted to put in place performance-based pay program and organizational benefits plan, so that employee would be motivated and thus enhance their productivity, and positive attitudinal and behavioral outcomes will be accomplished as this will encourage employees to support the organizational and human resource department strategies and goals in the organization. Consequent upon higher employee productivity and performance, there would be higher organizational performance which is the sole objective of every organization.

Organizations should exercise cautions when implementing performance-based program, most especially performance-based pay. High level of trust, sufficient pay package and effective performance appraisals should be guaranteed. The rationale behind this is that some empirical evidences that cast doubt on the effectiveness of performance-based pay program demonstrated lack of trust, insufficient pay package and biased performance appraisal in the program. To guarantee positive effect of performance-based pay system on performance, all these factors should be taken into cognizance.

The overall findings of this study can serve as a compendium for the management in entrenching an effective competitive reward system in the organization. To solidify the body of knowledge in this research area, future research can replicate this research in a larger context. Also, future research can
explore further the dimensionality of distributive justice and organizational benefits and validate how they can be measured further.

REFERENCES


Does Organizational Culture Moderate the Relationship between Trust of BSR on Performance of Small Scale Industries: Partial Least Square (PLS) Approach

Keywords: Trust of BSR, Organizational Culture, Performances, Small Scale Industried, SPSS, PLS

INTRODUCTION

In previous years, maximization of profit is considered as the sole task of firms in both business theory and practice (Benedik & Davor, 2010; David, 2012; Fiori, Donato & Izzo, 2007; Karen, Taylor, Hill & Yalcinkaya, 2011). Environment adjustment, disappearance of biological species and the worldwide economic crisis gave forward motion to the support of social responsibility by not only aiming at revenue making but by paying more attention to the social and environmental penalty of company operations as well (Benedik & Davor, 2010; Caroll & Shabana, 2010; David, 2012; Gorondutse & Hilman, 2013a). Modern conditions of conducting business required a concept shift from the neo-liberal reductionism profit orientation toward a holistic standpoint, sense of balance of economic, social and environmental degree of corporate responsibility (Benedik, & Davor, 2010; David, 2012; Fiori et al., 2007; Gorondutse & Hilman, 2013a).

Trust refers to the key sign of physically powerful administration in the direction of stakeholder trade interaction (Buchan, Croson, & Dawes, 2002; Hansen, Dunford, Boss, Angermeyer, & Alan, 2011; Hilman & Gorondutse, 2013a). Trust has been regarded as the anticipation that the trustee is agreeable to keep promise and accomplish obligation (Perrini, Castaldo, Misani&Tencati, 2010), its idea has gotten a significance in both management and marketing research or have proven important in digestive situations where the thrusters is vulnerable (Hilman & Gorondutse, 2013a; Perrini et al., 2010).

Furthermore, the most popular theories like “stakeholder theory” and “legitimacy theory” have emphasized the significance of social responsibility of business, in a better way. The theories are based on the argument that: apart from pursuing the ultimate return of maximizing objectives, business need to be responsible for their activities in the society and thus, continual procedure and success of organizations activities are reliant on conformity of societal opportunity and attainment continue for sustained existence in the society (Caroll & Shabana, 2010). The study also extends theoretical development of BSR and performance link by considering relationship in a wider perspective of stakeholder. This model integrates managerial motives with the stakeholder theory that argue managers develop social responsibility strategic based on stakeholder priorities (Peloza & Papania, 2008; Jones, 1995).

Conversely, BSR become a connote to support and emphasize the associations between the firms and communities in which it operates, this direct to identify and explore the role of trust of BSR as a essential assets in determining the linkages between the business and its stakeholders (Hilman & Gorondutse, 2013b). However, despite studies on social responsibility and performance relation, there is general consensus that the association is still not well understood and surrounded with contradictory evidences which warrant to have another mechanism to clarify the relation, hence, this considers the

The practices of social responsibility is not a new in Nigeria but unfortunately, is mainly adhere by multinational corporations (Abiodun, 2012; Adegbeti & Chizu, 2011; Amaeshi, Adi, Ogbachie, Amao, 2006; Hassan, 2007; Ojo, 2007; Opara, 2010; Okoro, 2012; Okoye, 2009) to date there little or no empirical evidences to what might happens within the indigenous firms (local firms). In this paper the research aim to close this paucity by focusing trust of BSR and Small Scale Industries performance with moderating effect of organizational culture in emerging nation. Small Scale Industries sector contribute to total output or employment, it is relinquish enormous in creating skilled jobs, a prospective mechanism of modernization, and a sector with tendency of generating multiplier effects (Gorondutse & Hilman, 2013d; Tybouts, 2000).

In addition the sector remains one of the significant vehicles in ensuring economic growth, and has become an avenue for developing countries to benefit from globalization (Mike, 2010). Research in this imperative sector in dwelling its action on responsible behavior is necessary so as to maintain its viable advantage. Despite the fact that business in developing nations have different system from those in USA and Europe. This information is very significant because organization need to recognized the important of business ethics and social responsibility dimension in their decision making process before they can apply then in business setting (Gorondutse & Hilman, 2013d; Hsu, 2012; Retab, Brik, & Mellahi, 2009).

Therefore, the provide a proposed framework that will link Trust of BSR, organizational culture and firm’s performance with moderating effect, and will contribute in literature and facilitate the links outside Europe and USA especially Nigeria as developing country and emerging nation (Hilman & Gorondutse, 2013b).The remainder of this paper will be organized as follows. Next, a discussion on the important concepts in business social responsibility and Trust of BSR, Organizational culture and performance were highlighted.

Then, previous works that relate the concepts are presented toward the development of a model that explains the relationships, to link these relationships stakeholder theory is used as a root. Third section discusses on methodology and hypothesis to be tested, next is the discussion and analysis of result, and finally, conclusion, recommendations and limitation for future study.

**LITERATURE REVIEW**

**Business Social Responsibility (BSR)**

BSR has been explained in the literature as the ethical obligations that make best use of the encouraging manipulate of the firm on its social environments and reduce the negative control as well (Carroll & Shabana, 2010; Hilman & Gorondutse, 2013a). Business Social Responsibility is a concept that received more attention worldwide. And commonly overlaps with similar approaches such as business ethics, corporate sustainability, corporate sustainable development, Stakeholder management, and corporate responsibility (Hilman & Gorondutse, 2013a; Lee, 2008; Matter & Moon, 2008). Furthermore, BSR has a broad variety of potential meaning: it can be considered as the private sector’s way of integrating the economic, social, and ecological imperatives of its activities (David, 2012; Hilman & Gorondutse, 2013a).

**Relationship between Trust of BSR and Performance**

Trust has been regarded as the social bond that can hold diverse types of organizational structures together (Atkinson & Butcher, 2003; Hilman & Gorondutse, 2013b; Puusa, &Tolvanen, 2006; Tian et al., 2011). Trust is an important component and helpful to human associations to archive an organizational goal. It provides togetherness and gives individuals emotion of safety. Puusa & Tolvanen (2006); Pivato
et al. (2008). Puusa, & Tolvanen, (2006) Shamir & Lapidot (2003), suggest that trust can be an interpersonal and a communal event.

Moreover, based on the previous research result trust of BSR level in an organization has a direct effect on their performances (Ellen et al., 2006; Hilman & Gorondutse, 2013b; Osterhus, 1997; & Perrini et al., 2010). Similarly, previous study use Trust of BSR on the customer perspectives (Hilman & Gorondutse, 2013b; Osterhus, 1997; Tian et al., 2011) what make different from others is that, this study will make a different contribution by using trust of BSR from organizational perspective.

On the other hand, the function of trust as significant determinant, that effect organization performance is derived from number of studies that examined the role of trust on performance of different types of inter-firm relationships. Many studies provide empirical evidence that trust is associated with the success of equity and joint ventures business (Luo, 2008; Park and Ungson, 1997) and buyer-supplier relationships (McEvily and Zaheer 2006; Zaheer et al. 1998). Some researchers have further tested the relationship by including mediating variables in the relationship between trust and performance (Mohr & Puck, 2013). For example, Zaheer et al. (1998), suggested that trust leads to higher performance via a reduction in transaction costs, although their empirical findings support a direct influence of trust on performance (Mohr & Puck, 2013).

Trust of BSR level does not have direct effect on performance only (Ellen et al., 2006; Mohr & Puch, 2013; Osterhus, 1997; & Perrini et al., 2010), but organizational culture as well (Jafaei, 2011; Fard, Zahed-Babelan & Sattari, 2013). However, this study is different from others as it studies trust of BSR from organizational perspective. The items of trust of BSR are adapted from few researchers’ work (Ellen et al., 2006; Osterhus, 1997 & Tian et al., 2011). This is because the scale of three items has adequate reliability and validity with three items. Therefore, in view of the above evidence that supports the importance of trust and performance, this research postulates the following hypothesis:

H1: Trust of BSR is significantly related to Performance

**Relationship between Organizational Culture and Performance**

Organizational culture is another variable which has been in literature for numerous years. It refers to members of an organization sharing values and beliefs over time and the result produces behavioral norms that can be accepted in providing a solution to a particular problem (Daft, 2005; Goffee & Jones, 1998). Organizational culture is a collection of beliefs, assumptions, values, attitudes, as well as behavior of its member. It can become as valuable sources for creation of advantages, development of guidelines, creation of solutions for issues faced by an organization; and drivers for achieving objectives (Cameron & Freeman, 1991; Daft, 2005).

Wallach (1983) and Ahmad et al., (2011) considers organizational culture as a blend of three components; bureaucratic, innovative or supportive. Organizational culture is intrinsic, unseen, built-in, and informal perception of an organization in which directs the actions of person towards organizations attitude and its behavior. Galbreath (2010) reveals that organizational culture has a significant effect on performance. He also indicated that firms with clear organizational cultures have better chance to improve business performance. The study also indicated that organizational culture is vital in shaping overall performance of a firm. Many leading business realize new ways to evaluate their intangible properties such as staff having a true —level of company cultural values, and belief which can accelerate their performance (Ah bahussin & El- garaihy, 2013).

What makes this study feasible is that the organizational culture is perceived as a moderating variable which previously regarded as a self-determining factor rather than a moderator (Fang et al., 2010; Peloza & Papania, 2008; Beneke et al., 2012; Perrini & Castaldo, 2008; Pivato, Misani & Tencati, 2008). Having discussed on organizational culture and it relationship to performance, several studies have revealed that
organizational culture is also related to other variable (Ahmad et al., 2011; Rashid et al., 2003). Therefore, it is possible for organizational culture as a mechanism or process to moderate the relationship between BSR and performance. Therefore, this leads to the following hypotheses:

H2: organizational culture is significantly related to performance.
H3: Organizational culture moderates the relationship between trust to BSR and performance.

**Underpinning theory of Stakeholder**
Several interpretation of stakeholder theory has been projected, but the contract is that it can be useful to give details as well as to direct the arrangement and operations of the reputable organizations (Donalson & Preston, 1995). Consequently, this is not only to say that business have take action in a conscientious way to equivocate escalating stakeholder demands, but to accomplish a better or excellent community. In addition, Jones (1995) argued that business concerned frequent dealings with stakeholders on the foundation of trust and cooperation has a motivation to be honest and ethical, since such behavior is advantageous to business (Jones, 1995). Hence, this relationship is in line with stakeholder theory which believes in keeping stakeholder promises (Pivato et al., 2008), as well as continued connections with stakeholder should be base on trust and cooperation since such actions is beneficial to business (Jones, 1995).

**Figure 1: Research framework**

**METHODOLOGY**

The research method is cross-sectional study design and non-experimental using the quantitative method of running questionnaire. The study unit analysis was owner/manager. The population during the study was 29, 204 and required samples sizes is 394 in conjunction of Yamane (1967) sample selection formulae. In order to reduce the sample sizes error and take care of the non-response problem, the sample size were doubling and round up to 800 (Hair, Wolfinbarger & Ortivian, 2008). In multivariate research, the sample size should be ten (10) times as large for the number of variables for the study. A purposive samples technique was used to draw a population samples through survey method using self-Administration questionnaire method.

Furthermore, measurement of this study was adapted from the study conducted by (Stanaland et al., 2011; Tian et al., 2011; Wallach, 1983; Kaplan & Norton, 1992 & Venkatraman & Ramanujam, 1986), with little contextual modification that fit the environment of study to measure the control on the independent construct (trust), Moderator (organizational culture) and dependent construct (performance) using 7-point
Does Organizational Culture Moderate the Relationship between Trust of BSR on Performance of Small Scale Industries: Partial Least Square (PLS) Approach

type, a scale with midpoint provide better optimal results in information processing and scale reliability, in addition, the 7-point scale is said to be efficient (Cavana et al., 2001 & Churchill & Peter, 1984). The data collected were analyzed using SPSS version 18 and smart PLS 2.0 m3 software packages. PLS technique of analysis is called the 2nd generation analysis while SPSS is called the 1st generation analysis, this is due to growing number of researchers from various disciplines such as strategic management (e.g., Hulland, 1999), management information systems (e.g., Dibbern, Goles, Hirschheim, & Jayatilaka, 2004), e-business (e.g., Pavlou & Chai, 2002), organizational behaviour (e.g., Higgins, Duxbury, & Irving, 1992), marketing (e.g., Reinartz, Krafft, & Hoyer, 2004), and consumer behaviour (e.g., Fornell & Robinson, 1983). Since 1987, in addition, The PLS methodology has also achieved an increasingly popular role in empirical research in international marketing, which may represent an appreciation of distinctive methodological features of PLS (Henseler, Ringle & Sinkoyes, 2012).

In order to obtain valid and reliable results, this study followed the two steps approach as suggested by (Chin, 1998). Therefore, the process was to confirm the construct validity before proceeding to test the hypothesis.

**Common method bias**
CMV is ascertained when constructs are measured using cross sectional survey technique, in order to tackle with this issue the study applied Harman 1-factor test on 3 constructs’ and the results reveals that no significant biases in the data. In addition, the correlation matrix (Table 4.5) does not signify any extremely correlated variables; common method bias frequently results in tremendously high correlations (r, 0.90) (Bagozzi, Yi, & Phillips, 1991). Consequently, we may assume that common method variance bias is not a problem, and the results corroborate the tenability of the proposed measurement model.

**RESEARCH FINDINGS**

Out of 800 questionnaires distributed 514 were returned out of which 486 are usable and valid for analysis after taken consideration of missing values and outliers with extreme values which yield the response rate 64%. According to Tabbanik & Fidell (2007) a response rate considered sufficiently large for statistical reliability and generability. The data collection took almost 5 month after a series of follow up during the period; errors were checked by statistical analysis for all the constructs cases.

**Demographic of respondents**
The descriptive analysis reveals that 31.1% were General Manager, 29.8% were different categories of Managers and 29.4% were Chief executive/Owner of business. Descriptive statistic show that the respondents were less than 5 years of their existence in the business with 35%, followed by the range of 5-10 years, which was 32.5%; followed by the range bracket of 11-20 years with 22.6%; the range bracket of 21-40 years with 7.4%, and, finally the range bracket of 40 years and above with 2.5%. It can be clearly seen that most of the respondents, over 80%, are still within the range of target of this study (see Table1 for this and the subsequent descriptive statistic).

Furthermore, the descriptive statistic shows that the activities of business were more with Food and Beverages with 25.5%, followed by Poultry with 20%; then Textile Materials with 13.6%, Weaving & Dying with 10.7%, Furniture and Equipment with 10.5%, Others with 8.2%, Recycling with 7% and Tobacco Product with 4.5%. The initial analysis assesses the Total Assets of the respondents based on the activities they operate. It was reveals that close to the half of the respondents 1-100million (1million naira is equivalent to USD6250), precisely 43.8%, followed by less than 1million with 34.6%, followed by 101-200million with 10.7%, followed by 201-300million and 301-Above with 5.8% and 5.1%, respectively. 301- Above is the least among Total Assets of the business by the respondents. These perhaps indicate that the businesses are small in nature. Based on the above, it could be summarized that.
the respondents who participated in the research provided adequate variance regarding their backgrounds. Hence, the data used in the study were provided by respondents from diverse economic backgrounds (see Table 1, for more details).

<table>
<thead>
<tr>
<th>S/N</th>
<th>Items</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Job Title:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chief executive /owner</td>
<td>151</td>
<td>29.4</td>
</tr>
<tr>
<td></td>
<td>General Manager</td>
<td>160</td>
<td>31.1</td>
</tr>
<tr>
<td></td>
<td>Managers</td>
<td>153</td>
<td>29.8</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>50</td>
<td>9.7</td>
</tr>
<tr>
<td>2</td>
<td><strong>Years of Existence:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Less than 5 years</td>
<td>180</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>5-10 years</td>
<td>167</td>
<td>32.5</td>
</tr>
<tr>
<td></td>
<td>11-20 years</td>
<td>116</td>
<td>22.6</td>
</tr>
<tr>
<td></td>
<td>21-40 years</td>
<td>38</td>
<td>7.4</td>
</tr>
<tr>
<td></td>
<td>Above 40 years</td>
<td>13</td>
<td>2.5</td>
</tr>
<tr>
<td>3</td>
<td><strong>Organization Location:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Headquarters</td>
<td>329</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Division</td>
<td>92</td>
<td>17.9</td>
</tr>
<tr>
<td></td>
<td>Subsidiary</td>
<td>43</td>
<td>8.4</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>50</td>
<td>9.7</td>
</tr>
<tr>
<td>4</td>
<td><strong>Ownership of the Organization:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Individual</td>
<td>247</td>
<td>48.1</td>
</tr>
<tr>
<td></td>
<td>Partnership</td>
<td>168</td>
<td>32.7</td>
</tr>
<tr>
<td></td>
<td>Joint ventures</td>
<td>62</td>
<td>12.1</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>37</td>
<td>7.2</td>
</tr>
<tr>
<td>5</td>
<td><strong>Number of employee in your organization:</strong></td>
<td>271</td>
<td>52.7</td>
</tr>
<tr>
<td></td>
<td>Less than 20</td>
<td>91</td>
<td>17.7</td>
</tr>
<tr>
<td></td>
<td>21-40</td>
<td>39</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td>41-60</td>
<td>66</td>
<td>12.8</td>
</tr>
<tr>
<td></td>
<td>61-80</td>
<td>47</td>
<td>9.2</td>
</tr>
<tr>
<td></td>
<td>Above 80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td><strong>Organization Activities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Food and Beverages</td>
<td>131</td>
<td>25.5</td>
</tr>
<tr>
<td></td>
<td>Tobacco Product</td>
<td>23</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>Textiles Materials</td>
<td>70</td>
<td>13.6</td>
</tr>
<tr>
<td></td>
<td>Weaving and Dyeing</td>
<td>55</td>
<td>10.7</td>
</tr>
<tr>
<td></td>
<td>Furniture and Equipment</td>
<td>54</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td>Recycling</td>
<td>36</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Poultry</td>
<td>103</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>42</td>
<td>8.2</td>
</tr>
<tr>
<td>7</td>
<td><strong>Total assets at the end of year:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Less than 1 million naira</td>
<td>178</td>
<td>34.6</td>
</tr>
<tr>
<td></td>
<td>1-100 million naira</td>
<td>225</td>
<td>43.8</td>
</tr>
<tr>
<td></td>
<td>101-200 million naira</td>
<td>55</td>
<td>10.7</td>
</tr>
<tr>
<td></td>
<td>201-300 million naira</td>
<td>30</td>
<td>5.8</td>
</tr>
<tr>
<td></td>
<td>301 million-Above</td>
<td>26</td>
<td>5.1</td>
</tr>
</tbody>
</table>
Descriptive analysis

Table 2 reveals descriptive statistic for the trust of BSR and performance. The mean value of trust was relatively high than the mean value of performance which demonstrated to be 5.23, and organizational culture is higher than Performance. Hence, the result indicates the level of trust of BSR on performance of small scale industries.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>N</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>486</td>
<td>5.60</td>
<td>0.61</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>O culture</td>
<td>486</td>
<td>5.33</td>
<td>0.58</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Performance</td>
<td>486</td>
<td>5.23</td>
<td>0.69</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

Measurement Model

Anderson and Gerbing (1988) recommend that construct validity should be assessed to confirm the convergent validity and reliability. Similarly, Hair, Ringle and Sarsted (2013) and Ringle, Wendey & Will, (2012) further suggested that discriminant need to be examined in order to satisfy the average variance extracted (AVE). Therefore, AVE for each construct should be greater than minimum cut bench mark off 0.5 (Fornel & Larcker, 1981; Hair et al., 2013). Thus, the independent construct (trust) has 3 items 1 item has been deleted due to lower loadings less than 0.5 (Hair et al., 2010; 2011). In addition, the dependent variable was measured by 7 items 4 items were equally deleted due to also lower loading, hence, the convergent validity of the model reveals exceeded the minimum loadings of 0.5 (Hair et al., 2010; 2011). See table 3.

Table 3: Cross Loading

<table>
<thead>
<tr>
<th>Variable (Items)</th>
<th>IV (Trust)</th>
<th>DV(Performance)</th>
<th>MO(OCulture)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR02</td>
<td>0.981</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR03</td>
<td>0.709</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OP05</td>
<td></td>
<td>0.549</td>
<td></td>
</tr>
<tr>
<td>OP06</td>
<td></td>
<td></td>
<td>0.924</td>
</tr>
</tbody>
</table>
Moreover, Table 4 shows the results of the Cronbach alpha of the independent variable as well as Moderating and Dependent are 0.736, 0.865 and 0.749 respectively; similarly, the results composite reliability reveals the independent variable as well as Moderating and Dependent are 0.883, 0.865 and 0.855, respectively. Thus, exceeded the yard stick of 0.7 (Hair et al., 2010; Nunally, 1978).

Furthermore, Average Variance Extracted (AVE) stood for independent variable, Moderating and dependent variable as 0.791, 0.425 and 0.669 respectively. In addition, Table 5 indicated the correlation among the variable as less than the square roots of AVE extracted that signify the adequacy of the variable discriminate validity (Hair et al., 2010).

**Table 4: Reliability and Validity of Constructs**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Loading</th>
<th>Cronbach alpha</th>
<th>Composite reliability (CR)</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>TR02</td>
<td>0.981</td>
<td>0.970</td>
<td>0.979</td>
<td>0.713</td>
</tr>
<tr>
<td></td>
<td>TR03</td>
<td>0.709</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance</td>
<td>OP05</td>
<td>0.549</td>
<td>0.749</td>
<td>0.848</td>
<td>0.661</td>
</tr>
<tr>
<td></td>
<td>OP06</td>
<td>0.924</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OP07</td>
<td>0.910</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCulture</td>
<td>BU08</td>
<td>0.500</td>
<td>0.865</td>
<td>0.890</td>
<td>0.425</td>
</tr>
<tr>
<td></td>
<td>IN10</td>
<td>0.668</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IN11</td>
<td>0.677</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IN13</td>
<td>0.635</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IN14</td>
<td>0.652</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IN16</td>
<td>0.633</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SP17</td>
<td>0.665</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SP20</td>
<td>0.673</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SP22</td>
<td>0.714</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SP23</td>
<td>0.676</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SP24</td>
<td>0.656</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 5: Discriminant Validity**

<table>
<thead>
<tr>
<th>Variables</th>
<th>O Culture (OC)</th>
<th>Performance (OP)</th>
<th>Trust (TR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCulture (OC)</td>
<td>0.651</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance (OP)</td>
<td>0.628</td>
<td>0.817</td>
<td></td>
</tr>
</tbody>
</table>
Does Organizational Culture Moderate the Relationship between Trust of BSR on Performance of Small Scale Industries: Partial Least Square (PLS) Approach

<table>
<thead>
<tr>
<th>Trust (TR)</th>
<th>0.495</th>
<th>0.388</th>
<th>0.889</th>
</tr>
</thead>
</table>

Note: Diagonal (bold face) represents the square root of the average variance extracted while other entries represent the correlations.

**Structural Model**

The structural model was explained by Table 6 and figure 3. The R square value was 0.40 which suggests that the model variable can explain 40% of the variance of the dependent variable which is moderate (Cohen, 1988). Hypotheses 1 stated that Trust of BSR was significantly related to a dependent variable business performance. The result in table 4.6 and figure 2, shows that hypotheses 1 is supported (beta = 0.578; t= 2.027; p< 0.001). This result showed the significance of TR for an improved business performance and thus supported H1 of the study. Similarly, in addition, the second hypothesis H2 state that Organizational culture is significantly related to Performance (OC -> OP) is statistically significant with a Beta (β) value and high t-value of above 1.96 (β = 0.578, t = 11.156, p = 0.001). Equally, H3 (CM*OC -> OP) Organizational culture moderates the relationship between Trust to BSR is significantly related to Organizational Performance and extremely not statistically significant with a Beta (β) value and low t-value of high than 1.96 (β = 0.014, t = 0.295, p = 0.768) see Table 4.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Path coefficient</th>
<th>Standard error</th>
<th>T. value</th>
<th>P. value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR -&gt; OP</td>
<td>0.101***</td>
<td>0.049</td>
<td>2.027</td>
<td>0.043</td>
<td>Supported</td>
</tr>
<tr>
<td>OC -&gt; OP</td>
<td>0.578</td>
<td>0.051</td>
<td>11.156</td>
<td>0.001</td>
<td>Supported</td>
</tr>
<tr>
<td>CM*OC -&gt; OP</td>
<td>0.014</td>
<td>0.050</td>
<td>0.295</td>
<td>0.768</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>

***: p<0.00; (R2) = 40%.

The quality of the structural model can be assessed by R2 which shows the variance in the endogenous variable that is explained by the exogenous variables. Based on the results reported in Table 6, the R2 was found to be 0.40 indicating that TR can account for 40% of the variance in the business performance. Based on the assessment criterion suggested by Cohen (1988), 0.26 substantial, 0.13 moderate and 0.02 weak; the R2 here is considered substantial indicating the power of TR in explaining the business performance.
Furthermore, a cross-validated communality \( Q_2 \) is obtained when the data points are predicted using the underlying latent variable scores. Whereas, if the prediction of the data points is obtained by the LVs that predict the block in question, then a cross-validated redundancy \( Q_2 \) is the output. In line with recommendations by Fornell and Cha (1994), the model will have predictive quality if the cross-redundancy value was found to be more than 0, otherwise the predictive relevance of the model cannot be concluded. Based on the Smart PLS 2.0 results, the obtained cross validated redundancy was found to be 0.312. Chin, (1988), set three criteria (i) if \( Q_2 \) is 0.02, then the model has small predictive relevance, (ii) if \( Q_2 \) is 0.15, then the model has medium predictive relevance, and (iii) if \( Q_2 \) is 0.35, then the model has large predictive relevance. This result supports the claim that the model has medium and an adequate prediction quality see Table 7.

**Table 7: Predictive relevance**

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>R square</th>
<th>Cross validated redundancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>0.40</td>
<td>0.312</td>
</tr>
</tbody>
</table>

**Moderating Effect sizes**

In estimating the significance of the interaction effect, we used a two tailed test because there was paucity of theoretical support whether organizational culture enhances or diminishes the association between commitment to BSR and Performance (Helm et al., 2010). The effect size is calculated as follows:

\[
f^2 = \frac{R^2_i - R^2_m}{1 - R^2_i}
\]

Where:

- \( i \) = main effect model (without the moderator)
- \( m \) = interaction effect model (with the moderator)

We can calculate the \( f^2 \) by filling in the 2 R2 values which we have already noted down

\[
f^2 = \frac{0.403 - 0.154}{1 - 0.403}
\]

\[
f^2 = 0.417
\]
We interpret the $f^2$ by following the guidelines given in Cohen (1988), as follows:

0.02 Small  
0.15 Medium  
0.35 Large

So based on the $f^2$ of 0.417 we can conclude that the effect size is large as per Cohen (1988).

**DISCUSSION, SUMMARY AND RECOMMENDATION**

The statistical significant result of the relationship between trust and business performance was found to be consistent with the result of (Hilman & Gorondutse, 2013b; Pivato et al., 2008; Zaheer et al., 1998). This study reported that Small Scale Industries were keeping promise in related to social behavior actions and hence improve their performances. Previous researches have acknowledged the effect of trust on business performance (Sirdeshmukh et al., 2002). Therefore, trust is vital thoughtful business interaction once the one trust is in a susceptible (high risk) situation (Castaldo, 2002). The relationship between organizational culture and performance, this result is consistent with Al- bahussin & El- garaihy, (2013); Alishah et al. (2011); Daft (2005); Galbreath (2010); Larry et al. (2011) and Rashid et al. (2003) who reveal a positive association between organizational culture and performance, in line with this policy makers should emphasize more on “what” delivered to stakeholders rather than “how” or the process of delivery. Managers/owners should ensure that social responsibility behaviors given to stakeholders are continuous, good enough and in fact, tremendous

Equally, (CM*OC -> OP) Organizational culture does moderates the relationship between Trust to BSR is significantly related to Organizational Performance and extremely not statistically significant. This indicates that the interaction of organizational would most likely not improve performance of Small Scale. Similarly, SMEs in Nigeria has to recognize that organizational culture plays a vital role in promoting organizational success and this could only be achieve by executing a desired culture which can shaped values, attitudes and behavior.

**Managerial Implications**

This study provides much required information to the potentials Small Scale Industries Owners-Managers regarding the understanding of trust of social responsibility and its effects on business performance. Furthermore, the policy maker and academics can make used of this study as a contribution to literature. The overall results of the present study confirm that understanding trust on social responsibility keeping promise will manifest in their performance of Small Scale Industries. SMEs in Nigeria has to recognize that organizational culture plays a vital role in promoting organizational success and this could only be achieve by executing a desired culture which can shaped values, attitudes and behavior, Therefore Managers should make sure that appropriate culture has been give much consideration in enhancing performance.

**Theoretical Implication**

The result of this study will add value to existing literature on the relationship between trusts on business performance particularly on issue related to social behavior. Secondly, the result also adds value to the existence literature on the relationship between Organizational and performance in newer context Nigeria. Thirdly, this study contributed in the body of knowledge by testing stakeholder theory outside the context of Europe and USA firms thereby confirming the theory which postulate that business should continue connection with stakeholder based on trust and cooperation since such actions is beneficial to business (Donalson & Preston, 1995; Jones, 1995). In addition, the present study also combine various past measurement studies in measuring the effect of trust on business performance this also could add to the body of knowledge within the context of this research.
Limitations of Study
This study is subject to some limitations one of constrains of this study is the used of cross sectional design for survey research, thus, the study cannot establish causal relationship on a longitudinal basis. The finding cannot be generalized in larger context across the cultures of other countries since the data collected during the study was limited to Kano state, Nigeria.

CONCLUSION
In this study an attempt was made to examined the effect of trust of BSR on business performance the results has confirm the significant of trust on business performances. Specifically, trust has proven to have a statistically significant effect on business performance, and Organizational culture has substantial impact on performance of Small Scale Industry, thus the Model of this study account 14% of the variance in the business performance this result confirm the existing literature (see for instance Hilman & Gorondutse, 2013b; Pivato et al., 2008 & Zaheer et al., 1998).

Suggeston for Future Studies
In order to overcome the limitations of this study, future research should employed longitudinal approach of the study, similarly future research should re-examine this Model particularly organizational culture in different setting whether the effect of moderation may likely changes. In addition, the present study employed quantitative techniques future study can employed qualitative or case study method for design and analysis of information.

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Does Organizational Culture Moderate the Relationship between Trust of BSR on Performance of Small Scale Industries: Partial Least Square (PLS) Approach


Initial Concept of Islamic Social Entrepreneurship: A Study from 12 Existing Models

Keywords: component, Social Entrepreneurship, Islamic Perspective, Research Gap

INTRODUCTION

Social entrepreneurship is an emerging area of research that examines business which significantly influenced by entrepreneurs’ society motives instead of being purely economically driven [1]. Social entrepreneurship is one of the branches of the economy that can alleviate poverty and able to improve the country’s economic status [2]. To seek for the lawful income is important to oblige according to the Islamic view and work in the field of business entrepreneurship and make the essentials good for Muslims (fardu kifayah) [3]. The concept of social entrepreneurship has been rapidly emerging in the private, public and non-profit sectors over the last few years, and interest in social entrepreneurship continues to grow [4; 5]. Social entrepreneurship has become a global phenomenon that impacts the society by employing innovative approaches to solve social problems [28].

Based on the current economic conditions, social entrepreneurial activities are very important to reduce social problem especially in developing countries such as Malaysia [2]. Among the initial steps recommended by the Malaysian government is collaboration effort between institutions of high potential from various government and private agencies. These institutions need to adopt the concept of social entrepreneurship into the world of entrepreneurship especially in the field of research as a whole to help entrepreneurs develop a range of products and services with low prices and quality [2].

Social entrepreneurship has become a new phenomenon in the country in order to reduce social problems and eradicate poverty communities [6; 7; 8; 9]. According to figures from the famous corporate entrepreneur [9], states that in Malaysia it is time for the entrepreneurs to implement the Islamic social entrepreneurship in the current practice of jihad business concept through social entrepreneurship and business entrepreneurship. Entrepreneurs are among the individuals and groups that are often discussed in the Qur'an, especially in a business context. Social entrepreneurs are entrepreneurs who have entrepreneurial activity in a business and have managed not to get a profit as a result of the activities [10].

The study based on Islamic social entrepreneurship from the social entrepreneurial activity is still new and lacking, especially in the Islamic perspective [10; 11; 12; 13; 30]. As we all know that Islam is a monotheistic religion which is complete and perfect for all Muslims because it covers all aspects of life in this world and the hereafter. Allah s.w.t. says:
"This day, those who disbelieved have given up all hope of your religion; so fear them not, but fear Me. This day, I have perfected your religion for you, completed My favour upon you, and have chosen for you Islam as your religion. But as for him who is forced by severe hunger, with no inclination to sin (such can eat these above mentioned animals), then surely, Allah is Oft-Forgiving, Most Merciful." (Surah Al-Maidah, 5: 3)

Perfection of Islam does not just include religious aspects, but also the best life procedures outlined by Allah. Al-Quran and As-Sunnah is the main source of reference and complete guide towards the best life for mankind. In addition, people are supplied with common sense to be used to achieve the purpose of life and closer to their Creator.

The background of the study is based on an analysis of the issues and limitations of Islamic social entrepreneurship based on previous studies in the context of a social entrepreneur. Most previous studies reviewed were more of concepts, theories and models of social entrepreneurship however without the focus on Islamic perspective based on the Al-Quran and As-Sunnah. [15; 16]. Based on the word of God s.w.t which means:

"Who is he that will lend to Allah a goodly loan so that He may multiple it to him many times And it is Allah that decreases or increase (your provision), and unto Him you shall return." (Surah Al-Baqarah, 2: 245)

According to Ibn Kathir, Allah encourages His servants to spend in His cause. Allah mentioned this Ayah in several other parts of His Glorious Qur’an. The Hadith that mentions Allah descends (every night down on the nearest heaven to us when the last third of the night remains) states that: Who would give a loan to He Who is neither poor nor unjust.

"By no means shall you attain Al-Birr, unless you spend of that which you love; and whatever of good you spend, Allah knows it well." (Surah Ali-Imran, 3:92)

Imam Ahmad reported that Anas bin Malik said:
"Abu Talhah had more property than any other among the Ansar in Al-Madinah, and the most beloved of his property to him was Bayruha’ garden, which was in front of the (Messenger’s) Masjid. Sometimes, Allah’s Messenger used to go to the garden and drink its fresh water. : Anas added, “When these verses were revealed, (By no means shall you attain Al-Birr unless You spend of that which you love), Abu Talhah said, ‘O Allah’s Messenger! Allah says, (By no means shall you attain Al-Birr unless You spend of that which you love). No doubt, Bayruha’ garden is the most beloved of all my property to me. So I want to give it in charity in Allah’s cause, and I expect its rewards and compensation from Allah. O Allah’s Messenger! Spend it where Allah makes you think is feasible.” On that, Allah’s Messenger said, Well-done!! It is profitable property, it is profitable property. I have heard what you have said, and I think it would be proper if you gave it to your kith and kin. Abu Talhah said, ‘I will do so, O Allah’s messenger.’ Then Abu Talhah distributed that garden among his relatives and cousins.”

"And give to the kinsman his due, and to the Miskin (poor), and to the wayfarer. But spend not wastefully (your wealth) in the manner of a spendthrift. Verily, the spendthrifts are brothers of the Shayatin (devils), and the Syahtan is ever ungrateful to his Lord. And if you turn away from them and you are waiting a mercy from your Lord for which you hope, then, speak unto them a soft, kind word. And let not your hand be tied (like a miser) to your neck, nor overextend it (like spendthrift), so that you become blameworthy and in severe poverty. Truly, your Lord expands the provision for whom He wills and straitens (for whom He wills). Verily, He is Ever-All-Knower, All-Seer of His servants." (Surah Al-Isra’, 17: 26-30)

Mujahid said: If a man spends all his wealth on appropriate things, then he is not a spendthrift, but if he spends a little inappropriately, then he is a spendthrift.
Therefore, the main objectives of this study are:

i. To identify the issue and research gap based on Islamic perspective from existing models.
ii. To develop a concept of Islamic social entrepreneurship according to Islamic perspective and Maqasid Shari’ah.

**RESEARCH METHODOLOGY**

The study was conducted based on the methodology of epistemology and content analysis. This study also explore on the existing models and theories from previous studies. Comparative analysis approach was used to look at the issue and limitation from previous studies. As shown in Figure 1, this study consists of two phases. The first phase is to analyze the issue and gap of social entrepreneurship through content analysis and comparative analysis. The second phase is to develop a concept of Islamic social entrepreneurship according to Islamic perspective and Maqasid Shari’ah. The method used for second phase is content analysis.

The next section will discuss in detail regarding the issues and gap on Islamic perspective from existing models of social entrepreneurship.

**ANALYSIS ISSUES AND GAP IN EXISTING MODEL OF SOCIAL ENTREPRENEURSHIP**

Based on the problems that occurs in the context social entrepreneurship from western perspective, there are still lacking especially in terms of implementation and acceptance by society [10; 8; 17; 16]. Nowadays, social entrepreneurs practice does not distribute their wealth and profit to those who are entitled to receive in a correct way. According to a study conducted by Siti Aisya Radin (2013), Malaysia is still at its weakest position and low in implementing social entrepreneurial activity, which is only 0.22 per cent compared to 49 countries, including the United States, the United Kindom, Hong Kong and Uganda [18] and the government has taken many ways in promoting social entrepreneurship activities conducted by all agencies [2].

Therefore, in-depth analysis study that focus on social entrepreneurship, particularly from Islamic perspectives is needed in order to help in solving social problem among society [19; 17; 10]. In addition, most of the previous studies just focus on the concept of social entrepreneurship from western perspective. However, there is lack of studies that focus on social entrepreneurship based on Islamic perspective. In addition, the study from [20; 21; 10] also do not emphasizes on social entrepreneurship based on Islamic perspective.

Researchers also found that there were lack of studies that focus on relationship between social practices of Islamic social entrepreneurs [20; 22; 23]. Studies related to the formulation of a model of social entrepreneurship among Muslim entrepreneurs in Malaysia was discovered. However, studies on social entrepreneurs from the Islamic perspective has not been developed further in the context of social entrepreneurship [12; 24].

In addition, [26] Habibollah et al. studied about the Islamic and sustainable social entrepreneurship model for development and social welfare program. However, this study does not focus on Islamic social entrepreneurship model according to Maqasid Shari’ah. Therefore, study from [1] focuses on the concept of Zakat and aims to holistically analyse its influence on social entrepreneurship in the Islamic and in the Gulf Cooperative Council Context, in particular. This study however does not only focus on Islamic social entrepreneurship model that is according to Maqasid Shari’ah.
Besides, according to Yazilmiwati Yaacob & Ilhaamie Abdul Ghani Azmi [11] examine on the social responsibilities of a Muslim entrepreneur in Malaysia in fulfilling Maqasid Shari’ah aspect with regards to their responsibilities to family members, the poor as well as their responsibility towards the Muslim community by providing employment opportunities to society, doing business in accordance with Islamic law and create an economic system. Nonetheless, this study does not focus on Islamic social entrepreneurship model.

Based on the problems identified above, the researchers feel that there is a need to study social entrepreneurship based on Islamic perspective which focus on the practices of social entrepreneurs reflected by the greatest leader, Prophet Muhammad S.A.W should be implemented. Hence, to date there is still no detailed study and analysis done to see the practice of Islamic social entrepreneurship based on Islamic perspective [15].

Therefore, this study will look at the practices of social entrepreneurship from the perspective of Islam. In addition, the practices of social entrepreneurs must be based on the model developed by the principles of Islamic Muamalat. This is because it can be viewed as an alternative guideline for the social entrepreneurs who can produce many social entrepreneurs that practice the concept of Al-Falah which is to get goodness and the pleasure from Allah in this world and the hereafter.

**FINDINGS**

Based on the analysis on the issue of social entrepreneurship from previous studies it can be concluded that:

1) There is lack of studies from model of social entrepreneurship that focuses on Islamic perspective.

2) Studies of successful entrepreneurs from the Islamic perspective has not yet enlarged in the context of social entrepreneurship

Summary and limitations of the analysis on model social entrepreneurship from previous studies are presented in Table 1.

<table>
<thead>
<tr>
<th>No</th>
<th>Researcher</th>
<th>Research Title</th>
<th>Limitation of the study</th>
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<tbody>
<tr>
<td>1.</td>
<td>[28]</td>
<td>Model of International Perspectives of Social Entrepreneurship.</td>
<td>Most of these studies focus only on the concept of social entrepreneurs western perspective and values of individual entrepreneurs. However, no study that specializes on the practices of social entrepreneurs in the context of social entrepreneurship Islam. This study also discusses the social entrepreneurship practices in social entrepreneurship Islam.</td>
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<td>3.</td>
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<td>4.</td>
<td>[20]</td>
<td>Social entrepreneurship compared to government foreign aid: Perceptions in an</td>
<td>This study only focused on social entrepreneurship western perspective.</td>
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<td>East African village.</td>
<td>In addition, this study did not discuss the practices of social entrepreneurs in Islamic social entrepreneurship.</td>
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<td>5.</td>
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<td>Investigating social entrepreneurship: A multidimensional model.</td>
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<td>7.</td>
<td>[27]</td>
<td>Social entrepreneurship: theoretical antecedents and empirical analysis of entrepreneurial processes and outcomes</td>
<td>This study makes a comparison between business entrepreneurship and social entrepreneurship. It is limited to the concepts, theories and empirical perspectives west alone. Therefore, a comparative study of social entrepreneurship and business entrepreneurship from an Islamic perspective has not been studied.</td>
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<td>8.</td>
<td>[15]</td>
<td>Practice of social entrepreneurship among the Muslim entrepreneurship in Malaysia</td>
<td>This study produced a model of social entrepreneurship among Muslim entrepreneurs in Malaysia. It also examines the practices implemented by entrepreneur Muslims. However, this study did not discuss about social entrepreneurs in social entrepreneurship.</td>
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<tr>
<td>9.</td>
<td>[26]</td>
<td>Waqf as a Social Entrepreneurship Model in Islam.</td>
<td>This article explains the Islamic and sustainable social entrepreneurship model for development and social welfare program. However, this study does not focus on model Islamic social entrepreneurship according to Maqasid Shari‘ah.</td>
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<td>10.</td>
<td>[1]</td>
<td>Social Entrepreneurship and Islamic Philanthropy.</td>
<td>This study focuses on the concept of Zakat and aims to holistically analyse its influence on social entrepreneurship in the Islamic and in the Gulf Cooperative Council Context, in particular. However, this study does not focus on model Islamic social entrepreneurship according to</td>
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Development of concept on Islamic social entrepreneurship according to Islamic perspective and Maqasid Shari’ah

The concept of Islamic social entrepreneurship must have Maqasid Shari’ah (preserve religion, life, intellectual, lineage, and property) in order to achieve the concept of Al-Falah as stated in Figure 2. Besides, it must fulfill basic requirement to help people in solving the social problem [10]. According to Habibollah [26], religious Waqf has been able in distribution of wealth in society and using finance and property in the line well-meaning humanitarian to develop opportunities and access vulnerable to the main infrastructure development. The tradition of the Prophet Muhammad: “Allah s.w.t love the people whom help the poor and needy mankind”.

<table>
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<td>This study aims to examine the social responsibilities of a Muslim entrepreneur in Malaysia in fulfilling Maqasid Shari’ah aspect with regards to their responsibilities to family members, the poor as well as their responsibility towards the Muslim community by providing employment opportunities to society, doing business in accordance with Islamic law and create an economic system. However, this study does not focus on model Islamic social entrepreneurship.</td>
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<td>12</td>
<td>[30]</td>
<td>Model on Social Entrepreneurship: Identify the research gap based on Islamic perspective</td>
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|   |   | This article discussed about the lack of model on Islamic social entrepreneurship based on comparative analysis. However, this study does not describe in details about the main concept of Islamic social entrepreneurship.
CONCLUSION

In conclusion, there are many issues and limitations in previous studies on social entrepreneurship especially from the Islamic perspective. This is because research and writing in the field of Islamic social entrepreneurship is very limited. Perhaps it is necessary for new things to be explored to researchers who want to understand and learn Islamic social entrepreneurship. This paper is an attempt to analyse the issue of social entrepreneurship from previous studies and identify the lack of previous studies on social entrepreneurship from an Islamic perspective. Islamic social entrepreneurship is based on the Al-Quran and As-Sunnah and need to implement the Maqasid Shari’ah (preserve religion, life, intellectual, lineage, and property) in to the real practices in order to achieve Al-falah (seek the pleasure of Allah s.w.t in this world and hereafter).

In addition, this study is very important to increase the economy growth for nation. Therefore, this study hopes that various parties to participate and take initiatives to increase the self-knowledge to help in eradication of social problems through social entrepreneurship based on Islamic teachings. Besides, it can be additional reading materials in the collection of studies and research on the Islamic perspective. Perhaps, this study also will contribute in a better understanding on the concept of Islamic social entrepreneurship. For future work, other researchers could expand the knowledge on Islamic social entrepreneurship from this study.

ACKNOWLEDGEMENT

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AGBA 12th World Congress
Page 816 of 1173
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**Effects of Information Technology, Market Information, IT Compatibility, and Intellectual Capital on Bank Performance in UAE**

**Keywords:** Information Technology for Market Information, IT compatibility, Intellectual Capital, Bank Performance, UAE banks

**INTRODUCTION**

In the twenty first century, information technology (IT) has witnessed dynamic and rapid developments, which produced radical changes in business traditional method and commercial affairs; are disproved and new techniques discover and replace with them (Hosami, Tahvildari, Moradi, Taheri, Nasab, & Jan, 2013; Gilani Nia, 2010). Contemporary banks are focusing on investment in information technology (IT) infrastructure flexibility to create business strategies and provide extended services (Wali, 2013). Many banks use technology and information in the marketing as an important tools in routine businesses. In this situation, banks that cannot successfully adapt with these changes according to market and competitors, which are equipped with technology and information, will be away from the competition (Hosami et al., 2013). In new marketing ideas, the experts focus on customers and how to build a familiarity between the bank and market, included bank’ strategy. The banks that have technical features related to the environment and their changes can lead to make the information available, hence, that will impact on strategic decision making of banks (Jamshidian & Abadi, 2007).

The question what the fruit is using by IT in the success of the strategic goals and objectives of the banks. Moreover, there are factor that increasingly worries banks and IT department are and continues to be IT is still consistent with the strategic goals and objectives (Jorfi, Nor, & Najjar, 2011). However, there are two objectives of this study. First, to examine the direct impact of two critical factors (IT compatibility and IT for market information) on bank performance in United Arab Emirates. Second, to study the role of intellectual capital as moderating factor on the relationships between IT compatibility and IT for market information on bank performance. The findings of this study may highlight on how to strategically exploit the IT compatibility, IT for market information, intellectual capital, and furthermore, how to use them more efficient to improve the performance of banks in UAE.

**RESEARCH MODEL**

Figure 1 explains the research model in this study. The researcher proposes three critical strategic factors that impact on bank performance. More specifically, the researcher attempts to prove the positive impact of that three critical factors (IT compatibility, IT for market information, and intellectual capital) on bank performance.
THEORETICAL BACKGROUND AND HYPOTHESES

UAE’s Banks
The financial services sector, particularly, the banking system is considered as one of the most complex industries in the world that is witnessing increasing competition. It plays an important role to develop the countries’ economics and diversification policy. (Sayani & Miniaoui, 2013; Shahwan & Hassan, 2013). Following the 2007 credit crunch, the global banking sector, in particular, the United Arab Emirates faced many challenges. These challenges are represented in the rapid improvements in telecommunication technologies and computer, removal of restrictions concerning the establishment, operation and supervision of credit institutions; and increased competition among both global and domestic banks (Shahwan & Hassan, 2013). In 2008, government of UAE has started to implement their strategy that is known Abu Dhabi Economic Vision 2030 that regarding the improvement of banks efficiencies.

In UAE, the banking sector is robust and healthy. Data released by the Banker Magazine and the website of Emirates 24/7 for 2015 reaffirms that the UAE banking sector is the largest within the Arab worlds, with total brand value to $8.58 billion, ahead of Saudi Arabia’s $7.24bn, Qatar’s $3.96bn, Kuwait’s $2.43bn, and Bahrain’s $736m (Abbas, 2015). Data released by Union of Arab Banks for 2015 reported that the UAE banking sector is the largest within the Arab world, with total assets expanding to US$ 629.3 billion, followed by Saudi Arabia which amounted the assets of US$ 551.4 billion. Due to have a large number of local and foreign banks in the UAE, where 23 local banks were operating during 2014, and foreign banks were 28 banks in same time (Central Bank of United Arab Emirates (CBUAE), 2014). Most of local banks are listed either on Dubai Financial Market and Abu Dhabi Securities Market. Local banks in the UAE have a total of 994 branches in 2014 and the foreign banks were 169 branches.

Primarily, the banking sector is a service industry. The nature of services is intangible, and understanding needs of consumers become the important challenges for service providers. According to Zeithaml, Parasuraman, & Berry (1985), the four distinct features of the services are: 58, inseparability, heterogeneity, and perishability. Intangibility refers to services cannot be seen and touched in same way as goods. Inseparability refers to produce and consume the services as same time. In other words, goods are firstly produced, then sold, and finally consumed, whereas service are firstly sold, then produced and consumed at same time. Heterogeneity refers to the performance of service to be different from transaction to other. In other words, high variability and non-standardization to deliver service due to

AGBA 12th World Congress
Page 820 of 1173
produce by people. This inconsistency cannot be easily eradication as goods. Finally, perishability refers to services cannot be stored or saved and cannot be used again in a future time period.

Due to the banking sector is a highly competitive environment, the banks seek to gain the knowledge that impact to decide choice between local and foreign banks. The UAE banks need to develop their services infrastructure. Competitive wars between local and foreign banks have made them to create new strategic marketing and use modern techniques (Al-Hawari, 2011). More recently, it is noted, banks are depending more on technological services to be more successful in this environment. Technological services have become a weapon in competitive environment due to easily duplicate the product of bank, but not the level of service. Consequently, by understanding the outputs of technological services, the banks can develop the service quality, increase ability to innovation, achievement competitive advantage and finally improve the performance of the banks (Al-Hawari, 2011). According to that, the purpose of this study to examine some factors related to technological services such as IT compatibility and IT for market information, which impact on service performance for the UAE banks.

**IT Compatibility**
Compatibility refers to smooth interaction between technical components, operations, employees and organizational structure (Byrd & Turner, 2000; Keen, 1991). According to Liu, Ke, Wei, and Hua (2013), the concept of compatibility is represented to the ability to share any type of information such as data, text, image, audio, video, and others via IT components inside banks. In fact, the compatibility for technologies and systems are very important for banks to success and in the situation, if systems and technologies is not compatibility with banks is doomed to failure (Ramazani, Allahyari, Zanjani, Vali, & Askari, 2013). Banks focus on appropriate data related to their information systems’ requirements and compatibility is supposed as data focus in banks. Therefore, the banks with incompatible systems and technologies will be unsuccessful in data focusing (Chapman & kihn, 2009). However, the timely and precisely data and information are an issue. Thus, the users must provide data and information for decision-makers precisely and in a timely manner. Therefore, the providing the data and information in timely are more effectiveness and are most important aims of any information system (Ramazani et al., 2013).

Features of compatibility contribute to impact on the decision-makers for using new technologies (Mndzebele, 2013). The compatibility is one of the key factors for implementation as long as the appropriate infrastructure put in place, because the banks do not want to compatibility issues to become a problem when the implementation of information technology (Lee & Kim, 2007). Mndzebele (2013) mentioned in his seminal article, the most important problem in the adoption of IT is the incompatibility of new technologies with value and beliefs of banks and their business practices and operations. The other hand, compatibility practices will lead to have a positive role in determining the manner to introduce a new idea (Lertwongsatien & Wongpinunwatana, 2003).

The compatibility of IT components helps the banks to share the knowledge with channel partners, hence, enhance its knowledge richness (Malhotra, Gosain, El Sawy, 2005). In addition, the compatibility of IT components allow the banks to exceed organizational boundaries through readily providing data, information, and knowledge in the bank (Chung, Rainer, & Lewis, 2003). Such compatibility facilitates the banks to smoothly transfer data from old information systems to new IT application that will contribute to implement the new systems without any problems (Liu et al., 2013). Furthermore, this compatibility enables the bank to collaborate with channel partners as they achieve complex activities (for example: developing new products/services and shared planning) that contribution to develop systems (Liu et al., 2013). Therefore, the following hypothesis is proposed:

H1: IT compatibility has a positive and significant impact on the bank performance
Briefly, the IT compatibility helps the bank to respond for changes in the market through timely sharing data, information, and knowledge inside and outside bank (Liu et al., 2013; Ramazani & Allahyari, 2013, Chung et al., 2003). So, the next section discuss about IT of market information and how it impact on bank performance.

**IT for market information**

Marketing capabilities of the banks refers to the ability of bank to collect resources, knowledge, and skills to add value in marketing field (Su, Tsang & Peng, 2009; Day, 1994). Marketing capabilities contributes to build, integrate, and configure internal and external resources, including those intangible strategic orientations (Su et al., 2009). However, past studies have found the relationship between dimensions of marketing capabilities and several processes at level of firm (for example: Hosami et al., 2013; Shin, 2013; Lee, Yoon, Kim & Kang, 2006). Marketing capability is very important mechanism related to market, through which larger market knowledge may employ by banks to produce and improve the economic performance (Madhavan & Grover, 1998). Moreover, marketing capability is embodied routines, practices, processes, and work patterns to apply the resources of the bank to the needs of business-related market (Vorhies & Morgan, 2005). Morgan, Zou, Vorhies, & Katsikeas, (2003) referred to marketing capabilities as the ability of bank to orchestrate marketing tools and techniques in an integrative systems. According to Vorhies & Morgan (2005), the market information capability may consist of excellence in exploitation of market information to develop better marketing programs, systematic information gathering about customers and competitors, and tracking customers’ needs and wants.

However, there are many different aspects of marketing capabilities, market information management capability is one of the most critical roles in the banks, and it has not been often discovered this concept or tested experimentally, at least simultaneously. Therefore, in spite of the clear evidence from previous studies, marketing capabilities positively impact economic returns of the different sectors (e.g., Shin, 2012), these certain sub-categories have been neglected as under-discovered research topics (Shin, 2013) and also not concern on banking sector. The possesses of bank in this capability enables the bank to learn about the market and also uses market knowledge, which lead to achieve a critical weapon and has clear market insights, hence, may impact on bank performance positively and become a source of competitive advantages.

IT is as a dynamic external factor affecting the internal processes. Filchers (1995) mentioned to two key areas for development the marketing process. First, changes in the marketing system, for example, the development of new products and services; and. Second, Changes in the way access to information that leads to an increase in potential performance on marketing management functions. Martel (1988) referred to three area, which IT has caused the change in it. (1) "Observable effects" (changes in the market variables). (2) "Invisible Effects" (changes in the structure and size of the marketing department) (3) "Information effect" (Changes in the marketing mix) (the ability to use high volume and complex marketing information efficiently). Therefore, this ability to control high volumes of data, information, and knowledge can be observed at high speeds, which may cause changes the nature of marketing activates (Hosami et al., 2013). These changes are: Activity changes, organizational changes and data changes. According to these changes, there are a variety of perspectives, opinions, and options for using market information. Consequently, IT can provide a variety of product and services ideas, which can produce many scenarios to assess the marketing plan (Gilaninia, 2011). From the above discussion, the following hypotheses are postulated:

H2: IT for market information has a positive and significant impact on bank performance
However, the dynamic changes in the market make banks to have a qualified human capital in order to understand the business, plan, solve problems, and use the technical skills effectively. So, the next section addresses the intellectual capital and how it impacts on bank performance.

**Intellectual capital (IC)**

The intellectual capital is a significant factor of performance (Bontis & Serenko, 2009; Bontis, 2001) especially for knowledge-intensive service organizations such as banks (Kianto, Hurmelinna-Laukkonen, & Ritala, 2010). Nevertheless, the underlying mechanisms still remain incompletely described and unclear (Hsu & Wang, 2012a). According to Meritum (2002), intellectual capital refers to all assets without physical material which are owned, used, mobilized, and deployed. Intellectual capital is including: Human Capital, Structural Capital, and Relational Capital (Meritum, 2002). Human capital is personal skills, competencies, knowledge, and expertise of all staff in the bank, including management, and the abilities of bank to creation and innovation (Lee & Hung, 2012). Structure capital refers to the supportive infrastructure that support staff (human capital to do their functions (Kavida & Sivakoumar, 2010), which includes structures, manuals, patents, processes, databases, and information systems (Vermeulen, 2013). Edvinsson and Malone (1997) divided the structure capital into process, innovation, organizational, and intangible capital.

- Process capital embraces programs, techniques, and procedures to accomplish and improve the delivery of goods and services
- Innovation capital consist of intellectual properties and intangible capital. Intellectual properties are represented as commercial rights, such as trademarks, copyrights, and patents.
- Organizational capital embodies in philosophy and systems of banks to leverage the bank’s capability.
- Intangible capital refers to theory and talents that the banks are managed.

The concept of relational capital is rooted to social capital, and is defined as “all resources linked to the external relationships of banks with partners, suppliers and customers” (Meritum, 2002). Changing customer demands is one of the most important difficulties faced by service organizations such as banks, so, they need to innovate and develop new services quickly (Kianto et al., 2010).


Organizations need to understand better the relationship between intellectual capital and business performance led academics and practitioners to build the necessary approach and tools to identify, classify and evaluate knowledge and intangible assets within the organization. In recent years, interest has been preferred on this topic, the spread of models and methodologies to conduct a study for assessing all the factors, tangible and intangible, which have an impact on business performance (Costa, 2012).

Although many studies have tried to deal with the question of how intellectual capital can create value for the organization, showing the current methodologies lack of a clear definition of the effects of intellectual capital on business performance (Costa, 2012) and face problems to manage intellectual capital as well (Maditinos, Chatzoudes, Tsairidis, & Theriou, 2011).

However, this study is unique because the term of intellectual capital is not captured well for banking sector in the world especially in UAE. Therefore, the expected benefits of this study are as following:

1. Intellectual capital studies often measure on accounting and financial measures (For example, VAIC) and very few studies used the questionnaire to measure intellectual capital.
This study is considered as one of few literature that focused on banking sector in Gulf countries especially UAE. Thus, it provides a novel perspective.

In this study, PLS-SEM software is a technique of structural equation modeling. This software has been used in few previous studies, so this will be the expected contributions of this study as well.

There are some studies that use one or two elements of intellectual capital as moderating variable such as Li & Tang (2010); Fan, Wonga & Zhang (2007). Until now, researchers, academics and practitioners have not focused on intellectual capital overall as moderating variable.

Ultimately, this study aims to examine and measure the impact of intellectual capital as moderating variable on the relationship between information technology for market information and IT compatibility, the following hypothesis is proposed to be examined:

H3: Intellectual capital (IC) has a positive and significant impact on bank performance.
H4: Intellectual capital (IC) positively moderates the relationship between IT compatibility and bank performance.
H5: Intellectual capital (IC) positively moderates the relationship between IT for market information and bank performance.

Balanced Scorecard to Measure Bank Performance

The last two decades, banks tend increasingly to choose the best tools and techniques to assess the performance in a comprehensive manner. Todays, banks operate in highly volatile, dynamic, and fast technological obsolescence. Banks, therefore, must respond to these changes through restructure the internal and external processes. According to Maiga and Jacobs (2003), the Balanced Scorecard (BSC) is a main tool to evaluate organizations including banks to cope with the changing environment, as well as, to respond to the new universal competition. The framework of BSC developed by Kaplan and Norton, which based on different organizations (1992). The BSC has received a considerable attention as a strategy for the integration of financial and non-financial performance measures to improve internal and external processes. The BSC framework consists of four essential dimensions: financial, customer satisfaction, internal process, and growth and learning.

The BSC varies from other traditional performance measurement systems through these two features:

1. Translating mission, vision, objectives and harmonious strategies of organization to develop the performance measures, and
2. Linking measurements together in accordance with the perspectives (Alhyari, Alazab, Venkatraman, Alazab, & Alazab, 2011)

Through the different perspectives of BSC, bank vision and strategies of business unites translate to objectives and measures (see Figure 1). The customer perspective measures the needs of customers and demand of new technology or process to increase customer satisfaction (Jyoti & Deshmukh, 2008). Also, the quick response to complaints of customers and satisfaction is, as well as the percentage of staffs who serve the customers (Alhyari et al., 2011). Internal business process perspective measures processes that related to activities such as innovation and operation processes, which improve performance (Kaplan & Norton, 1992). The financial perspective measures level of operation income, return on investment, financial status of organizations and cash flow (Kaplan & Norton, 1996). These factors impact on the product or services of organization, which used to evaluate the financial measurements (Alhyari et al., 2011). The innovation and learning perspective measures the investment in human resources such as R & D expenses and the cost of training (Judeh, 2008).

This perspective determines the infrastructure of organization such as system’s efficiency and used technology that contribute to achieve goals and objectives. The important indicators of learning and
growth are: staff training, the ability for sustainable development, R & D investment and access to information.

However, when adopting the BSC as approach, the senior management team holds the "vision for change" and enriches a sense of teamwork and cooperation. According to experts of performance measurement (Rohm, 2002), the processes are more “about changing hearts and minds and sustaining new directions, than it is about selecting performance measures” (Alhyari et al., 2011).

**STUDY DESIGN AND METHODOLOGY**

The primary purpose of this study is to examine the effect of variables on each other’s. To achieve that a quantitative methodology approach was used. Questionnaire survey is considered as one of the significant tools to collect the primary data from respondents (Kerlinger & Lee, 2000). The sample of this study consists of 23 local banks listed in central bank of UAE. These banks have 1014 branches at the country level. This sector is knowledge based and have a significant importance to the UAE economy. The chief target of this study was to draw data from local banks listed in central bank of UAE. However, the great problem was the inability to collect data from all local banks, and that endeavor was too ambitious. The research design of this study is cross-sectional research, which is appropriate for this study to collect the data at point of time. The survey questionnaires were distributed and collected from the period of April until September 2015. Due to the nature of this study’s variables, the source of data was IT managers, CKO, and IT executives. Because they know better than other on how to use the compatibility of IT and market information. Questionnaire methodology has been adopted in this research.

Five hundred seventy questionnaires have been distributed and two hundred and sixty sex were returned completely. The questionnaire was designed for this study for a multi-dimensional measures. It has been measured and all the answers on a 7-point Likert scale, with 1 being Strongly Disagree and 7 being Strongly Agree. The 8 questionnaire’s items for Balanced Scorecard (BSC) were developed after findings put forth by Karasneh & Al-Dahir, (2012); and Paschke (2009) with regard to four perspectives, namely the financial, customer, internal process, and learning and growth perspectives. The 9 questionnaire’s items of IT for market information were developed Perez-Cabanero et al (2012), Trez & Luce (2012), and Nguyen & Nguyen (2011). The 5 questionnaire’s items to measure IT compatibility, this study was adopt the questionnaire developed by Benitez-Amado & Ray (2013), Fink & Neumann (2009), Paschke (2009). Finally, for the measurement of intellectual capital, this paper adopted the 11 items of questionnaire from Sharabati et al., (2010); and Bontis, Keow, & Rachardson (2000) with regard to the three perspectives of human, structural and relationship capitals. The total of questionnaire’s items of this study is 33 items. Structural Equation Modeling (SEM) is the technique used to examine and analyze the data and to test hypothesis by Smart-PLS statistical software.

**STATISTICAL ANALYSIS AND RESULTS**

Partial Least Square (PLS) is used to confirm the validity and reliability of outer. The model of this study comprises from these variables: IT compatibility, IT for market information, intellectual capital and bank performance.
The Outer Model (Measurement)
The next sections examine the reliability and validity of constructs before starting the goodness of measurement model. The reliability and validity was examined through the content validity, discriminant validity, and convergent validity as described in the next sections.

The Content Validity
In analysis literature, the content validity has compared with the other constructs of model. Therefore, the factor loading contributes to examine the content validity (Hair, Anderson, Tatham, & Black, 2010). The items will be removed if are loaded high with other constructs than their individual ones. To do that, the items will be deleted if are loaded high with other constructs than their respective ones. Table 1 and 2 presented all the constructs are significantly loaded higher in their variables.

The Convergent Validity
The convergent validity reflects the extent to which group of items converges to measure the variable (Hair et al., 2010). In analysis literature, it can be established by testing the reliability, the loading, and average variance extracted (AVE). To study the items are statistically significant and highly loaded, AVE should be at least 0.5, factor loading is at least 0.7, and the composite reliability should be at least 0.7. Table 3 illustrates all these criteria have been done and confirmed. Therefore, the results of measurement model (outer model) have the appropriate convergent validity.
The Discriminant Validity
In SEM literature, discriminant validity reflects to the degree of items that can distinguish a constructs from another constructs model. In the model, the constructs’ items have variance between them more than other constructs (Compeau, Higgins, & Huff, 1999). In the table 4, the diagonal line of values includes the square root of AVE and there are constructs’ correlations below. To test the discriminant validity, it should be compared to the diagonal line with the values of other off the diagonal. Based on Fornell and Larcker (1981), we observe in the table (4), the diagonal line’s value is higher than other values in columns and rows; and that confirmed the discriminant validity of model.

Table 4 omitted but would have been here

The Inner Model (Structural Model), and Hypotheses Testing
Testing the Direct Hypotheses
This stage is to test the inner model through hypotheses test via running Bootstrapping and Algorithm in PLS software. Figure 3 and Table (5) shown the results. Figure 3 and Table 5 show that all the 3 hypotheses have positive and significant results at the 0.001, 0.05. 0.01 levels of significance ($\beta=0.223$, $t=2.850$, $p<0.001$), ($\beta=0.110$, $t=1.814$, $p<0.05$), ($\beta=0.243$, $t=2.504$, $p<0.001$) respectively. Therefore, these results supported the hypotheses of the study H1, H2, H4.

Table 5 omitted but would have been here

![Figure 3: Hypotheses Testing](image)

Testing the Moderation Role of Intellectual Capital (IC)
In order to examine the mediation effect of IC, Smart PLS was used to estimate the indirect impact between variables. Table 5 shows that IC has not a moderation effect on the relationship between IT Com and bank performance that lead to be not significance ($\beta = -0.095$, $t = 0.775$) and therefore confirm H3 is not support. The other hypothesis (H5) has a moderation effect on the relationship between ITMI and
bank performance at the 0.01 level of significance ($\beta = -0.257$, $t = 2.009$, $p < 0.01$). As well, it is impact negatively on bank performance and that not support the hypothesis.

**Predictive Relevance of the Model**

To test predictive relevance of the model, the researcher was employed R-square, cross-validated redundancy and cross-validated communality. According to Cohen (1988), values of R-square are weak with 0.02, moderate with 0.13, and substantial with 0.26. Cross-validated communality and Cross-validated redundancy are the medium to measure the quality of model. According to Fornell and Cha (1994), their values should be more than zero to make that modal has predictive quality. Table 6 illustrate values more than zero and therefore confirmed that the model has prediction quality.

Table 6 omitted but would have been here

**DISCUSSION AND CONCLUSION**

The major purpose of this study is to examine the direct and indirect effect of IC on bank performance. Due to the inconsistency in the literature of the effect of IC and its elements on bank performance, one moderator' variables has been proposed as a tool to describe these relationships in different context. This variable is IC. However, not all hypotheses are supported. In line with other previous studies, IC, IT com, and ITMI have been found to have a direct positive and significant impact on bank performance ($\beta=0.223$, $t= 2.850$, $p<0.001$), ($\beta=0.110$, $t= 1.814$, $p<0.05$), and ($\beta=0.243$, $t= 2.504$, $p<0.001$) respectively (Ramazani & Allahyari, 2013, Liu et al., 2013, Wali, 2013).

As mentioned previously, the elements of IC have been used as moderator variables but IC- as whole- not used as moderator yet. The moderation role of IC and bank performance were examined. IC was found to have not a moderation impact on the relationship between IT com and bank performance ($\beta = -0.095$, $t = 0.775$). It may be the closest reasonable explanation is due to the weak inter- correlation between those variables. Another justification for the insignificant results between IT Com, IC, and bank performance may be related to the lack of connectivity between strategies of bank and human resource as one of the reasons to not improve the performance. Moreover, the technology models may be different in performance, reliability, users, environment or other characteristic, which lead to impact on result of running of software. Therefore, IT com allows for both remote sensing and responding by increasing the flexibility and compatibility of technology (Bhatt et al, 2010).

Likewise, IC has negative and significant moderation impact on the relationship between ITMI and bank performance and some studies had same result such as Hultink, Talke, Griffin, and Veldhuizen, (2011); Song, Benedetto, and Parry (2010). Although it is known to all, market information derived from personal and impersonal sources are used on customers and competitors. However, the researcher did not find evidence supporting the hypothesis that ITMI is positively related to bank performance. This result can be explained as follows. First, previous studies (e.g., Brockman & Morgan, 2003; Soh, 2003) found that market information can result in greater performance and their sample was manufacturing industry, so, few studies focused in services sector such as Keh, Nguyen, Ng (2007). As well as, escalation of technological uncertainties, the value of existing information dissipate more quickly, and increasing to collect and use a new information (Song et al, 2010).

This study has many theoretical contributions. Besides investigating the direct impact between variables due to the inconclusiveness result in the previous literature, this study includes and studies new relationships between variables i.e. IT com and ITMI. Moreover, this study fills the gap in the literature by testing the moderating impact of IC on the relationship between IT com, ITMI and bank performance. The results of this study will desire other researchers to study and test other factors, which may impact on
these relationships. The framework of this study is a unique framework that proposed new relationships never studied before.

In practice, the results of this study have different practical implications. This study shows the way to CEO, CKO, IT managers and IT executives to include compatibility of IT, IT for market information, and intellectual capital in their bank while implementing systems and strategies.

Moreover, banks face difficulties when improving performance, therefore, other tools needed to enable and pave the roads for successful implementation. Based on the conclusion of this study, banks must have some management practices such as programs, technology, and knowledgeable before thinking in improving the performance systems. The main reason behind this is to avoid failure that may impact on all parts of bank and may lead to collapse.

There are some limitations of this study. First, it examines in emerging markets and focused on local banks in UAE and the generalizability of our results beyond the UAE context is unclear. As well as, the UAE business, cultural, economic, and environments are different from other countries.

A second limitation included the IT for market information construct. The researcher measured IT for market information using items that loaded on a single factor. Therefore, the next researches can be addresses other factors such as IT for information acquisition, IT for information utilization, and market information processes. This possibility is interesting and should be explored in future research.

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All of the tables cited in this paper are omitted due to space considerations. Interested parties are invited to contact the author for a complete copy of the paper.
Keywords: Ethical Business Culture, Small and Medium Enterprise, Case Study, Sustainable Business Environment

INTRODUCTION

The scandals and collapses, for example, involving Independent Insurance and Marconi in the United Kingdom, Elan in Ireland, Kirch in Germany, Royal Ahold in the Netherlands, HIH Insurance and One.Tel in Australia (Hill, 2001, p.369) and Satyam in India, posed analogous questions about the efficacy of corporate ethical practices. These global corporate collapses represent a defining moment in the contemporary corporate practices. After the failure of Enron and other high profile companies, many boards of directors, in response to new guidelines and a perceived crisis of confidence, decided to re-examine their business practices during the intervening period (Flanagan, Little, and Watts, 2005, p.278).

In order to ensure that there were no systemic abuses by managers, legislations on fiduciary restraints, disclosure regimes and directors’ duties were developed. Subsequently, corporate governance gained greater circulation, salience, credibility and eventually, entrenched as part of corporate practices of public-listed companies (Wong, 2002, p.120-121). In fact, corporate scandals have produced increased levels of regulation in the US, UK and Australia, not to mention Malaysia by refocused attention to the board of directors, suggesting that board failure was a significant contributing factor to the corporate collapses (Hill, 2001, p.375).

Thus, commentators claimed of a need to change the culture in the boardroom (Knight, 2004). However, Flanagan et al. (2005, p.278) argued that any cultural change needs to be consistent with the ethos of those who control the organization. The ethos in turn will initiate the organization’s culture and stated mission. They maintained that unless these factors are addressed early, it is likely that a strategy adopted that is not consistent with the organization’s ethos culture and mission will fail.

This means, officers of a company are expected to act ethically, that is, to take full cognizance of the interests that the firm’s stakeholders directly or implicitly entrust to them when making their decisions.

Over the years, we have observed a destruction caused by social institutions and we have foreseen more would come in future. Hence, we questioned the ethical capabilities of the corporations. We contended that a business should thrive on ethical culture which subsequently would be expected to flourish ethical businesses. We propose that studying characteristic of an ethical business culture among Small and Medium Enterprise (SME) has its mores of what constitute ethical business and consequently ethical business culture would bring Malaysia to a level that is equal to the one in developed countries.

Based on the stories of the corporate scandals in the past two decades (i.e. Enron and WorldCom for instances), we concluded that recognizing ethics culture in maintaining ethical business is importance. On
this premise, we believed that it is time to recognize that ethics in business should embrace ways and means to discover the expression of ethical business. We based our discussion by employing a single case study within the SME company to identify the ethical culture characteristics associated with Ardichvili, Mitchell and Jondle’s work (2009) ethical business cultures model. For this purpose, we chose Thumbprints Utd. Sdn. Bhd. (Thumbprints) one of the leading printing and packaging SME company in Malaysia as our sample case study. The practical justification for choosing Thumbprints is that the company has successfully managed to survive in the industry during the financial crisis by practicing and emphasizing on honesty and maintaining integrity as its guiding principles in conducting the business operation. We therefore contended that a sustainable business should thrive on ethical culture business. With this aim, we attempt to focus on actions, and ground on the rationalization of imposing ethics culture in the Malaysian corporations.

LITERATURE REVIEW

A substantial amount of literatures have claimed the over-exhaustion of ethics studies. Scholars argue (Arjoon, 2005; Letza et al., 2008) have asserted that the present governance system is lack of moral obligation. Scholars such as Liew (2007) and Arjoon (2005) claimed that the economic orientation has led to corporation neglect non-economic component and has linked ethics as the missing vector in business. Similar contention was given by Rossouw (2009), who viewed that values improve governance while others laud ethics as the way forward to prosper a business.

Having analyzed the literature, we came to an agreement that there was a gap in our corporate governance’s representation of a system that guides corporate behavior. In our argument, despite economic gain being their priority, corporations should not neglect their values in pursuing their aims. We proposed that the corporations in this era be nurtured with ethical governance—particularly with ethical culture—if corporations were to remain sustainable. This means, officers of a company are expected to act ethically, that is, to take full cognizance of the interests that the firm’s stakeholders directly or implicitly entrust to them when making their decisions.

Ethical Culture

Schein defined culture as ‘a system of shared assumptions that can have a strong influence in directing followers’ behavior beliefs’ (as cited in Schaubroeck, Avolio, Kozlowski, Lord, Trevino and Peng, 2012). In this context, culture has been delineated from varying layers, of which an organization’s culture is the surface layer that represents the outer layer of an organization system, followed by the deepest layer (the shared meaning). Schein (1985) stated that leaders could influence the surface layer of an organization through visible artifacts, norms, policies and standards, all for which have been termed by Schein as shared cultural elements.

In addition to Schein’s (1985) description of ethical culture, we have based our understanding of ethical culture from the work of Trevino (1986), who pointed that ‘shared understandings concerning ethical conduct can be seen as a shared cultural sub-element or a “microcosm” of an overall organizational culture’ (as cited in Schaubroeck et al., 2012). In other words, ethical culture is a subset of an organizational culture, of which the sub elements contain formal and informal systems of promoting ethical behavior in an organization. Formal ethical culture, as described by Trevino (1986), includes artifacts such as policies, authority structures, reward systems, and ethics training programs, while informal systems include peer behavior such as ethical language, myths, stories, and ethical norms. These various elements would influence members in an organization to be more cognizant about ethical issues, and would avoid or discourage unethical conduct.
Characteristics of Ethical Culture

The model of our study was drawn from Ardichvili, Mitchell and Jondle’s work (2009), which identified the characteristics of ethical culture. In particular, they have defined ethical culture in five clusters of ethical business culture’s characteristics: mission and vision values, stakeholder balance, effective leadership, process of integrity and long term perspective. In their study, they conducted a clustering method to identify the ethical characteristics from which we have formed the themes since this study focused on the identification of ethical culture characteristics.

Against the above premise, ethical culture in this study can be summed up as how an organization demonstrates its characteristics. However, this study focused on deliberating the two aspect of ethical culture characteristics, which are leadership effectiveness and mission and value-driven. It is perceived that the three other characteristics (process integrity, stakeholder balance, and long term perspective) needs a prolong engagement, which demands longer period of time in the field. Due to that limitation, this study focused on the two keystones in order to enhance the knowledge on ethical culture characteristics.

To enhance the knowledge on ethical culture, Schaubroeck et al. (2012) have developed a multilevel model of leadership and culture influences. Having used a survey to collect data from soldiers at various hierarchy levels, Schaubroeck et al. (2012) then observed the direct and indirect effects of leadership and ethical culture across a hierarchy of levels. Ultimately, they found a positive relationship between ethical leadership and ethical culture within a hierarchical level, and that ethical leadership has indirectly influenced the members’ moral agency.

Similar relationship was also concluded between ethical leadership and ethical culture at lower levels. In addition, the study also found that the ethical leadership of leaders of high level can influence that of their subordinates leaders’ and consequently, on their followers. Schaubroeck et al.’s (2012) study has extended Schein’s model of ethical culture by introducing a new meaning of ethical culture’s relationship with ethical leadership in multilayers perspective, which Schien (1985) did not specify. They delineated a deeper examination of ethical culture that penetrates through ethical leadership across levels in an organization.

This led us to believe that by developing effective leadership corporations would lead to more ethical conduct. Perhaps one way to provide insightful understanding of the effective leadership is to identify the characteristic of an effective leadership aspect. A better understanding of the ethical culture of a company that possesses ethical business culture would be ideal to study the characteristics of ethical business culture. As mentioned above, our study was drawn from Ardichvili, Mitchell and Jondle’s work (2009) where we will be guided by the statement the described the characteristics of Ardichvili, Mitchell and Jondle’s work (2009). However, our exploration focuses on the two main characteristics of ethical culture cluster, which are mission and value-driven and leadership effectiveness. We believe the remaining ethical culture cluster (Stakeholder Balance, Process Integrity, and Long-term Perspective) requires prolong engagement as it involves stages of process in order to develop comprehensive understanding of the model proposed by Ardichvili, Mitchell and Jondle’s work (2009).

RESEARCH METHOD

Our aim of the study was to understand the process of ethical culture in a company that has been sustaining in business. Because our study required understanding, we needed to interact with people and thus, the interpretivist epistemology was considered appropriate. The interpretivist epistemology is commonly used for a study that requires interaction with social reality. Leading commentators in research methods including Creswell (2013) and Denzin and Lincoln (2011) for example claimed that the use of interpretivist epistemology should result in greater and in-depth understanding of the research issue.
Case study method
The study was designed based on a single case study method to seek an understanding of ethical culture. The aim is to seek patterns that can provide an insightful understanding of the characteristics of ethical culture in a company that has been sustaining in business. In this regard, we chose Thumbprints Utd. Sdn. Bhd. (Thumbprints), one of the leading printing and packaging companies in Malaysia as our sample case study. The practical justification for choosing Thumbprints is that the company has successfully managed to survive in the industry during the financial crisis by emphasizing on honesty and maintaining integrity as its guiding principles in conducting the business operation. Also, Thumbprint has received several accolades related to its ethical business practices.

In arguing for the use of a single case study, Crouch and McKenzie (2006, p.493) claimed that “in principle, just one case can lead to new insights if it is recognized that any such case is an instance of social reality”. Indeed, small samples in certain situations which permit the greater involvement of the researcher would enhance validity and reliability of the study, although in isolation not being enough to support major generalizations (Denzin and Lincoln, 2005).

Data collection
The study conducted semi-structured interviews with the key informants of the respondent in this study. The key informants are individual who be able to answer our inquiry. Hence, interviews were conducted with the top management and middle management of Thumbprint. Prior to that interview protocol was prepared, which contains several primary questions. Open ended questions such as; How Thumbprint define ethical culture? What are the element of ethical culture practices applied? How the leaders inculcate ethical culture? What are the do and don’ts applied in respect of ethics norms. As the main purpose of the interview is to acquire a profound understanding of the association of ethical culture and sustainability of business, the use of a small sample thus meets the objective of this study.

In order to support the validity of the findings, we have triangulated the method of interviews with document citing in order to answer the objective of the study. Two main data sources were gathered: a public document related to Thumbprints and documents gathered from Thumbprints. They were all analyzed concurrently. The triangulation of data enhances the data’s credibility. Additionally, non-participant observation method was also conducted to gain more insightful data in order to increase the level of validity, and to allow closer contact with our setting. Nonparticipant observation is especially important to characterize nonverbal communications. In this regard, we took the opportunity to look around of the respondents’ company including the type of vehicles used by the company’s board members. Pictures were taken to provide evidence of citing and to validate the information with the two other sources (interview and document). Since non-participant observation was conducted without respondents' awareness of being studied, the method therefore emphasized the reliability of the data obtained from the interviews and documents citing.

Analysis procedure
In analyzing the data, we have adopted Ritchie, Spencer and O’Conner’s (2003) method of data analysis, in which three main activities – data management, description accounts and explanation accounts – were conducted to make sense of the meaning. The purpose was to provide thorough analysis of the data. In all instances, we have attempted to understand the process of ethical culture by categorizing and conceptualizing themes that had similar patterns as Ardichvili, Mitchell and Jondle’s (2009) characteristics of ethical organization cultures’ cluster. Ardichvili, Mitchell and Jondle’s (2009) have found five characteristics of ethical organization culture cluster, which were gathered from many statements taken in verbatim from the interviews.
With the main aim of discovering patterns that could identify the characteristics of ethical organization cultures clusters, they have concluded these five themes: Mission and Value-Driven, Stakeholder Balance, Leadership Effectiveness, Process Integrity and Long-Term Perspective and each cluster is represented by several descriptive statements or combining statements of different participants. For the purpose of this paper, we focused on delineating formal ethical culture cluster, which to our opinion are most relevant and apparent in its application of ethical business; there are mission and value-driven and leadership effectiveness.

As explained above, the three remaining themes requires a longer prolong engagement in the company as there are based on process-oriented. Their informal nature of the three remaining themes requires time due to its process-oriented nature. Various ethical cultures literature found ethical culture contains two aspects which are formal structure and informal structures. In order to gain an insightful discovery of the characteristics that are formal and not complex, we focus on studying the two concerning formal characteristics of ethical culture cluster.

**FINDINGS**

Thumbprints began its printing business in 1990. The company produces four categories of print products: book and magazines, POS materials, Duplex boxes and Labels. By learning through a hard way, Thumbprints managed to survive in the printing industry during the financial crisis. Continuous improvement is one of the success ingredients practiced in Thumbprints. By keeping abreast with the technology and being steadfast in their management system, the company managed to achieve another business level. Apart from the extrinsic quality of its products, the uniqueness of Thumbprints is seen from its intrinsic mode, of which honesty and integrity are the two themes advocated by the company. Thumbprints’ core values are (1) Honesty, which means no lie, no cheat and no corruption, and (2) Integrity, which means doing the right thing without supervision. These intrinsic values have facilitated good relationships between Thumbprints and other companies, financial institution and customers.

The main milestone of Thumbprints was when it adopted ISO 9001 in 2002. Adopting ISO 9001 was a brilliant move as it improved quality control and public confidence of the company because efficiency and quality goes hand in hand with quality control and public confidence’s reputation. Thumbprints’ efficiency and quality requirement was to adhere to the ISO 9001 policy in terms of customer relation and product quality. As mentioned above, continuous improvement is very important in Thumbprints and in doing so, the company has established several steps to meet the ISO 9001 requirements, particularly by conducting monthly reviews on operational efficiency, and monitoring the output quality. Several agenda were also conducted to maintain product quality; these included by (1) keeping abreast with the production schedule, (2) monitoring the work in progress, shipping schedules and record lists of previous job reports, and (3) having constant discussion and liaison with clients during annual business review meetings.

Thumbprints’ outstanding performance is evident from the many awards they have accomplished; these include the Malaysia Star 2002 & Malaysia Star 2004, the SMI-Maybank Rising Star, the SMB Emerging Business Award, Sijil Penghargaan Anugerah Kecemerlangan Industri, Malaysia-Canada Business Council Business Excellence Award for Customer Service Excellent, Enterprise 50, Industry Excellent for Environmental Business Excellence Award, Malaysia-Canada Business Council for Environment and Environmental Printer of the Year, to list a few.

However, findings revealed that changing the culture of Thumbprints was not an easy task. Sharing their experiences, Thumbprint explained that it took years of building the foundation of ethical culture in the company. Interview findings revealed the strength of Thumbprint ethical culture is from the founder. The founder, who is the Managing Director (MD) belief in value and this, became the focal point of the
company business practices. Our findings revealed that the leadership effectiveness was the anchor of the mission of ethical business in Thumbprint.

Ethical Culture Characteristic: Leadership Effectiveness
Ardichvili, Mitchell and Jondle (2009) described leadership effectiveness as follows: ‘ethical culture starts at the top and is conveyed by example’. In documenting the effective leadership ethical culture characteristics of Thumbprints’ we found somewhat similar statements gathered from the interview transcript and document. Table 1 depicted statements relevant to support the leadership effectiveness.

<table>
<thead>
<tr>
<th>Ardhchivili, Mitchell and Jondle (2009)</th>
<th>Themes emerged from the interviews that described leadership effectiveness clusters</th>
<th>Themes from document that described leadership effectiveness clusters</th>
<th>Observation notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Ethical culture starts at the top and is conveyed by example”</td>
<td>“it start from top ‘as a leader you have to start’”</td>
<td>Compliance with the company’s ethics policy is the responsibility of all employees, as well as of the top management and board of Directors. Compliance is monitored by Head of Department/ Supervisor under the guidance of corporate Managers and the compliance coordinator. All top management must earn their respect by exemplary personal behavior, performance, openness and social competence. Thumbprints expects all employees and management to work together in upholding the company’s ethical stand and other key employees must confirm that they have conducted all operations under their control in accordance with the policy. Violations of the policies will result in</td>
<td>The authors often attended the founder talk. The founder is the role model and often called to give talk on how to fight corruption.</td>
</tr>
<tr>
<td>“Senior management demands ethical conduct at every level of the company”</td>
<td></td>
<td></td>
<td>Observation from the other employees who apply similar believe with the founder.</td>
</tr>
</tbody>
</table>
**Characteristics of Ethical Business Culture in Small and Medium Enterprise: A Case**

<table>
<thead>
<tr>
<th>Disciplinary action, up to and including termination of employee.</th>
<th>“Do what they say they’re going to do”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Award winning title</strong> SOBA Award etc.</td>
<td></td>
</tr>
<tr>
<td><strong>Thumbprints® pledges to conduct business that is always free from corruption and in accordance with the Anti-Corruption Principles for Corporations in Malaysia.</strong></td>
<td></td>
</tr>
<tr>
<td>The authors refer to the founder stakeholder and found similar expression given that the founder practiced what he preached.</td>
<td></td>
</tr>
<tr>
<td>“They live the lives with great personal integrity”</td>
<td>“we live simple lives”</td>
</tr>
<tr>
<td>- Thumbprints® is committed to working with its business partners, regulators and law enforcement agencies to create a business environment that is free from corruption.</td>
<td></td>
</tr>
<tr>
<td>- Observation notes gathered include pictures, observation of the company that often stick reminder that the company practice zero tolerance to corruption</td>
<td></td>
</tr>
</tbody>
</table>

Thumbprints have an ethical culture that starts from the top and is communicated through examples. Themed emerged were: ‘it starts from the top”. One respondent, who was also the board member, said that, ‘it starts from top, as a leader you have to start’. Based on our observation and triangulation of data gathered from the document and stakeholders of Thumbprint, we found that this statement strongly supported the reputation of Thumbprints’ leadership effectiveness. We found the senior management demands ethical conducts at every level of the company. We concluded that it was no doubt that the founder (who is the MD) has walked his talk. The first observation was on the founder passion for fighting corruption initiatives, in which the founder has often involved himself by giving talks and collaborate with association such as TI-M to realize the zero corruption efforts. His constant guidance to the do and don’ts guided the employee to the practice of doing the right thing.

The board believes that profit will come in time if one practices ethical business. Sharing that belief, the board member explained that their business has already obtained the attention of international market. For example, the board said the word of mouth from their customers about Thumbprint ethical culture has...
spread to New Zealand and that has initiated many business opportunities. The leader characteristics theme was that: “ethical culture starts at the top and is conveyed by example,” “the ‘CEO and senior management live their lives with great personal integrity’” and they “do what they say they’re going to do, are the component emerged to support the evidence of leadership effectiveness. We find similar themes express by Ardichvili, Mitchell and Jondle (2009) to support the characteristics of Thumbprint.

Ethical Characteristics Cluster: Mission and vision driven
The emerging themes from both sources (interview and document) as shown in Table 2 reflect the mission and vision driven characteristic.

<table>
<thead>
<tr>
<th>Ardchivili, Mitchell and Jondle (2009)</th>
<th>Themes from interviews that described mission and vision driven clusters</th>
<th>Themes from document that described mission and vision clusters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Column 1</td>
<td>Column 2</td>
<td>Column 3</td>
</tr>
<tr>
<td>‘clarity of mission and values, reflected in ethical guidelines and behavior’</td>
<td>Mission and vision</td>
<td>Vision</td>
</tr>
<tr>
<td></td>
<td>‘I am sure we do, you see our vision is not to be the most profitable our mission, our vision is to community and partner’</td>
<td>A Business Company Best to Commune and Partner</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Mission</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Building Community</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Based Company Encompassing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Whole Human Being Of Body, Mind And Soul</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Creating Environment For Continuous Growth</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nurturing Talents And Maximizing Utilization Of Gifting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exceeding Business Partners Expectations in All Aspects</td>
</tr>
<tr>
<td><strong>‘Institutionalizes ethical values’</strong></td>
<td><strong>Institutionalized ethics</strong></td>
<td><strong>Code of Ethics</strong></td>
</tr>
<tr>
<td></td>
<td>‘One day I just called my HOD and directors and said in 1998, today onwards we stop giving corruption’</td>
<td>‘Based on its code of ethics document’, establishes a framework for professional behavior and upholds values such as trust, transparency, honesty and integrity in all dealings;</td>
</tr>
<tr>
<td></td>
<td><strong>Zero Corruption Programme</strong> that needed to be followed in the company.</td>
<td>To raise the awareness among management and employees on the company’s ethical stand in carrying out their daily activities and making business decisions; to comply and maintain high ethical standards, obey all applicable laws and regulation</td>
</tr>
<tr>
<td><strong>Ethics Policy</strong></td>
<td><em>e.g. comply with all government laws, rules and regulation applicable to its business, whether expressed or implied.</em></td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| **Conflict of Interest Policy** | *Gift and Entertainment Policy*  
| | *Environmental Policy*  
| | *Customers Relation and Product Quality Policy*  
| | *Equal Employment Opportunity Policy*  
| | *Safety and Health Policy*  
| | *Social Responsibility Policy*  
| | *Electronic communication usage policy* |

| **“Build relationships of trust and respect”** | **Build trust chance and surprisingly the price other people offered was very high. Many times we thought it was impossible to enter a new contract in a new company because of corruption but you have to determine, sometimes it takes almost 5 to 7 month. At the beginning we supplied to one client Nestle… only so we go out and find more. But you see how many people wanted to go through the pain.** |

| **Strong culture that actively eliminates people who don’t share the values (time and persistent-strong culture)** | **Strong culture** | *‘it does not happen overnight It takes time and you have to be very persistent. ‘that we still can give incentive, pay installment and everything else, so to us, that is okay. Actually, we cannot say we are a 100% clean company because we got so many stuff and we are still teaching people to stop giving and taking, sometimes, we sign some bills and we see something off and we investigate, we caught either we call him off duty or report* |
to the police. The last case set an example to the other. On feedbacks, we usually remained silent but now we will report because we want to kill this culture.

**“Corporate values are sustained over long periods of time”**

**Corporate values – loyalty and nationalistic**

“One day I just called my HOD and directors and said in 1998, today onwards we stopped giving corruption”

“be a good citizen in a global economy. We want to do something because we are Malaysian”

Analysing the data, we found that Thumbprints statements (from interviews and documents) described the mission and vision values as depicted in Ardichvili, Mitchell and Jondle (2009). For example, during the interviews, our respondents shared their experience on how they had to face the challenges to obtain a contract. They expressed their method of building trust by keeping promises and maintaining the quality of their products. As mentioned by the CEO: “many times we think is impossible to enter a new contract in a new company because of corruption but you have to be determined, sometimes it take almost 5 to 7 month. At the beginning we supply to only one client, so we go out and find more. But you see how many people want to go through the pain.” In particular, the respondents claimed that once the customers and suppliers have trust in them, the next contract would easily ensue.

Another example relates with the mission and vision driven component is seen in Thumbprints data that delineate a strong culture of ethics. This was evident from their shared experience of having to ask one employee to resign amicably due to the latter’s unethical conduct. As mentioned by the Chief Executive Officer (CEO), the employees were given the choice to leave the company if they could not accept or would not change their values to fit into the company’s shared values, norms and beliefs.

In particular, the company addresses that compliance to company’s ethical policy is the responsibility of all employees regardless of the level of management. The following excerpt is an example: compliance with the company’s ethics policy is the responsibility of all employees, as well as of the top management and board of Directors. Compliance is monitored by Head of Department/Supervisor under the guidance of corporate Managers and the compliance coordinator. All top management must earn their respect by exemplary personal behavior, performance, openness and social competence. Moreover, adherence to ethical policy is monitored by an authorized department. This supports the company’s seriousness concerning effective leadership.

**DISCUSSION**

This study commenced with the objective to identify the ethical culture in the context of sustainable business. Our findings supported the five ethical business characteristics (mission and vision driven, stakeholder balance, leadership effectiveness, process integrity, and long term perspective) developed by Ardichvili, Mitchell and Jondle (2009). The five characteristics of the model are interconnected and together act as guidance in its application of creating ethical business culture. Our study will discussed
two of the main characteristics which are: effective leadership and mission and value driven, which in our opinion are significant in its application of creating ethical culture towards sustainable business.

Culture in the context of our study means a shared value and belief of people. Corporate culture, based on the interpretation of our data, is the shared belief and practices among corporate citizens. Corporate citizen in this sense means inward and outward corporate citizen. ‘Inward’ means the direct citizens who are involved in the company, while ‘outward’ means the external parties who are involved directly in the company (often described as stakeholders). Expressions that supported corporate culture statement were based on a company’s philosophy that their business was built on the relationship between and within the company, and that the relationship was built on mutual benefits. Ethical culture, on the other hand means ‘doing the right thing and doing what you say you are going to do’. It is of this meaning that has created the ethical culture in Thumbprints.

Based on the findings, the foundation of the ethical culture in Thumbprints are individual, collective of individual and the system. Our finding indicates that an individual is the main function of ethical culture, in which his shared belief and values are communicated through a system that leads towards such culture. Shared beliefs in the context of this case are honesty and high standard of ethics, while values mean the integrity upheld by the corporate citizens. The founder of Thumbprints explained that individual’s spiritual values such as religion, belief, personal nature (loyalty, nationalism) are important to translate the shared belief. The shared belief is transferred from an individual, who basically acts as a role model; it then goes through a collective of individuals, who work together to create a system of ethical culture. It all started with one individual, who is the founder, vision to change his company into an ethical governance. He started by believing in doing an ethical business then managed to influence his associates into believing in what he believed in and along with a collective of individuals, they have worked through their mission and vision. System of ethical culture contains the components of the characteristics clusters. It is of this system that has created the ethical culture in Thumbprints.

Based on our findings, the keystone of the ethical culture model is the effective leadership clusters. The effective leadership is an integral component of Thumbprint that leads towards its mission and vision to govern the company towards ethical governance. Results indicate there is interconnectivity between effective leadership and mission and vision. The ethical culture model of Thumbprint started with the founder, an individual whose spirit is as high as a mountain, who along with the executive directors, nurtured his company into creating ethical environment, where upholding values in doing business. Subsequently, the values were translated into mission and vision. Their beliefs are shared with the employees in order to materialized the mission and value driven norms in Thumbprints. Nordberg (2008) states an individual director should look after the interest of others rather than his own.

CONCLUSION

Our study began with the notion that ethical culture sustains business. Our proposition was constructed based on Ardichvili, Mitchell and Jondle’s (2009) characteristics of ethical business culture model. By using this model, we framed our study to identify the general characteristics of a company’s ethical culture. This includes a concept of characteristics of ethical business culture. Triangulation of data indicates ethical culture begin with the leader which later led to mission of value, hence ensuring ethical conduct and socially responsible behavior. This is because, questions of ethical behavior generally relate to how one regulates one-self. In this respect, ethical business culture are avowedly meant to sculpt, mould and shape corporate behavior in certain ways that will be deemed and accepted as what is usually termed ‘ethical’.
Overall, this study identifies a broader picture of ethical business culture elements: the founder and top management are the focal influential factor of the whole corporate ethical culture. In addition, the analysis has also highlighted the sequential of events that have occurred in our case study, which have built the ethical culture towards sustainability. The sequence of events started with the founder as an individual who established the keystone, followed by the board and members who collectively worked through the found mission and vision values in order to progress towards the ethical culture and the support from society who believe in their mission.

Our results indicated that ethical leadership initiates employees to perform ethically. Interestingly, although we found the characteristics of ethical business culture model developed by Ardchivili, Mitchell and Jondle (2009) exist in our finding, we also found differing results. While Ardichvili, Mitchell and Jondle (2009) found mission and value driven as the model of the keystone, we found leadership effectiveness as the keystone of an ethical business culture which initiate the mission of a company. This finding is unique in a sense that it delineates ethical leadership effectiveness as the leading vector of an ethical culture.

Limitation and future research
This study adopted a single case study to seek an understanding of an issue, that is, to understand the ethical culture patterns of a business within the context of the case, not to develop a set of testable hypotheses. While there is advantage to a case study, there are also certain and obvious limitation due to research constraints. Logically, if more samples of case study used, the findings would be broader in scope and/or the process would be more efficiently performed. Thus, concluding from a wider perspective and comparing between cases in this study could not be performed.

However, in order to minimize the potential limitation in this study, it could be ensured that the selected individuals in this study were experts in their fields and engaged in different projects relating to ethics in addition to their work in their company.

Thus, a single case study in this research allows greater involvement of the researchers which is believed would enhance the validity and reliability of data obtained, although in isolation not being enough to support major generalizations. We propose a further study in the context of the three remaining unexplored themes which are; Stakeholder Balance, Process Integrity, and Long-term Perspective.

ACKNOWLEDGEMENT

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Impact of Product Diversification, Geographic Diversification and their Interaction on Corporate Performance of PLCs in Malaysia

**Keywords:** Product Diversification, Geographic Diversification, Corporate Performance, Public Listed Companies, Malaysia

**INTRODUCTION**

Diversification has been one of the widespread practices among worldwide organizations since 1960’s (David, 2011; Muzyrya, 2010). On theoretical grounds, several advantages such as risk reduction, market power, transaction costs, and economies of scope benefits have been attributed to diversification strategies (George, 2007; Grant, Butler, Hung, & Orr, 2011; Lewellen, 1971; Liu & Hsu, 2011; Lu & Beamish, 2004; Nachum, 2004). Given the motivation from these benefits, strategists often decided to enter into new product and geographical segments in order to improve performance of their companies. However, in reality, diversification strategy appeared to be much more controversial strategy with certain companies pursuing it successfully while others facing failure (Goold & Luchs, 1993; Muzyrya, 2010).

The diversification-performance relationship has been one of the well-attended research areas in different disciplines, yet empirical results and theoretical arguments on the relationship have been mixed and inconclusive (Asrarhaghighi, Rahman, Sambasivan & Mohamed, 2013; Kang, 2011). One stream of research found a positive effect of level of geographic diversification (Bodnar, Tang & Weintrop, 1999; Han, Lee & Suk, 1998; Kang, 2011) and product diversification on firm performance (Nachum, 2004; Kuppuswamy & Villalonga, 2010; Villalonga, 2004; Zhao, 2008). The arguments of these studies are based on transaction cost theory (Williamson, 1971), resource based theory (Wernerfelt, 1984), and market power theory (George, 2007) which assert that diversified firms perform better as they gain internal market advantages, economies of scope benefits, and market power benefits as opposed to single business firms.

On the other hand, certain scholars reported negative impact of degree of geographic diversification (Denis, Denis & Yost, 2002; Fauver, Houston & Naranjo, 2004; Kang, 2011) and product diversification on firm performance (Comment & Jarrell, 1995; Grass, 2010; Hill & Hansen, 1991; Rajan, Servaes & Zingales, 2000). These findings largely support agency theory arguing that managers’ personal motives and goals are active behind diversification decisions instead of organizational benefits (Aggarwal & Samwick, 2003).

and geographic diversification (Geringer, Tallman & Olsen, 2000; Sambharya, 1995; Tallman & Li, 1996) have not been causes of good or bad performance. Hence, research results and theoretical arguments concerning the impact of both, product diversification and geographic diversification on firm performance have been contradictory and inconclusive (Hennart, 2007; Muzyrya, 2011; Palich et al., 2000).

Moreover, certain researchers examined interaction effect of product diversification and geographic diversification on corporate performance (Chang & Wang, 2007; Geringer et al., 2000; Hitt et al., 1997; Tallman & Li, 1996); but the empirical evidence is inconclusive as certain studies suggested positive (Hitt et al., 1997), others suggested negative (Sambharya, 1995), while a third group suggested no interaction effect of two strategies on firm performance (Geringer et al., 2000; Tallman & Li, 1996).

The disagreement among the research results on the topic could largely be due to size, time period, and contextual differences among the studies, reliance on different methods for measuring product and geographic diversification, and different measures of firm performance (Asrarhaghighi et al., 2013; Mehmood & Hilman, 2013). Most importantly, critical review of relevant literature reveals that many studies on product/geographic diversification’s impact on performance were conducted in American or European contexts and there has been limited research in context of Asia on this topic (Doaei, Anuar & Ismail, 2014; Yaghoubi, Abidin & Yaeghoobi, 2011).

Specifically, there is extremely limited research on diversification-performance relationship in Malaysian context and research involving joint or combined effect of product diversification and geographic diversification in context of Malaysia is largely lacking (Daud, Salamudin & Ahmad, 2009; Doaei et al., 2014) representing a significant research gap. Coupled with that, certain past studies such as those of Ishak and Napier (2006), and Doaei et al. (2014) indicated that a large number of diversified companies (product and geographic wise) were observed to be working in Malaysia in almost all the sectors. Hence, keeping in view diversified culture of Malaysian PLCs, existence of few studies on the topic in the Malaysian context, and the significant role of Malaysian corporate sector towards growth and development of the country (MIDA, 2015) as discussed in relevant sections, this research is deemed necessary and indispensable for its invaluable inputs and contribution in form of findings and recommendations.

To enrich the existing literatures of diversification strategy use in the Malaysian PLCs, this study makes an attempt to achieve following objectives; 1) To examine whether product diversification strategy impacts corporate performance, 2) To examine whether geographic diversification strategy impacts corporate performance, 3) To examine whether geographic diversification strategy acts as a moderating variable on the relationship between product diversification strategy and various corporate performance dimensions, 4) To examine whether product diversification strategy acts as a moderating variable on the relationship between geographic diversification strategy and various corporate performance dimensions.

CONCEPTUAL BACKGROUND

Product Diversification Definition and Types
Product diversification is a growth strategy which explains the extent to which a firm operates in multiple and disparate product markets (Hitt et al., 1997; Ravichandran, Liu, Han & Hasan, 2009). Product diversification is company’s entry into new activities or business segments which is pursued either through acquisition or by internal development, and results into substantial changes in company’s processes, systems and structures (Tan, 2007; Varadarajan & Ramanujam, 1987). Organization can select to pursue product diversification either in related or unrelated businesses or industries (Johnson, Scholes, & Whittington, 2008).
In related diversification strategy, an organization starts producing new products or services but those new products could be produced using existing set of resources and competences and are also offered in same or relevant industries (Rumelt, 1974; Thompson, Peteraf, Gamble, & Strickland III, 2012).

In related diversification, the primary advantage is that businesses can create synergies across product units by combining various business activities in purchase, manufacturing, marketing, and R&D, and thus can attain economies of scale and economies of scope (Amit & Livnat, 1988; Rumelt, 1982). For instance, at Texas Instruments: semiconductors, defense electronics, and computer businesses share manufacturing and R&D activities for creating synergies through gaining efficiencies (Ravichandran et al., 2009).

On the other hand, in unrelated diversification, an organization offers new products or services which are entirely different from the existing ones and they are normally introduced into entirely new and different product and market segments or in different industries (Pearce II & Robinson Jr., 2011). The basic motives and benefits of unrelated diversification are to decrease overall business risk, creation of internal capital market and cross subsidization of different businesses (Berger & Ofek, 1995; Grant et al., 2011; Hoskisson, Hitt, & Ireland, 2009).

Geographic Diversification Strategy
Historically, Ansoff (1965) expressed ideas about importance of carefully selecting corporate and business level strategies in different organizations. The decisions about corporate and business level strategies entail deciding about firm’s boundaries in form of product and geographic scope (Capar, 2003). Product and geographic diversification strategies and their relationship with performance have attained much attention in international business, finance, economics, and strategic management literature.

Way back in 1972, Stopford and Wells’s (1972) research on multinational companies suggested that product diversification and geographic diversification significantly determined growth in those companies. Followed by this, a large body of research studied geographic/international diversification-performance relationship (Buhner, 1987; Capar, 2003; Geringer et al., 2000; Gomes & Ramaswamy, 1999; Pantzalis, 2001; Ramaswamy, Kroeck, & Renforth, 1999; Tallman & Li, 1996).

International or geographic diversification is a growth strategy which carries significant potential to impact firm performance (Ansoff, 1965; Chandler, 1962). It is a strategy pursued by a firm for its expansion beyond the borders of its own country and across other countries or geographical regions (Ghoshal, 1987; Wiersema & Bowen, 2011). The terms such as international diversification, geographic diversification, regional diversification, and international diversity are used interchangeably in the literature and also depend upon how the diversification is being conceptualized and measured (Capar & Kotabe, 2003).

According to Capar (2003), there could be three reasons as to why international diversification might lead to greater performance: achieving efficiency through internalization, exploiting market differences, and obtaining resources and learning. While there could be inherent advantages for pursuing geographic diversification, this strategy might also carry certain costs (Beleska-Spasova & Glaister, 2010; Lu & Beamish, 2004). According to past scholars, various theories explain the motives, benefits, and costs of geographic diversification (Beleska-Spasova & Glaister, 2010; Capar & Kotabe, 2003; Lu & Beamish, 2004; Pantzalis, 2001; Wiersema & Bowen, 2011).

Corporate Performance
Corporate performance has been one of the widely used dependent variables in the field of business research (Richard, Devinney, Yip, & Johnson, 2009). It is because performance has been considered to most important evaluation criteria for a company’s strategy. Predominately, previous researchers seemed to be excited in discovering impact of diversification strategies on performance (Kang, 2011; Muzyrya,
2010). In diversification-performance research, a variety of performance indicators were used to examine the relationship (Palich et al., 2000).

The literature review of organizational performance dimensions indicates multiple approaches used to represent this important construct. Combs, Crook & Shook (2005) attempted to identify number of performance indicators employed by different researches conducted between 1980 and 2004 (published in Strategic Management Journal). They revealed that altogether 238 researchers relied on 56 different performance indicators for judging performance. Among them, accounting ratios of performance were most frequently used (52%) which represented a subset of financial performance measures (82%) used in those studies. Other researchers in the same line, for instance, Richard et al. (2009), and Carton and Hofer (2006) also came up with similar conclusions. However, researchers in the field have suggested using multiple indicators of performance to enhance richness of the findings (Micheli, Mura, & Agliati, 2011). This research framework is designed to examine the impact of Product Diversification Strategy and Geographic Diversification Strategy (independent variables) on various dimensions of Corporate Performance – ROA, ROE, ROS, and EV (dependent variables). In addition to that, the framework also intends to analyze the interaction impact of Product Diversification Strategy and Geographic Diversification Strategy on all dimensions of Corporate Performance. Figure 1 below presents research framework of the study.

**Figure 1: Research Framework**

![Research Framework Diagram](image)

**METHODOLOGY**

**Variables**

This study include Product Diversification Strategy and Geographic Diversification Strategy (Independent Variables); Return on Assets, Return on Equity, Return on Sales, and Enterprise Value (Dependent Variables); and Company Age, Company Size and Company Leverage (Control Variables). The information about all these variables was collected from Thomson Reuters DataStream and company annual reports.

**Data collection and sample characteristics**

Datastream provides data regarding several indices, hundreds of company accounts and financial ratios for over 61,800 companies belonging to over 75 countries of the world, and it is considered to be most reliable and accurate source of data (Dastidar, 2009; Daud et al., 2009; Thomson Reuters, 2012). For those companies whose information regarding various variables was not available on Datastream, the information was accessed from company annual reports or other sources.
Data analyses were conducted on SPSS (Statistical Package for Social Sciences) through descriptive as well as by using inferential statistics techniques. Descriptives were used to augment the main analysis, but the tests of all independent variables’ impacts on dependent variables were conducted through inferential statistics by using regression analysis. The basic analysis concerning interaction impacts of product diversification strategy and geographic diversification strategy were done using MRA (Moderated Regression Analysis). MRA was done using hierarchical regression analysis and past studies have validated the use of this technique in studying interaction impacts or moderator impacts of variables (Al-Hilali, 2012; Kozlowski, 2014).

This research was organized for non-financial Public Listed Companies (PLCs) listed on Bursa Malaysia. All data including number of product and geographic companies’ segments, and data for financial ratios were collected through Thomson Reuters Datastream. The data was collected for three years’ time period; from year 2010 to year 2012 and after data screening and cleaning, 569 companies ended up being part of final analyses.

**Analysis and Findings**

Table 1 includes information about number of PLCs appearing in the analyses from different sectors. The table shows that PLCs from 10 different sectors were included in the analyses. Maximum participation was from industrial product sector (186) PLCs, followed by Trading/Services (120), and Consumer (101). PLCs from Mining (1), Hotels (4) and IPC (1) sectors were less in number.

A list of descriptive statistics showing information about the minimum values, maximum values, variance, standard deviation, mean, skewness and kurtosis is provided in Table 2. It can be observed from Table 2 that the mean of Product Diversification is around 2.54 revealing that overall, Malaysian PLCs have more than 2 and less than 3 business segments. Similarly, the mean of Geographic Diversification is 2.26 indicating that overall, Malaysian PLCs are operating in more than 2 geographic/international segments. An average PLC is around 23 years old, whereas average leverage for the companies is around 18.5%. Statistics also show greater variance and standard deviation in Age and Leverage.

As mentioned earlier, the hierarchical regression analysis comprised of four models, and variables were entered in a sequence, with main independent variables entered in Model 1 and 2, control variables entered in Model 3, and the interaction term was entered in Model 4. The results show that Models 1 and 2 were not significant. However, Models 3 and 4 were significant (p = 0.000). It could be seen that PDCentered had significant negative impact on ROA in models 3 and 4, where PDCentered was significant at 0.013 and 0.020 in Models 3 and 4 respectively. This means that Product Diversification is negatively affecting ROA. Refer to Table 3.

Table 4 provides findings obtained after running hierarchical regression analysis comprising of four models conducted in order to examine impacts of Product Diversification, Geographic Diversification and other variables on tROE, and to analyze the interaction impact of Product Diversification and Geographic Diversification on tROE.
Table 5 provides findings obtained after running hierarchical regression analysis comprising of four models conducted in order to examine impacts of Product Diversification, Geographic Diversification and other variables on tROS, and to analyze the interaction impact of Product Diversification and Geographic Diversification on tROS.

The results show that Models 1 and 2 were not significant, but, Models 3 and 4 were significant (p = 0.000). It is evident that in any model, neither PDCentered nor GDCentered had any sort of significant impact on tROS. This provides evidence that Product Diversification and Geographic Diversification do not possess any association with tROS.

It can also be noticed from Model 4, that interaction term PDGDCentered was also insignificant and therefore, insignificant Change in F-statistic could also be observed (sig = 0.602). Therefore, the analysis concluded that the combination of Product Diversification and Geographic Diversification or their interaction had no significant impact on tROS.

Table 6 provides findings obtained after running hierarchical regression analysis comprising of four models conducted in order to examine impacts of Product Diversification, Geographic Diversification and other variables on tEV, and to analyze the interaction impact of Product Diversification and Geographic Diversification on tEV.

Table 7 provides summary of results for all accepted and rejected hypotheses in relation to findings discussed before in this chapter.

DISCUSSIONS AND CONCLUSION

While concluding the discussion on the test of various hypotheses, it can be stated that the individual impacts of the two strategies; product diversification and geographic diversification are different from their combined impacts on various dimensions of corporate performance. As far as product diversification strategy is concerned, it has significant negative impact on ROA and ROE, but possesses a significant positive impact on EV.

Geographic diversification strategy has significant positive impact on EV but has no relationship with other indicators of corporate performance. The interaction of the two diversification strategies has significant negative impact on ROA and ROE. Therefore, it has been suggested that companies following the two strategies simultaneously, must be cautious about their joint effects. If the level of product diversification is high, then the degree of geographic diversification must be kept low. And, if the level of geographic diversification is high, then the degree of product diversification must be kept either moderate or low.

The findings also revealed that company age, size and leverage were also significant predictors of performance indicators. Greater is the size of the company, greater would be the performance as measured through all indicators. However, leverage and age are negatively associated with various performance indicators as discussed earlier.
Overall, the discussions provide guidelines about the impact of all independent variables on dependent variables of the research. Most importantly, they provide direction about the main and interaction impact of product diversification strategy and geographic diversification strategy on corporate performance.

Theoretical Implications
The results and findings of this research pay considerable contributions to the existing body of knowledge. Particularly, they pay contribution to the relevant research on product diversification strategy, geographic diversification strategy and corporate performance and reinforce the volume of research on product/geographic diversification-performance relationship as well as the impact of their interaction on performance. The findings also contribute to transaction cost economics, agency theory, internal market efficiency, resource based theory, market power view, internalization theory, and internationalization theory. The type of analyses conducted in this research provides greater understanding of diversification-performance relationship as it examines the interaction impact of both strategies on performance.

Additionally, it does so by examining the moderating impact of geographic diversification on the relationship between product diversification and performance and also by testing the moderating impact of product diversification on the relationship between geographic diversification and performance. The discussions also paid contribution to the relevant literature by comparing this research results with other similar past researches conducted in the field.

This study analyzed and revealed that product diversification negatively impacted ROA and ROE, and positively impacted EV. Whereas, geographic diversification was discovered positively affecting EV. Neither product diversification strategy nor geographic diversification strategy had any sort of relationship with ROS. Hence, in a way, this study verified and agreed to past research conducted on product diversification-performance relationship revealing negative impacts of this strategy on accounting measures, particularly ROA and ROE.

This study also provides verification of positive impact of geographic diversification on performance, although measured through a comparatively new indicator; enterprise value. This research also confirmed the findings of those studies which revealed that product/geographic diversification was not significantly associated with ROS.

Most importantly, this research concluded that interaction of product diversification and geographic diversification was significantly influencing ROA and ROE. Additionally, it added to the available literature on the moderating effect of these strategies by stating that product diversification as well as geographic diversification had a negative moderating impact. Specifically, geographic diversification operated as a negative moderator between product diversification and performance and product diversification acted as negative moderator between geographic diversification and performance.

The conclusions of this study also agree with the proposition that product/geographic diversification-performance relationship could be affected or determined by certain moderating variables (Hitt et al., 1997; Ravichandran et al., 2009; Tallman & Li, 1996). Concerning product diversification, the results acquired through this research suggest that transaction cost economics (Williamson, 1998), agency theory (Aggarwal & Samwick, 2003), internal market efficiency (Coase, 1937), resource based theory (Wernerfelt, 1984), market power view (Bernheim & Whinston, 1990) could be relevant and referred to while understanding and interpreting impact of product diversification on performance. In addition, the findings suggest that internalization theory (Buckley & Casson, 1976; Rugman, 1981; Rugman & Verbeke, 2008) and internationalization theory (Capar & Kotabe, 2003; Hamel, 1991) could be relevant while studying the impact of geographic diversification on performance.
Managerial Implications
This research analyzed linkages and connections between certain significant variables or factors or managerial decisions which strategists like CEOs or Directors confront in their organization life. They are decisions about diversifying their companies by new product or business segments or by internationally through entering into new geographic areas or countries. Thus, the results and findings of this study provide important managerial implications to strategy makers in Malaysian PLCs in particular concerning these decisions. Therefore, from practical perspective, this research provides feedback to strategists, decision makers, and to Malaysian corporate sector about diversification strategies.

At first, the findings point towards impact of product diversification strategy on performance. The findings, as revealed in this research suggest that product diversification strategy negatively impacts accounting performance measured through ROA and ROE. If the managers are deeply concerned about improving their companies’ ROA and ROE, then increasing levels of product diversification are not beneficial to pursue. Hence, regarding these performance ratios, they should not be diversifying too much into new product or business segments.

The findings also suggest that strategists looking for improving ROS of their companies by diversifying through product won’t be able to observe it. However, increasing level of product diversification would lead to increasing EV of their companies. Hence, if the main objective of product diversification is to increase enterprise value of the company, then this could be achieved through that strategy.

Secondly, as far as geographic diversification is concerned, strategists looking for improving their companies’ ROA, ROE, and ROS, will not be able to achieve it with the increasing level of geographic diversification. This suggestion is similar to those of previous scholars who also recommended same set of guidelines for practicing managers. However, increasing degree of geographical diversification would positively affect enterprise value of the companies. Therefore, it is concluded here that independently, both product diversification strategy and geographic diversification strategy lead to an increase in enterprise value.

Thirdly, it is believed that product diversification strategy and geographic diversification strategy are not mutually exclusive and they could be pursued at the same time (Capar, 2003; Hitt et al., 1997). Therefore, a number of past scholars have examined the interaction effect of the two strategies on performance (Chang & Wang, 2007; Geringer et al., 2000; Hitt et al., 1997; Tallman & Li, 1996). The findings of this study suggest that the interaction impacts of product diversification and geographic diversification are significant for ROA and ROE. However, the interaction impact is not significant for ROS and EV.

This research has covered Malaysian PLCs operating in non-financial sectors and therefore, the suggestions provided herein are particularly useful for those non-financial companies. The findings and recommendations about significant and insignificant impacts of product diversification strategy and geographic diversification strategy are in fact serving as a feedback to investment and capital management decisions taken by PLCs and Malaysian corporate sector.

It is believed that the recommendations would enable and facilitate achievement of national programs via helping the corporate sector in strategic decisions. For instance, they would help facilitating achievement of 11th Malaysia Plan as according to Economic Planning Unit in Malaysia, this plan incorporates certain important strategic basics of ‘increasing value in Malaysian economy’ and ‘strengthening of institutions’. Further, it is believed that the recommendations would attempt to contribute achieving Economic Transformation Plan through guiding investment and strategic decisions regarding diversification strategies in Malaysian companies.
Suggestions for Future Studies

It has been noticed in several parts of this research report that past studies into interaction impact of product diversification and geographic diversification have been extremely limited for Malaysian companies. This research has filled that gap and provided a guideline for conducting similar studies into the topic within the context of Asia in general and Malaysia in particular. Future studies could improve the area by conducting separate studies on manufacturing and service sectors of Malaysia. Greater understanding could be gained through including additional controls into the research designs such as sectors, industries, intensity of competition, and market structure, provided that the information is readily available.

Additional independent variables into the relationships could also provide greater insight, such as subsidiary management, leadership, and decision making systems. Case studies of defeated and undefeated product and international diversifiers will also improve understanding. Future studies could also examine the relationships using other types of financial ratios such as earnings per share, return on investment, excess value, Tobin’s q and market return.

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Impact of Product Diversification, Geographic Diversification and their Interaction on Corporate Performance of PLCs in Malaysia


All of the tables cited in this paper are omitted due to space considerations. Interested parties are invited to contact the author for a complete copy of the paper.
Ethnic Affiliation and Access to Affordable Healthcare in Nigeria and Malaysia

Keywords: Ethnicity Affiliation, Affordability, Access, Healthcare Services, Nigeria, Malaysia

INTRODUCTION

The main purpose of reform regulation in the health sector is to make health care and safety services accessible, affordable, costs effective, efficient and equitable to the citizens. This is in addition to demystifying or removal of biased selection, waiting period for patients, adverse selection, premium increases and demographic features considerations before attending to patients (Susan & Fengyu 2004; Steven 2004). In the conceptual perspective described by Alan and Joel (2004), reform regulation success is dependent on the proper implementation of the various reforms instruments of control by the government and policy makers charged with the responsibility of ensuring that the reform achieves its set down goals or objectives.

Contributing to the debate on reform in healthcare service provision, Johannes and Jutting (2005) argue that, how the financing of healthcare is organized has an important impact on achieving the objectives of the health system or reform. Most world health system or reform share common convergence line of maintaining good health for population as the first goal, protection against risks of illness as second and achieving consumer satisfaction within resource constraints as third (Yahya and Mohamad Khan, 2011). Researchers have acknowledged that, though the objectives of most reform seem to be closely interlinked; trade-off is sometimes ensued between health status, financial protection and public satisfaction or access and affordability (Mechanic & Rochefort 1996). In addition, healthcare finance has a strong influence on the final outcome as well as on intermediate goals of the healthcare and safety system reform (Mechanic & Rochefort 1996; Barbara, Leiyu & James 2005). Expanding the scope of these arguments Yasar, Ramesh and Laura (1997) broaden the scope in addition to demographic factors such as ethnic affiliation, age, gender, location and educational level; environmental factors are also major determinants of performance through efficiency and effectiveness as well as access and affordability to all categories of citizens. This research therefore, studies the relationship between reform access and affordability and ethnic status of the respondent in Nigeria and Malaysia.

An attempt to establish the relationship between ethnic origin and healthcare delivery have been widely researched with no single factor identified as the cause of the variation in access and affordability to healthcare services in the two countries (Abdurrahim 2009; Dogo 2009; USDHHS 2000; Abdel-Ghaney & Wang 2001; Shi 2001). Linda and Jess (2004) studied the relationship between ethnicity, healthy condition and longer life in the US and found serious gap between access to healthcare services and ethnicity or educational level. The study rated US as occupying 10th position in terms of access and provision of affordable healthcare to its citizen. This rating pushes US far behind Canada and other developed countries. Linda and Jess (2004) further elaborated that, a close look at inner society of the US
revealed an existence of wide gap in terms of access and affordability to healthcare services along ethnic line which is more than the rating cited earlier.

This study by Linda and Jess (2004) further identified high variation in terms of healthcare services access and affordability between the White majority and Africa American and Hispanic minority, but more seriously with Africa American residents. A similar study conducted by Dwyer (1995) showed that, European American citizen compared to Canada and Japan were ranked 12th in terms of longer life expectancy. At the same time Africa American were ranked shorter with 33rd position in the world in relation to life expectancy (Dwyer 1995; CDC 2001). This showed a clear variation in access and affordability to healthcare services and in turn long life base on ethnic differences. A clear picture of the whole variation showed that, even though Hispanic American shares the same socioeconomic status, educational and poverty level with Africa American, the later were more vulnerable to the variation in terms of access and affordability to healthcare and invariably longer life in the US (Centre of Disease prevention and Control CDC, 2001). This problem has also been identified as a major problem hindering effective healthcare services delivery in both Nigeria and Malaysia (Yahya & Mohamad Khan 2011a; Abdurrahim 2009; Dogo 2009; Yahya & Mohamad Khan 2011b). Research conducted by USDHHS (2001); Abdel-Ghaney and Wang (2001) showed that less than 10% of European American who share the same socioeconomic status with the Africa American and Hispanic suffer the same differentiation in terms of longer life expectancy and healthcare services access and affordability problem.

Shi (2001) found all opposing result and reported that, those citizens occupying, low income belonging to the minority citizens and poor suffered the problem of access and affordability of healthcare and safety coverage.

Thomas (2011) elaborated on the issue of health access and affordability disparities in the US. The correlational indices between poor state of citizens, poor health and health inequalities are present in all states. All these are likely promoted due to the ongoing racial/ethnic, economic and other social factors in the US society of recent (CDC 2011). For any successful reform to records positive outcome the source of better per capita allocation must shift from residing mostly in the richer regions of a country neglecting the vast majority poor regions (CDC, 2011).

Bhattachanya and Tandan (1991) conducted a research in rural Varanasi in Uttar Pradesh to determine factors that encourage or hinder access and affordability healthcare services. The study revealed that literacy rate played a significant role in the level of healthcare access and utilization not ethnic differentiation. The result in part is in contrast with other studies; it showed that women rather ethnic affiliation close to the clinic did not record higher clinical attendance than those from far places. This result contradicted most health report insisting on closeness of clinic and/or distance as basic factors that encourage or discourage clinic attendance. This resulted into an insinuation that other factors must have contributed to this disgusting result. In another study, the result revealed that poor residents and low educated members not by ethnic affiliation attends tertiary healthcare mostly located in the urban centers due to either economic reasons or were force through referrals from the rural clinics. This showed that access to affordable healthcare may not necessarily be the major factor compelling people to attend tertiary clinics (Chabbra & Saraf 1997).

In a study conducted to determine the factors that are affecting healthcare seeking and utilization (access) of curative care among women using responses from 3000 households revealed the influence of socioeconomic status of the patient. The study used cross-sectional data in addition to qualitative data. The analysis was done using univariate, bivariate and multivariate method. The study revealed that quality service was the major determinant of patient utilization pattern not gender or ethnic affiliation. The perception of the patient favored private providers and was against public providers; due to the believed that inclusion of injection and near availability of all drugs was only found in the private and not public clinics is yet another reason (Chirmulay, 1997).
widely defined as better service or treatment. The study also found that educational level of the family, caste belong to or ethnic group, and culture encourage the choice as well as access and affordability of private or public care service provision (Chirmulay 1997).

METHODOLOGY

Research Population and Data Collection
The survey evaluated reform in healthcare delivery in Nigeria and Malaysia between accesses to an affordable healthcare service based on ethnicity affiliation of citizens in the two countries. The survey was carried out in Nigeria and Malaysia from October 2010-January 2011. The reform specifically targeted employees from formal sectors in the countries. Therefore the research frame is mainly from the list of tertiary institutions and those attending both public and private clinics in the two countries. A total of 750 respondents were recruited for this survey. Each questionnaire took approximately 15 min to complete. In this study, the questionnaire were left to the respondents and collected on the following day due to their busy schedule. Those in charge of the distribution and retrieval of the questionnaires were specially train by the researcher from two institutions in the two countries as research assistants. They were initially train on what the research is trying to investigate incase of on the field questions by the respondents.

Stratified Random Sampling
From the sampling frame of the institutions in the two countries retrieved from the internet and from the lists of those attending the clinics the sample of survey was obtained. The name of the institutions were randomly selected, thus for administrative convenience, each institution is hereby treated as a stratum. In practice, the population often consists of heterogeneous units with respect to the character under study. Thus, in this research work, some beneficiaries of the NHS in the two countries are from the private sector while some are from the public sector. Similarly, some are senior staff while some are junior staff, among others. Moreover, it is evident that the nature of sampling problem will be different from these different sectors of the population and each sector needs to be treated as a separate stratum. Therefore, six stratsums were created from Nigeria and Malaysia out of which the samples were drawn and respondents were selected. The stratum includes Kaduna Polytechnic, Ahmadu Bello University Zaria, Bayero University Kano, American University Yola, Shehu Idris College of Health Technology Makarfi-Zaria, and Selected private clinics in Nigeria. While selected in Malaysia includes University Malaya, University Sains Malaysia, University Utara Malaysia, University Putra Malaysia, Cyberjaya University College of Medical Sciences and Some selected Private Clinics were also taken.

DATA ANALYSIS

Data obtained from this study was analyzed using descriptive and inferential statistics as suggested by (Huck, Corner and Bound, 1974). Therefore a pilot test was conducted with an alpha coefficient of more than 0.60 and this result is acceptable according to Sekaran (2000). On the other hand, factor analysis was conducted to determine the construct dimensionality and measurement equivalence across all items. The results of factor analyses showed 0.89 values for measurements of sampling adequacy exceeding the minimum value of 0.60 as stated by (Tebachnic & Fidel 2007). While the Bartlet’s test of sphericity reached the statistical significance of p<0.05 this supported the factorability of the correlation matrix. Inferential statistics was also used in order to allow the researcher to generalize the findings from this set of data to a larger population. The study used SPSS software for quantitative data analysis version 16. To analyze the data collected from the questionnaire.

Content Validity
In order to content validate the entire research instruments, the draft of the instrument was sent for validation to content experts as suggested by Grant and Davis, (1998) and Lyn (1986) that the content
experts should be between 3-10. This study utilized 15 experts from Nigeria and Malaysia from medical personnel, psychologists, safety and health experts, educationists, human resources experts among others.

**External Validity and Reliability**

External validity depends on similarities between contexts of researcher and the user. The study provided a solid descriptive technique to allow judgment and generalization of findings to other situations. The primary strategy used in this study was to ensure transferability through the provision of rich and detailed description, so that any one that would be interested in transferability might have a solid framework for comparison as described by (Merian1998). Additionally, this study provided detailed description in accordance with external validity of methods and theory such that other researchers can determine whether findings could be compared with those of their own studies by employing open ended, in-depth questionnaire.

**Hypotheses Formulation**

**The convergence hypotheses.** The hypotheses were formulated based on five conceptual hypotheses models. The postulation by the convergence hypotheses are in six major areas of health care delivery system. Each of the convergence factor addressed one or more variables of this study. It includes, cost control refer to as affordability in this study and effort to improve efficiency and effectiveness of health services, promotion of health and improvement of health-related behaviors (life style) refer to as demography in this study. These convergence factor covers variable, affordability, efficiency, control and demography of this study. The second factors are basically concerned with, inequalities in health outcomes as well as access to medical care. These factors cover variable equity and access of this study (Mechanic & Rochefort 1996). The hypotheses are supported by Access Pathway model, Health Commodity Hypothesis model, Process Study Model, Community/Cooperative Model Based, as suggested by (Neal, Moira & Paul 1999; (Catherine and John 2000 & Yu-Luen & Mark 2005; Davis & Rowland 1990; Davis, Gold & Makuc 1981; Hurd & McGarry 1997; Secombe & Amey 1995; Short, Monheit & Beauregard 1989; Spillman 1992; Freeman, Aiken, Blendon & Corey 1990; Thomas, Aman & Aviva 2006 & Johannes 2005).

**Stating the Hypothesis.** Relying on the postulation of these models the following research hypotheses were design or formulated:

1. H1: There is no significant Difference between affordable to healthcare Delivery and Safety services to Nigeria and Malaysian Citizens and Ethnic Affiliation.
2. H2: There is no significant Difference between access to healthcare Delivery and Safety services to Nigeria and Malaysian Citizens based on Ethnic Affiliation.

**FINDINGS**

The result on table 1, in the (appendix) showed the results of the analysis to determine the effects of ethnic affiliation and possibility of having access to affordable healthcare and safety services after the introduction of reform in hospital services in the two countries. The analysis answered the hypothesis that there is no difference between healthcare delivery and safety of employees under reform and ethnic affiliation in Nigeria and Malaysia and the alternate affirm the opposites. The results on table 1 (in the appendix) showed that, there was no discrimination in terms of having accessibility to affordable healthcare services as results of the citizen’s ethnic affiliation. The accessibility results in terms of ethnic affiliation showed (F=1.660, P=.116>0.05), signifying that the p-value is higher than 0.05 which supported the assertion that there is no significant discriminatory practices to herald any ethnic group from having access to affordable healthcare services in both Nigeria and Malaysia. To this level ethnic affiliation has nothing to do with having access to an affordable healthcare service if a citizen fail ill in the two countries. Measuring affordability of healthcare services after the reform have made the services
available shows that Ethnic affiliation does not serve as a constrain to having affordable healthcare service with \( F=3.778, M=-.53721 \), supported the null that, there is no significant difference between ethnic group (Igbo and Hausa/Fulani, Igbo and Malay as well as Igbo and Chinese) in both Nigeria and Malaysia in terms of having affordability to better healthcare and safety delivery after the introduction of healthcare scheme reform as shown on Mean and multiple comparison table, on table 2 in the (appendix).

The mean result of individual ethnic group in Nigeria representing the average mean of accessibility to healthcare services showed, Hausa/Fulani ethnic group having 3.4655, Yoruba 3.2260, Igbo 3.3879, and other tribes in Nigeria 3.3874, this showed that in terms of accessibility to healthcare services due to reform in healthcare the Hausa/Fulani ethnic group scored higher mean followed by Igbo and other ethnic groups. The mean average access to Malay is 3.3882, followed by Chinese with 3.3835, Indians 3.4591 and other ethnic groups in Malaysia had 3.1919 tables 2 (See appendix). This result showed that the Indian ethnic group benefitted more to the subsidy provided by the reform in terms of access to healthcare services. The Malaysian resulted having higher mean associated with the Indians is partly attributed to existence of subsidy in the private clinics for those willing to attend by the government. This gave rise to reduction in number of people whose income can afford going to the private to not attend the public clinic, which reduce queue in public clinics and accommodate more of other citizens. Comparing Nigeria to Malaysia showed that other ethnic groups, referring to smaller ethnic group in Nigeria benefited from the cross-subsidization of the reform in addition to the Hausa/Fulani ethnic groups. While the Malaysian others refer to non-Local resident in Malaysia with 3.1919 as the lowest beneficiaries and the Indian smaller ethnic group benefitted more than the Malay and the Chinese second most populated citizens.

The results comparing Nigeria and Malaysia using healthcare and safety delivery and ethnicity showed that one out of the two variables is larger than 0.05, in this case one out of the two variables supported null hypothesis that, there is no significant difference between reform characteristics and ethnic variation in Nigeria and Malaysia. To be precise reform affordability has \( P=.000<0.05 \), this result did supported the null hypothesis that there no significant difference between ethnic variation and affordability of healthcare and safety services in Nigeria and Malaysia. To further elaborate the differences between Nigerian and Malaysian variation in terms of affordable to healthcare services by ethnic affiliation with the mean scores on table 4.6 (appendix) was assessed.

The result of the mean score showed that Hausa/Fulani ethnic having 3.5796 affordable healthcares, Yoruba 3.3792, Igbo 3.0424 and others in Nigeria 3.5010. The mean result for affordability to healthcare by ethnic affiliation through cross-subsidy favored the majority ethnic of the Hausa/Fulani and the Minority ethnic groups in Nigeria. It invariably shows that the reform supported universalistic provision and access to all citizens to have access to affordable healthcare services devoid of discrimination. This may be partly due to the federal system of government operational in the country where states priorities differ, some concentrated on healthcare service delivery, while other states may be education. The result for affordability of healthcare in Malaysia by ethnic affiliation on table 2 showed a mean score of 3.5527 for Malay, 3.6193 for Chinese, 3.5045 for Indians and others score 3.1919 mean in terms of affordability to healthcare services under reform.

The Chinese had the highest mean average affordability of healthcare services in Malaysia, followed by Malay and then Indians, while other ethnic groups outside the dominant ethnic groups were the least of those who can afford healthcare under the present reform probably in the private hospitals and not public. Comparing Nigerian and Malaysian affordability by ethnic affiliation revealed that the major ethnic groups scored the highest mean for affordability specifically Hausa/Fulani and Yoruba in Nigeria and Malay and Chinese in Malaysia. In this case the Igbo’s were the least ethnic group in terms of affordable healthcare, while minority ethnic groups had a moderate affordability as a results of cross-subsidy.
provided by the recent reform in healthcare service provision in both Nigeria and Malaysia where both public and private clinics mutually operate.

DISCUSSIONS

The result of the study conducted by CDC, (2011); Thomas, (2011) showed there is variation in terms of having access and affording healthcare and safety services, between European American and Hispanic as well as Africa American citizens in the US, this trend is presently under CDC’s scrutiny on the way to reduce the variation between the ethnic Americans, Hispanic and Afro-American citizens. The CDC result supported the results obtained in this study with Hausa, Igbo, Yoruba, having more access compared to other small ethnic groups put together in Nigeria and Malay and Chinese having an edge in terms of access and affordability over the Indians and other small ethnic group’s residents in the two countries. The variation in healthcare and safety services is not a developing world problems alone even the most developed countries still faces the problem of access and affordability to a segment of its citizens as depicted by the study of (CDC 2011 & Thomas 2011). While reform to certain level reduces the tally or gap in terms of having access and affording to pay for healthcare services, it invariably if not well coordinated extended the gap between the have and have not (Yahya and Mohamed Khan, 2011)

Summary, Conclusion and Recommendation

The implication of these results showed that, healthcare and safety reform had succeeded in reducing the gap between the have and have not in terms of access to affordable healthcare in both Nigeria and Malaysia. The degree of differences in terms of accessibility and affordability to healthcare and safety services was fully defined by comparing the individual mean average of each ethnic group of the individual countries and the result showed that the success of reform is higher in Malaysia than in Nigeria. The mean score for educational level supporting the low, poor and vulnerable groups to subsidized healthcare services stands as one of the greatest success of the reform. The rich, highly educated and public and private sector employees in both Nigeria and Malaysia’s contribution make it easier for the vulnerable groups to have access to an affordable health services.

The concluding part of these results suggested further studies to define the different degree of access that will be sufficient to be deem enough in each individual country. Study should also be conducted to classify what constitutes an affordable care, using spending by the individual country on health and out of pocket spending by the individual citizen with special consideration to ethnic group affiliation of the individual citizens as a bench mark.

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**APPENDIX**

**Table 1** ANOVA: Reform and Ethnic Group

<table>
<thead>
<tr>
<th>Reform &amp; Ethnic Groups</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acc Between Groups</td>
<td>2.688</td>
<td>7</td>
<td>.384</td>
<td>1.660</td>
<td>.116</td>
</tr>
<tr>
<td>Acc Within Groups</td>
<td>171.701</td>
<td>742</td>
<td>.231</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acc Total</td>
<td>174.390</td>
<td>749</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affor Between Groups</td>
<td>6.564</td>
<td>7</td>
<td>.938</td>
<td>3.778</td>
<td>.000</td>
</tr>
<tr>
<td>Affor Within Groups</td>
<td>184.146</td>
<td>742</td>
<td>.248</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affor Total</td>
<td>190.710</td>
<td>749</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 2**: Mean Average Results for Access and Affordability of Healthcare Services by Ethnic Group and Country

<table>
<thead>
<tr>
<th>Criterion For Nigeria</th>
<th>Ethnic Group In Nigeria</th>
<th>Mean Average Nigeria</th>
<th>Criterion For Malaysia</th>
<th>Ethnic Group</th>
<th>Mean Average Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Healthcare</td>
<td>Hausa/Fulani</td>
<td>3.4655</td>
<td>Access Healthcare</td>
<td>Malay</td>
<td>3.3882</td>
</tr>
<tr>
<td>Access</td>
<td>Yoruba</td>
<td>3.2260</td>
<td>Access</td>
<td>Chinese</td>
<td>3.3835</td>
</tr>
<tr>
<td>Access</td>
<td>Igbo</td>
<td>3.3879</td>
<td>Access</td>
<td>Indian</td>
<td>3.4591</td>
</tr>
<tr>
<td>Access</td>
<td>Other ethnic groups</td>
<td>3.3874</td>
<td>Access</td>
<td>Other ethnic groups</td>
<td>3.1919</td>
</tr>
<tr>
<td>Affordability Healthcare</td>
<td>Hausa/Fulani</td>
<td>3.5796</td>
<td>Affordability Healthcare</td>
<td>Malay</td>
<td>3.5527</td>
</tr>
</tbody>
</table>
Ethnic Affiliation and Access to Affordable Healthcare in Nigeria and Malaysia

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yoruba</td>
<td>3.3792</td>
</tr>
<tr>
<td>Igbo</td>
<td>3.0424</td>
</tr>
<tr>
<td>Other ethnic</td>
<td>3.5010</td>
</tr>
<tr>
<td>Chinese</td>
<td>3.6193</td>
</tr>
<tr>
<td>Indians</td>
<td>3.5045</td>
</tr>
<tr>
<td>Other ethnic</td>
<td>3.1919</td>
</tr>
</tbody>
</table>

Table 3: Cronbach Alpha Test Results for Pilot Study

<table>
<thead>
<tr>
<th>Country Name</th>
<th>Variable Name</th>
<th>Number of Question items</th>
<th>Cronbach Alpha Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nigeria</td>
<td>Affordability</td>
<td>1-10</td>
<td>.732</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Affordability</td>
<td>1-10</td>
<td>.829</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Demographic Characteristics</td>
<td>1-9</td>
<td>.626</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Demographic Characteristics</td>
<td>1-9</td>
<td>.893</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Accessibility</td>
<td>1-11</td>
<td>.478</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Accessibility</td>
<td>1-11</td>
<td>.825</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Equity</td>
<td>1-8</td>
<td>.589</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Equity</td>
<td>1-8</td>
<td>.882</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Efficiency</td>
<td>1-13</td>
<td>.626</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Efficiency</td>
<td>1-13</td>
<td>.950</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Control Mechanism</td>
<td>1-10</td>
<td>.670</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Control Mechanism</td>
<td>1-10</td>
<td>.890</td>
</tr>
</tbody>
</table>

Source: Field Study

Table 4: Group Statistics

<table>
<thead>
<tr>
<th>Location</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>692</td>
<td>3.4677</td>
<td>.51664</td>
<td>.01964</td>
</tr>
<tr>
<td>Rural</td>
<td>58</td>
<td>3.3092</td>
<td>.60210</td>
<td>.07906</td>
</tr>
<tr>
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<td>692</td>
<td>3.4799</td>
<td>.60304</td>
<td>.02292</td>
</tr>
<tr>
<td>Rural</td>
<td>58</td>
<td>3.3774</td>
<td>.68397</td>
<td>.08981</td>
</tr>
<tr>
<td>Urban</td>
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<td>3.6250</td>
<td>.54546</td>
<td>.02074</td>
</tr>
<tr>
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<td>58</td>
<td>3.4957</td>
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<td>.08804</td>
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<tr>
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<td>.47620</td>
<td>.01810</td>
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<tr>
<td>Rural</td>
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<tr>
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<td>.01884</td>
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<td>Rural</td>
<td>58</td>
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<td>.60535</td>
<td>.07949</td>
</tr>
<tr>
<td>Urban</td>
<td>692</td>
<td>3.3146</td>
<td>.50400</td>
<td>.01916</td>
</tr>
<tr>
<td>Rural</td>
<td>58</td>
<td>3.2552</td>
<td>.58913</td>
<td>.07736</td>
</tr>
</tbody>
</table>

Source: Field Study
Business Process Management for an Effective Hydrotherapy System

Keywords: Active Hydrotherapy, Passive Hydrotherapy, Obesity, Quality of Life, Weight Reduction, Malaysia

INTRODUCTION

Today’s tough competitive business environment resulted from rapid variance in technology and globalization, organizations are facing continuous pressure to improve the business process efficiency and effectiveness, the real challenge in bringing change is trade-off issue (Caron & Vanthienen, 2015). Many organisations fail in their attempt to adopt business process management (BPM), (Buh, Kovačič, & Indihar Štemberger, 2015). BPM is the most important topic for many organizations. If adopted successfully, it can add significant value and efficiency to the business processes and improve business performance, productivity and give competitive advantage to organization (Buh, Kovačič, & Indihar Štemberger, 2015; Indihar Štemberger, Bosilj-Vukšić, & Jaklič, 2009; Bai & Sarkis, 2013; Ortbach, Plattfaut, Pöppelbu, & Niehaves, 2011; Hung, 2006). Effective design and execution of BPM is being more important for modern business organizations (Aldin & de Cesare, 2011). BPM has been an effective concept for decades, its strategic role in operation is still important to be investigated with the perspective of Information Technology and Operation Management (Liu, Li & Zhao, 2009; Bititci U, Ackermann, F., Ates, A., Davies, John D., Gibb, Stephen, MacBryde, J., 2011).

The alarming rise in obesity amongst Malaysians has ranked, Malaysia as most obese country in South-East Asia region, and placed sixth in the Asia Pacific (Marilyn, 2011). Cognizant to this, the worldwide obesity rate has also more than doubled since 1980. In 2014, more than 1.9 billion adults, 18 years and older, were overweight. Obesity is a well-established risk factor for cardiovascular disease and recognized as a major factor that determine many other obesity link sedentary lifestyle (non-communicable) diseases (also referred to as NCD) such as cancers, gallbladder diseases, cardiovascular disease, respiratory problems and musculoskeletal disorders (Ashwini, 2008; WHO, 2013). The absence of an effective system to assess and intervene at an early stage of these diseases causes us to rely on ever-more expensive interventions and hospitalizations, which is an economic burden to the healthcare industry and country.

Current study highlights two types of hydrotherapy active and passive. In past researchers have been interrogating hydrotherapy for pain relief, current study interrogate the effectiveness of hydrotherapy in weight reduction and quality of life improvement. Hydrotherapy has been in practice in many Malaysian hospitals for many years. Within the Malaysian government hospital settings, active hydrotherapy is a part of physiotherapy system to treat obesity, especially in child obesity such as hospitals in Sungai Buloh, Temerloh and Alor Star. However, to the researcher knowledge obesity treatment utilising passive hydrotherapy is very new or rather has never been used before in Malaysia. Obesity in Malaysia is increasing with passage of time, though government launched many campaign against obesity but still positive results are not yet achieved. Government of Malaysia has invested in million to install the hydrotherapy system in Hospital but still the obesity disease is not in control.
Current study suggests improvement in the hydrotherapy system and introducing passive hydrotherapy for weight reduction. Findings of this research after several experiments confirm positive results of reducing weight with the use of passive hydrotherapy. Analysis of recent research of hydrotherapy system reveals that there is a significant improvement in the mental health related quality and significant reduction in stress level is observed (Schitter, Nedelj kovic, Baur, Fleckenstein, & Raio, 2015). As pointed out by Cugusi et al. (2015) little is known about the effects of hydro-based exercise on weight reduction and quality of life improvement. Thus, this research is keen to identify the effect of active and passive hydrotherapy on the weight reduction and the quality of life indicators of Malaysian obese subjects.

LITERATURE REVIEW

As defined by Hammer and Champy (1993, p. 85), a business process is a collection of activities whose final aim is the production of a specific output that is of value to the customer. A business process has a goal and is affected by events occurring in the external world or in other processes. Process adheres to any kinds of productive activity of living beings, or mechanical or automatic means which is normally referred to as basic work activities ‘elementary processes’ (Anttila and Jussila, 2013). According to prominent BPM researchers (Ko, Lee and Wah Lee, 2009), BPM is defined as “supporting business processes using methods, techniques and software to design, enact, control and analyse operational processes involving humans, organizations, applications, documents and other sources of information”.

The healthcare system should focus on continuous improvement and in designing and maintaining all processes in order not to waste resources or patient’s time. The health system should be able to use facilities and information effectively to serve the community, conserve resources, monitor costs and quality of care, and manage the system (Snyder, Paulson, & McGrath, 2005). Congruent to this, an effective online database can help the healthcare management to manage the record and health progress of obese patients who participate in Hydrotherapy session. Business process management system is not yet introduced in Malaysian hydrotherapy system. Current study recommends to introduce BPM in hydrotherapy process to make it more effective results oriented. Data from the WHO shows that lifestyle diseases (also referred to as non-communicable diseases - NCDs) caused approximately 63% of all deaths worldwide in 2008 (Hazreen et al., 2014) and almost 80% of deaths in 2008 from NCDs occurred in the low and middle-income countries.

Weight gain and fat storage have long been viewed as signs of health and prosperity in some communities. “As the standard of living continues to rise, weight gain and obesity have emerged as one of the most common and serious nutritional problem confronting many communities” (MASO, 2009). A study which was conducted by Ambady and Chamukuttan (2010) showed that Asians have higher body fat percentage compared with Caucasians.

The rising concern on obesity in Malaysia has initiated several studies on prevalence of obesity in the country. Using the WHO guidelines of BMI ≥ 25.0 for overweight and BMI ≥ 30.0 for obesity, it was reported that in Malaysian adult males, 15.1% were overweight and 2.9% obese while in adult females, 17.9% were overweight and 5.7% obese (NHMS, 1997). Malaysian adult prevalence of overweight and obesity has been reported as the highest in Asian region and at an alarming rate in Asia-Pacific region. Figure 1 shows the prevalence of adult obesity in some Asians country.
According to Sherina and Lekhraj (2009), among respondents of 891 Malaysians, it shows that respondents from the age group of 50–59 years old had higher prevalence of obesity (58.2%) compared to respondents of the 20–49 years old age group (45.6%). There was significant association between obesity and race in this study where the prevalence of obesity was highest among the other races group (Orang Asli, Eurasians and Sikhs) which is at 20 percent.

In today’s time, hydrotherapy effectiveness in treating diseases has been recognized in the area of physiotherapy and occupational therapy (Craig and Kukuh, 2004). Most therapist at present applied hydrotherapy in the rehabilitation programs which is designed to improve neuromuscular and skeletal function. This practice is highly remarkable in physical treatment, especially for athlete rehabilitation programs and hospitalized patients prior to surgical conditions.

Hydrotherapy involves the use of water for pain-relief and treating illness. It is one of the oldest forms of naturopathy treatment. Hydrotherapy exercises are a form of physical therapy performed in water. Water exercise programs are growing in popularity as this type of exercise is typically used to alleviate the stress that regular exercise imposes on the body (Matsumoto, Takasugi, Hotta, Fujishima & Iwamoto, 2004). While anyone can benefit from hydrotherapy, older and heavier people typically engage in these types of exercises, such as the elders, special children and also pregnant women (King, Sallis, Frank, Saelens, Cain, Conway, 2011). They are beneficial especially to those living with pain, injury or other health problems.

Quality of Life is: “an individual’s subjective feeling of well-being as it relates to emotional state, physical functioning, psychosocial attitudes or communication” (Aaronson, 1988). Aquatic exercise has many advantages, because water properties such as resistance, reducing weight and pressure affected on joints. Quality of life is described as general well-being of individuals. Some of important indicators of it include physical and mental health, recreation and leisure time (Figueira A., 2010; Hinman RS, Heywood SE, Day AR, 2007). Aquatic exercise decreases pain and improves quality of life in these patients due to strengthening the muscles around the joint and reducing pressure on it (Figueira A., 2010; Hinman RS, Heywood SE, Day AR, 2007). In South Korea, aquatic exercise training is widely used in recent years (Kang HS.,2008). The results showed that aquatic exercise training has a significant effect on quality of life (Ansari, Elmieh, & Hojjati, 2014). Obese patient normally feel pain in their knee, and obesity also affect their social life. Obesity effect obese patient physical and social life, this study concludes that
hydrotherapy has significant positive impact on quality of life of obese; results are similar to past literature.

METHODS AND MATERIALS

This kind of exercise required warm water, the properties of water add extra benefit to this type of exercise. The concept of therapeutic modality is not a new concept. Its root goes back to Roman and Greek times; people use warm baths and Spas since Roman and Greek times (Levin 1991). Most research is done to identify the effectiveness of hydrotherapy in pain reduction; rare research is done to connect this phenomenon with weight reduction concept. Therefore, this study is aimed to identify the aquatic process role in obese patient weight deduction.

Active hydrotherapy
Active hydrotherapy experiments were done in the Malaysia National University Hospital (HUKM) in Cheras. The pool is of 3 meters wide, 6 meters long and 1.5 meter in depth, with water temperature maintained at about 33°C. The subjects are immersed in the water to about their chest level and subjects are actively moving and performing a programmed exercise in the heated water pool. The exercise procedures are similar to procedures done on dry land, which normally begins with warming up and ended up with cooling down.

The hydrotherapy sessions were programmed by the physiotherapist and initially supervised and organised by a certified hydrotherapist, and each session will typically last for 45 minutes.

![Figure 2a: Active hydrotherapy pool](image1)

![Figure 2b: Typical active hydrotherapy session](image2)

Passive Hydrotherapy
The passive hydrotherapy experiments were performed in a private centre using a spa tub equipped with a portable air compression machine, a mat that is placed at the bottom of the tub that could emit high intensity air (bubbles) at strong pressure through a specially designed connecting hose. The spa tub is typically 1.25 meters in length, 0.7 meters wide and 0.5 meters in depth. The high pressure ozonised air generates high intensity heated water bubbles which are capable of massaging and vibrating the body parts of the subject immersed to about his chest level. The hydrotherapy session is done by oneself upon a very brief explanation by the operator. The subject will be asked to simply relax and enjoy the bubbling water which require very minimal physical movement of turning and toss just as to let the air bubbles reach all of his/her body parts. Within 15 minutes therefore, the subject is being passively exercised by letting the high intensity air bubbles to do the “exercise” activities. The water temperature is typically kept at about 36°C.
Current study used mixed research method to derive accurate and valid results. For quantitative data collection SF-36V2 questionnaire is used. It consists of 5-scale profile of functional health and wellbeing scores as well as psychometrically based physical and mental health summary measures and a preference-based health utility index. SF-36V2 has been documented in more than 4,000 publications (Turner-Bowker, Bartley, and Ware, 2002).

Eight health domain scales:

i. Physical Functioning
ii. Role Physical
iii. Bodily Pain
iv. General Health
v. Vitality
vi. Social Functioning
vii. Role Emotions
viii. Mental Health

Physical Component Summary
Mental Component Summary

Before and after the experiments of active and passive hydrotherapy, a structured interview was conducted, purpose of interview was to know the opinion of subjects about hydrotherapy. Triangulation in term of method is new concept in research era, researcher use this method to validate the results. In this study 8 subjects voluntarily participated, 3 subjects for active hydrotherapy, 3 for passive hydrotherapy and 2 subjects for control group. Quantitative data is analysed with the help of SPSS (VERSION 22), descriptive statistic and Paired sample t-test is used for data analysis. For qualitative data analysis Nvivo software is used, from word search test thematic analysis is done.

RESULTS AND FINDINGS

Active Hydrotherapy
Two subjects fully completed the sessions while the third subject had discontinued with the session due to personal reasons. In the course of active hydrotherapy session, all subjects felt the improvement in their mobility, flexibility and exercise capability. This is consistent with the findings by Cider et al. (2003) that physical training in warm water provides improvement in muscle function and exercise capability in patients with chronic heart failure (CHF). Tables below show the result on Demographic and on SF-36v2 Questionnaire for both pre and post-test of active hydrotherapy sessions for all three subjects.
Table 1: Result of Active Hydrotherapy for Subject 1 and Subject 2

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Subject 1</th>
<th>Subject 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>22/08/2013</td>
<td>20/09/2013</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>83.7</td>
<td>82.3</td>
</tr>
<tr>
<td>Height (cm)</td>
<td>152</td>
<td>156.5</td>
</tr>
<tr>
<td>BMI (kg/m²)</td>
<td>37.2</td>
<td>33.6</td>
</tr>
<tr>
<td>Date</td>
<td>18/11/2013</td>
<td>18/11/2013</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>84.4</td>
<td>82.9</td>
</tr>
<tr>
<td>Height (cm)</td>
<td>152</td>
<td>156.5</td>
</tr>
<tr>
<td>BMI (kg/m²)</td>
<td>37.51</td>
<td>33.85</td>
</tr>
<tr>
<td>Waist Circumference (cm)</td>
<td>100</td>
<td>103</td>
</tr>
<tr>
<td>Waist Hip Ratio</td>
<td>0.84</td>
<td>0.85</td>
</tr>
<tr>
<td>Skinfold – Abdomen</td>
<td>6 cm 19 mm</td>
<td>6 cm 7 mm</td>
</tr>
<tr>
<td>Skinfold – Triceps (R / L)</td>
<td>4 cm 52 mm / 4 cm 11 mm</td>
<td>4 cm 14 mm / 3 cm 7 mm</td>
</tr>
</tbody>
</table>

Table two shows that there is significant positive difference between pre-test and post-test results for quality of life improvement after active hydrotherapy sessions. All subjects reaffirmed that they felt tremendous improvement in their quality of life. Active hydrotherapy helped subjects in body pain reduction, reduced emotional behaviour, improved physical activity and overall improved the general health. Subject 3 withdrawn from the intervention due to personal problems.

Passive Hydrotherapy
On the passive hydrotherapy sessions: soothing, relaxing and calming effects. Subject A further reaffirms that she immediately experienced the “lightness” in her body and felt easier to move around even at the very first passive hydrotherapy session. Table 3 shows, all parameters in passive hydrotherapy showed a

Table 2: SF36v2 Health Survey Questionnaire for Active Hydrotherapy (Subject 1 and Subject 2)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Subject 1</th>
<th>Subject 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical functioning (PF)</td>
<td>21.3</td>
<td>33.9</td>
</tr>
<tr>
<td>Physical role (RP)</td>
<td>20.1</td>
<td>32.4</td>
</tr>
<tr>
<td>Bodily pain (BP)</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>General health (GH)</td>
<td>48.2</td>
<td>35.3</td>
</tr>
<tr>
<td>Vitality (VT)</td>
<td>45.8</td>
<td>42.7</td>
</tr>
<tr>
<td>Social functioning (SF)</td>
<td>40.5</td>
<td>24.1</td>
</tr>
<tr>
<td>Emotional role (RE)</td>
<td>24.8</td>
<td>34.8</td>
</tr>
<tr>
<td>Mental (MH)</td>
<td>35.9</td>
<td>27.5</td>
</tr>
</tbody>
</table>
good percentage of reduction. A good 2.48% reduction in weight is significant because it was achieved within 10 days. An average of almost 6 cm reduction in the waist line is another evident that passive hydrotherapy procedure is worth considered when treating obesity. On the average, the QoL showed improvement both in the PCS and MCS, though a marginal value for the MCS as shown in Table 3. All subjects had very positive feedback.

Table 3: Summary of Analysis and QoL Result of Passive Hydrotherapy

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Subject A (%)</th>
<th>Subject B (%)</th>
<th>Subject C (%)</th>
<th>Average (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight (kg/m²)</td>
<td>-2.69</td>
<td>-2.62</td>
<td>-2.14</td>
<td>-2.48</td>
</tr>
<tr>
<td>BMI (kg/m²)</td>
<td>-2.11</td>
<td>-4.11</td>
<td>-2.53</td>
<td>-2.92</td>
</tr>
<tr>
<td>WC (cm)</td>
<td>-2.91</td>
<td>-7.29</td>
<td>-7.42</td>
<td>-5.87</td>
</tr>
<tr>
<td>WHR</td>
<td>-1.14</td>
<td>-3.96</td>
<td>-13.59</td>
<td>-6.23</td>
</tr>
<tr>
<td>PCS</td>
<td>+3.2</td>
<td>+3.5</td>
<td>+2.4</td>
<td>+3.03</td>
</tr>
<tr>
<td>MCS</td>
<td>+2.0</td>
<td>+3.7</td>
<td>-0.8</td>
<td>+1.63</td>
</tr>
</tbody>
</table>

Note: - indicate reduction

Table 4: Paired Sample t-Test Results

<table>
<thead>
<tr>
<th></th>
<th>Active Hydrotherapy Paired sample-test (p) Value</th>
<th>Passive Hydrotherapy Paired sample-test (p) Value</th>
<th>Controlled group Paired sample-test (p) Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of Life Weight Reduction</td>
<td>0.031</td>
<td>0.042</td>
<td>0.894</td>
</tr>
<tr>
<td>Weight Reduction</td>
<td>0.038</td>
<td>0.027</td>
<td>0.95</td>
</tr>
</tbody>
</table>

Table 4 shows the results of Paired Sample t-test, results reveal there is significant difference between pre-test and post results of active hydrotherapy, passive hydrotherapy as value of p is below 0.05. Table 4 shows that significant difference is not observed for pre-test and post-test of controlled group, as value of p is not less than 0.05.

Qualitative Data Analysis

Figure 5 shows result of text search query, purpose of this search was to get idea about most appearing words in all interviews. After analysis, themes were created based on the perception of interviewee (see table 5).
Table 5: Data Matrices and Pattern Matching before Hydrotherapy

<table>
<thead>
<tr>
<th>Themes</th>
<th>Interviewee 1</th>
<th>Interviewee 2</th>
<th>Interviewee 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knee Pain</td>
<td>Complained of soreness at the knee and leg, pain in knee</td>
<td>Pain in joints of bones</td>
<td>Feel pain in body</td>
</tr>
<tr>
<td>Walk</td>
<td>Cannot walk for long way, difficult to go upstairs, feel backache while climbing stairs</td>
<td>Difficult to walk, breathlessness after fast walk</td>
<td>Difficult to walk</td>
</tr>
<tr>
<td>Blood Pressure</td>
<td>High Blood pressure</td>
<td>High blood pressure complain</td>
<td></td>
</tr>
<tr>
<td>Refreshment and Happiness</td>
<td>Never feel fresh</td>
<td>Fear from Health condition</td>
<td>Feel shame for heavy weight, reluctant to join social activities and depressed</td>
</tr>
<tr>
<td>Body Weight</td>
<td>Feel heavy body</td>
<td>Feel heaviness when walk</td>
<td>Feel heaviness</td>
</tr>
</tbody>
</table>

Table 6: Data Matrices and Pattern Matching after Hydrotherapy

<table>
<thead>
<tr>
<th>Themes</th>
<th>Interviewee 1</th>
<th>Interviewee 2</th>
<th>Interviewee 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>No pain in knee and body, easy to climb stairs,</td>
<td>Joint Pain reduced</td>
<td>Body pain reduced while walking</td>
</tr>
<tr>
<td>Relax</td>
<td>Feel relax</td>
<td>Feel relax</td>
<td>Feel excited and relax</td>
</tr>
<tr>
<td>Walk</td>
<td>Feel easy to walk</td>
<td>Easy to move</td>
<td>Easy to walk</td>
</tr>
<tr>
<td>Blood Pressure</td>
<td>Blood pressure reduced</td>
<td>Blood Pressure reduced</td>
<td></td>
</tr>
<tr>
<td>Refreshment and Happiness</td>
<td>Feel Happy, fresh</td>
<td>Feel Excited, best way for exercise and safe way</td>
<td>Fresh, and back to normal life</td>
</tr>
<tr>
<td>Body Weight</td>
<td>Body weight reduced up to 2.5 KG. Not feel heaviness</td>
<td>Weight reduced and feel light</td>
<td>She believes that Passive Hydrotherapy is way to reduce weight</td>
</tr>
</tbody>
</table>

Figure 5 shows results of text search query, extracted from Nvivo software. Figure shows that after hydrotherapy sessions improvements have been observed by all subjects. Hydrotherapy has made obese subjects life happier and given them a hope to lose the weight and to come back in the normal life. After searching text via Nvivo, coding process was completed. Based on the coding thematic analysis of each interview is completed. Interviewees affirm that active and passive hydrotherapy improved their quality of life, in term of freshness, low blood pressure and less pain in body.

CONCLUSION AND RECOMMENDATION

The Star online news (Thestar.com.my, 2014) and BBC News in June 2014 reported that Malaysia has been rated to be the highest in obesity in Asian region (BBC News, 2014). Statistically, in Malaysia 49% of women and 44% of men were found to be obese. 5.2.1 Active Hydrotherapy. Results reveal active hydrotherapy is effective in skin-fold fat reduction and quality of life improvement. However, weight not reduced in active hydrotherapy but significant reduction is observed in body fat, which is positive sign for good health. In passive hydrotherapy, significant weight reduction is observed and quality of life is also improved. This shows hydrotherapy is an alternative source for weight reduction and quality of life improvement for obese subjects. There are several methods for weight reduction like medical treatment,
surgery, medication etc, compare to all these sources hydrotherapy is most easy, safe and economical source of weight reduction.

Based on the findings of current study, it has been observed that hydrotherapy (active and passive) have positive impact on the quality of life improvement. Qualitative results of current study support the quantitative data results, obese subjects mentioned that they were feeling pain in knee and their social life was disturbed due to heavy weight. After hydrotherapy sessions all subjects felt relax and body pain also reduced. Therefore, this research concludes that hydrotherapy is one of the effective treatments for obese subjects, which helps in weight reduction and improve in the quality of life.

This study extends body of knowledge of Hydrotherapy concept, before current study researchers did not analyse the role of hydrotherapy in weight reduction, current study proven that hydrotherapy is also source of weight reduction. As Malaysia is suffering with obesity problem, current study provides a framework to reduce obesity ratio. Thus, current study can be practically followed by obese subjects. This study used mixed research method, which can be considered a methodological contribution to hydrotherapy concept.

Based on the results this study suggests few recommendations for Ministry of Health Malaysia to concentrate on hydrotherapy system, use Mobile health unit for passive hydrotherapy that can be an effective source for awareness about hydrotherapy. Mobile health unit can cover sub urban and rural area of Malaysia.

<table>
<thead>
<tr>
<th>BPM Elements</th>
<th>Suggestions for health authorities</th>
<th>Suggestions for Hydrotherapy Procedure</th>
</tr>
</thead>
</table>
| Analyse      | Analyse the policy of obesity treatment | • Analyse the cause of obesity  
• Analyse the treatment most suitable to the patients. (determine the policy if treatment) |
| Re-design    | Re-design the present procedures | Re-design the treatment/procedure if the procedure failed |
| Implement    | Implement the new policy  
Monitor the:  
• Implementation  
• Program of treatment | Implement the new policy  
Monitor the:  
• Program of obesity treatment  
• Schedule of the treatment |
| Manage       | Manage the program & the people involved in the program | • Keeping records  
• Taking control of the results |
| Automate     | Continuously looking for betterment of the policy/program/procedure through research | Make the routine of the program as a good habit to the patients. As mentioned in Chapter 2, currently majority of healthcare sectors utilizing software for maintaining the record and for effective treatment. Therefore, for effective Hydrotherapy process management software/database can help to manage this system effectively |
| Communication| Communication between authorities and patients through campaigns | Communicate and discuss the progress of the patients, etc |
| Continues Improvement | With respect to rapid changes in technology and new viruses appearance in our environment force | For effective hydrotherapy continues improvement in the system make this process more effective and result oriented |
Based on above discussion, it has been observed that BPM can really contribute to Malaysian hydrotherapy system, if BPM is implemented in the hydrotherapy system it will enhance the process of hydrotherapy and this system will become goal oriented. Government already invested in hydrotherapy system, but still the goal of this system is not achieved, an effective strategy is required to modify the process of hydrotherapy.

This research was conducted with great consideration and researcher tried to cover all aspects of hydrotherapy. Still there are few limitations in current study. The major limitation of this research was to conduct the experiment at the government hospitals, which is the main public access in seeking obesity treatment. This may be due to the reasons of confidential of data or may be due to patient’s reluctance to participate in hydrotherapy session. Further data can be analysed with different statistical tools.

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A Visual Framework for Identifying Sources of Unnecessary Regulatory Burdens on Business

**Keyword:** Unnecessary Regulatory Burdens, Enforcement, Conceptual Studies

**INTRODUCTION**

Regulation is a key mechanism for attaining the social, economic and environmental policy objectives of a government (ANOA, 2014). Regulators administer regulations. They are government ministries, agencies, or organisations that are empowered by legislation to administer and enforce the regulation. Regulators ensure that regulated businesses comply with the regulations. A regulated business complies with regulations through regulatory instruments such as licence, permit, registration and notification.

The definition of regulation used in this thesis (ANAO, 2014, p. iv): “The administration of any rule put in place with government authority where there is a reasonable expectation of compliance. Regulation is intended to influence or compel a particular behaviour by business and the community and includes legislation, regulations, quasi-regulations, such as industry standards and codes of practice, industry/government agreements, accreditation schemes and international treaties to which the government is a signatory.”

Occasionally, businesses experience regulatory burdens or red tapes when dealing with regulators (HLGAB, 2014; Swedish, 2010). Examples of regulatory burdens include multiple interactions with regulators, delay in obtaining permits, high amount of fees, prescriptive regulatory requirements and overlapping requirements with other regulations. Some of the regulatory burdens are necessary, and business has to comply with them. However, some are unnecessary. Governments all over the world initiate programmes to reduce regulatory burdens or red tapes (Hilmer, 2013). The primary objective of the programmes is to improve public service delivery and the environment to do business (GTZ & Mesopartner, 2010).

Bozeman (2000) defined compliance burden as total resources actually utilised in complying with the rule. Bozeman regarded compliance burden as the direct cost of regulation, which is a part of the total regulation cost. The total regulation cost constitutes the cost of compliance burden, implementation burden, regulation formulation and opportunity cost imposed by the regulation. Regulators undertake the implementation burden, and regulated businesses bear the compliance burden.

Djankov, McLiesh and Ramalho (2006) conducted a research on regulations governing business activities, which is a major determinant of growth. Data was collected from 135 countries in seven regulatory areas. The areas are starting a business, registering property, hiring and firing workers, getting bank credit, enforcing contracts in court, protecting equity investors and closing a business. The research concluded that there is a consistent relationship between more friendly business regulations and higher growth rates. Djankov et al. (2006) suggested that countries should improve their business regulations when creating growth policy.
Bozeman’s (1993) definition of red tapes which is widely used by academicians is rules, regulations and procedures that require compliance but do not meet the organisation’s functional objective for the rule.

Regulatory burdens can also result from inefficiencies in communication and information exchanges among stakeholders (GTZ & Mesopartner, 2010). Many literatures describe regulatory burdens as creating adverse effects. However, Kaufman (2015) also introduced the notion of “beneficial red tapes” together with “negative red tape”. According to Bozeman and Feeney (2011) the number of regulations does not cause red tapes, instead regulations that consume resources and do not meet the intended objectives were the contributors.

The good regulatory design minimises unnecessary regulatory burdens on business (AGPC, 2009). Best practice regulation applies the lowest necessary regulatory burdens to business to achieve the policy goals. Hence, it maximises the net benefits to the business.

Sources of Unnecessary Regulatory Burdens
A small number of literatures discussed the sources of unnecessary regulatory burdens or red tape. Bozeman and Feeney (2011) has developed a model of red tape and its determinants. The model was derived from Bozeman’s theory of red tape (Bozeman, 1993; Bozeman, 2000).

Bozeman and Feeney (2011) described that red tape can occur at the same time rules are created. In addition, rules can also become red tape over a period. The former is referred to as “rule-inception red tape” and the latter as “rule-evolved” red tape. In this thesis, rules are assumed to include acts, regulations, procedures and other regulators’ regulatory instruments. The term rules will be used interchangeably with the term regulation in this thesis. The theory assumes rules to have a behaviour requirement of rules formation, implementation plan, and enforcement mechanisms.

A good description of sources of unnecessary regulatory burdens is given in the Australia’s Government Productivity Commission report (AGPC, 2009). We utilised the definition in his research.

Unnecessary regulatory burdens are derived from a number of sources. The three broad categories are (AGPC, 2009):

i. Problem with regulations themselves;
ii. Poor enforcement and administration; and
iii. Unnecessary duplication and inconsistency.

The first category is the problem with regulations themselves. It comprises of unclear or questionable objectives, conflicting objectives, overly complex regulation, excessively prescriptive regulation, redundant regulation, and regulatory creep. The second category, poor enforcement and administration; is made of excessive reporting and recording requirement, inadequate resourcing of regulators, overzealous regulation and regulatory bias.

The third category is the unnecessary duplication and inconsistency. Duplication of regulation, inconsistency in regulation, and variation in definition and reporting requirement are sources of regulatory burdens in this category.

A summary of the sources of regulatory burdens or red tape as described by Bozeman and Feeney (2011) and AGPC (2009) is illustrated in Table 1.

Table 1 omitted but would have been here
Identification of Sources Unnecessary Regulatory Burdens on Business

In Australia, extensive consultation activities with the regulated business including chambers of commerce and business associations from various industries were performed in identifying unnecessary regulatory burdens (COAG, 2012). Interviews, focus group discussion and survey were among the activities. They were time-consuming and costly.

Small businesses were concerned about regulations that are overbearing and lacking in understanding of the industry. The businesses were also concerned about the variations the same regulation being implemented across the country. Duplication of regulatory requirements irritated them. The use of information technology such as web-based solutions that could reduce reporting and compliance burdens was limited. Small businesses experienced an increase in paperwork and information compliance obligations.

A number of studies have been carried out to access regulatory burdens or benefits on business. Kitching and Smallbone (2010) have categorised the studies into four types. They are perception surveys, compliance cost studies, qualitative studies and cross-national surveys.

In opinion surveys, business owners were asked about their knowledge whether regulations burden them (Carter, Mason, & Tagg, 2009; Mason, Carter, & Tagg, 2006). Many of business owners agreed that regulations burden them. Some studies have suggested that the stated effects are overstated (Allinson, Braidford, Houston et al., 2005). Respondents provided data for an explanation of regulatory effects, but do not themselves constitute a reason (Silverman, 2011).

There are a number of studies that focus on compliance cost. The primary focus of the studies is on quantifying the costs of compliance (Chittenden, Kauser, & Poutziouris, 2002; Crain and Crain, 2010; Lancaster, Ward, Talbot et al., 2003). Compliance costs constitute the labour time costs associated with the regulatory compliance activities. Examples of the activities include discovering, interpreting and complying with regulations, recording information and reporting to the regulator.

Regulation has been argued to raise the substantive, administrative and psychological costs to businesses, deterring start-up, investment and innovation, and ultimately impeding growth (Chittenden, Kauser, & Poutziouris, 2005). Studies on compliance costs have highlighted the importance of the financial, time and psychological costs related to compliance.

Cross-national surveys were conducted to explore whether regulations could be associated with macro-level economic indicators such as business entry rates, productivity and growth (Caballero, Cowan, Engel et al., 2013; Capelleras, Mole, Greene & Storey, 2008; Djankov et al., 2002; Djankov, 2009; Klapper, Laeven & Rajan, 2006). The regulation was proxied using indicators constructed from the World Bank’s database or other similar databases. The surveys found that regulations correlated with adverse macro-level outcomes.

Qualitative studies have examined the dynamic influence of regulation on business decision-making and competitiveness (Arrowsmith, Gilman, Edwards et al., 2003; Ram, Edwards, & Jones, 2007). These studies provide deeper micro-level insights compared to other types of study by showing how small business agents (i.e. owners, managers and employees) possess varying level of awareness about regulation, interpret and adapt to regulation in varying degrees. Qualitative studies are useful for the heterogeneity of the agents’ responses to regulation and the influence of stakeholders on the small firm’s performance.
Edwards, Ram and Black (2003) concluded that regulations often exert only a limited impact on small businesses. Most firms can adapt to regulation by absorbing any additional costs or passing them on to customers.

The indirect impacts of unnecessary regulations due to inefficient regulations affect business productivity. It distorts the allocation of resources. Inefficient regulations could also increase prices, impede employment growth and reduce the flexibility of small businesses to respond to change.

Reducing regulatory burdens foster entrepreneurship. An empirical research finding has confirmed that countries, where entrepreneurs can register their business quickly, have seen more entries in industries that experienced an increase in global demand and technology shifts (Ciccone, 2007).

**Visual Framework**
Visual helps to facilitate practices in situations such as learning, meeting, analysis, design, operation, innovation, decision-making and strategic planning (Sibbert 2010, 2013; Rohde 2013, 2015; Paddrik, Haynes, Todd, Beling & Scherer, 2014; Kaplan & Norton, 2004; Pichlis, 2014; Kumar, 2013).

Kaplan and Norton (2004) have developed a Strategy Map, which provides a visual framework for an organisation’s strategy. The strategy map links the desired productivity with growth outcomes, customer value proposition, outstanding performance in internal processes and capabilities required from intangible assets. The strategy map captures the organisation strategy in visual form. It facilitates managers in executing the desired strategy.

Pichlis (2014) demonstrated the visualising and prototyping in his works on the utilisation of service design tools to support the evolution of a service concept. The study examined a multidisciplinary service design project that developed a solution for communicating the sustainability of meals. Passera, Karkkainen and Maila (2012) have developed a visual of the service prototyping practical framework.

**Problem Statement**
A problem statement is a statement of issues that are under further investigation (Sekaran, 2003). This research aims at addressing the problem of identifying the sources of unnecessary regulatory burdens on business by regulators. For example, based on current regulations that regulate a petrol station business, what would be the possible unnecessary regulatory burdens on the petrol station? Can a regulator’s staff indicate sources of unnecessary regulatory burdens?

The lack of literatures on this thematic topic restricts we from providing the evidence to validate the problem statement. Our experience in the field indicates that there is a real need for the problem to be researched in greater details.

In conducting the research, we have to understand the current practices in the identification process carried out by a regulator's staff. We plan to perform a series of iterations together with the staff that will lead to the development of a visual framework that is useful to them.

The solution to the problems should make it easier for a regulator’s staff to identify the sources of unnecessary regulatory burdens on business using the recommended visual framework. We plan to explore the possibility that the sources of unnecessary regulatory burdens could be detected by using the proposed visual framework.

**Research Questions**
The primary functions of research questions are to explain what the study intends to learn or understand (Maxwell, 2003). The research problem leads us to the following research questions:
i. How do a regulator staff currently identify the sources of unnecessary regulatory burdens on business for a given business entity?

ii. How to develop a framework for identifying the sources of unnecessary regulatory burdens on business?

iii. How to design a visual identification framework?

iv. How useful is the visual framework for identifying the sources of unnecessary regulatory burdens on business by a regulator’s staff? In other words, how would the visual framework improve work practices of a regulator’s staff?

**Research Objectives**

The overall objectives of the research are:

i. To understand how a regulator staffs identify the sources of unnecessary regulatory burdens.

ii. To propose a framework for identifying the unnecessary regulatory burdens on business. The framework aims at improving the regulators’ work.

iii. To design the visual identification framework.

iv. To document and analyse the results of an intervention program in order to increase the usefulness of the visual framework in identifying the sources of unnecessary regulatory burdens.

v. To contribute lessons learned and observations made in developing a visual framework for identification of sources of unnecessary regulatory burdens.

**Significance of the study**

The success in identifying and reducing the unnecessary regulatory burdens on business reduces compliance cost. It helps improve ease of doing business. It also enhances the efficiency of the regulators’ service delivery.

Hilmer (2013) reported that the red tape cost is substantial. For example, the United Kingdom’s Gross Domestic Product is about 3 trillion British Pound. Assuming that the percentage of the estimated government red tape is maintained at 0.29% (Table 2), the value of the red tape is about 8.7 billion British Pound.

Table 2 omitted but would have been here

Businesses could use the cost saving towards further enhancing their business. For example, they could invest in value-adding activities such as new product development and marketing (Chittenden, Kauser, & Poutziouris, 2002; Crain & Crain, 2010). Similarly, regulators could also save on their operating cost as a result of the efficiency of their service.

**RESEARCH METHODOLOGY: ACTION RESEARCH MODEL**

Many literatures suggest Kurt Lewin as the pioneer in Action Research (AR) works (Kemmis & McTaggart, 1990; Zuber-Skerrit, 1992; Holter & Schwartz- Barcott, 1993; Reason, 2001). Lewin’s central AR idea is “studying things through changing them and seeing the effect” (Sandford, 1970).

AR uses several cycles of investigation to reveal the solutions to problems in a particular situation and localised settings (Stringer, 2014). An AR sequence constitutes diagnosing, action planning, action taking, evaluating and specifying learning (Figure 3.2). AR is a collaborative approach to an inquiry. It enables people to perform a systematic action to resolve specific problems. In short, AR is “learning by doing”. Dick (1999, 2000) is an excellent on-line reference for AR.
AR is suitable for postgraduate research work (Phillips, 2014). Perry and Zuber-Skerrit (1991, 1992) have produced the guidelines for AR for postgraduate research. They also included a discussion on the thesis writing for AR based research.

Dick (1999) has described how AR could be used and reported for a dissertation. The candidate’s independent thesis research and writing comprise of four main phases, which are planning the thesis, acting in the fieldwork, observing and evaluating the fieldwork and reflecting on the results of the fieldwork in the light of the literatures and the researcher’s theoretical framework. This reflection should lead to the argument and contribution of the thesis to the knowledge in the field.

Professionals who want to use research to improve their practices tend to choose AR (Denscombe, 1998). Krathwohl (1998) reiterated that the objective of AR is to find improvements to practical problems, making AR a suitable approach to solving practical everyday problems. The summary of the studies of research on the factors that attract practicing managers to use AR in their works is described in Sankaran and Tay (2003).

The factors include:

i. It uses action as an integral part of the research and integrates with thought.
ii. It is focused on the researcher’s professional values instead of methodological considerations.
iii. It allows practitioners to research their activities.
iv. It helps improve practices at the workplace of an organisation.
v. It helps managers in their professional development. It examines their beliefs and practices.
vi. It helps managers to be multidisciplinary. They work across technical, cultural and functional boundaries.
vii. It helps managers in implementing change effectively. Managers involved are participants in the change process. It pursues changes in action and understanding through research.
viii. It is problem-focused, context-specific and future-oriented.
ix. It helps in developing a holistic understanding.
x. It can use a variety of data collection methods.

Our proposed AR model is as shown in figure 1. We started with AR cycle one on the literature review based on the formulated problem statement and research questions. Subsequently, we carried out few AR cycles in the core AR project. The second AR cycle was developing the baseline or understanding on how the regulator’s staffs identify the sources of unnecessary regulatory burdens. Based on the evaluation of the AR cycle two and other sources of information, we developed the initial visual framework.

We carried out the subsequent series of the AR cycles. They are focus group discussion with senior staffs, two interviews with regulatory experts to gather their feedbacks on the developed visual framework. These were followed by a focus group with the same sample of junior staff to use the developed visual framework. The final AR cycle will be the thesis writing, which documents the entire research work.

Figure 1 omitted but would have been here

THE RESEARCH’S OUTPUT: THE KICM VISUAL FRAMEWORK

The output of the study was a visual framework for identifying sources unnecessary regulatory burdens on business. The overall framework, is known as KICM Visual Framework, provides the guidance or method for a regulator staff to identify sources of unnecessary regulatory burdens. Figure 2 shows the KICM Visual Framework.
The design philosophy behind the framework is to look at regulatory compliance from business perspectives. Information on business activities is gathered and correlated with regulatory instruments that the business encountered. For each regulatory instrument, unnecessary regulatory burdens are identified. Finally, the unnecessary regulatory burdens are mapped with 12 sources of unnecessary regulatory burdens.

Figure 2 omitted but would have been here

The Step 1: KNOW (K) prepares regulators’ staff on the knowledge of regulatory glossary, regulatory burdens, unnecessary regulatory burdens, and what are good regulations. Good regulations encompass information about good and bad regulations, and good and bad administration and enforcement of regulation. The information is provided in the form of visual templates.

The Step 2: IDENTIFY (I) provides visual templates to identify business activities, regulatory instruments, regulators and regulations, and information obligation. It is important to understand about business activities. Some of these activities require complying with regulations. For example, a business has to apply a permit to import a particular product or apply for advertisement license for before the business can put up a billboard.

The Step 3: CHECK (C) provides visual templates for the staff to check whether acts, regulations and guidelines are transparent. What is meant is easily available for access from a website or publish documents. A visual template, step 3b, requires staffs to check whether regulatory instruments are transparent. Also, the staffs are required to check on a number of procedure or interaction between business and a regulator in using the regulatory instrument, processing time, the amount of fee imposed and compliance cost to the business. Finally, a visual template provided to check about information obligation with regards to transparency, some procedures, processing time by regulators, fee and compliance cost.

The Step 4: MAP (M) provides visual templates to allow staff to map unnecessary regulatory burdens according to its sources. Currently, 12 sources unnecessary regulatory burdens have been identified and divided into two categories namely ‘Problem with Regulation Themselves’ and ‘Poor Enforcement and Administration’ as shown in figures below.

Sources of unnecessary regulatory burdens on business due to problems with regulations themselves are unclear or questionable objectives, conflicting objectives, overly complex regulation, excessively prescribed regulation, redundant regulation, regulatory creep and inconsistency of regulation (Figure 3). Meanwhile, sources of unnecessary regulatory burdens resulting from poor enforcement and administration of the regulations are excessive reporting and recording requirement, inadequate resourcing of regulators, overzealous regulation, regulatory bias or capture, and variations in definitions and reporting requirements (Figure 4).

Figure 3 omitted but would have been here

Figure 4 omitted but would have been here

In Step 2A, a regulator staff use the visual template to list out business activities for a given business. For example, an architect firm’s business activities include company registration; obtain development order and getting building plan approval from local councils (Figure 4). The source of business activities can be gathered by interviewing architects, architects and regulators websites. It is important that the business activities are comprehensively gathered because most of these activities required the business to comply
with regulations through regulatory instruments. Examples of regulatory instruments include license, permit, registration, notification and inspection, which need to be obtained from various regulators.

Step 2B and 2C use a single visual template to facilitate the identification of a regulatory instrument, regulation and regulator, for each business activity (Figure 6). For example, an architect requires building plan approval from local council. The corresponding regulatory instrument is building plan approval, which is a permit. The permit is issued by a local council where the building is going to be constructed.

Figure 5 omitted but would have been here

Figure 6 omitted but would have been here

The final step in Step 2, Step2D, is the identification of information obligation for each regulatory instrument. Typically, every regulatory instrument has a checklist of information that needs to be submitted by a business. This checklists or requirements are call information obligations. For example, for a building plan submission, an architect firm needs to submit the building layout plan, land title and other information. The architect firm needs to get a certified copy of the land title from a land office. This process incurs the cost to business such as cost to travel to the land office and purchases the certified copy of the land title.

Figure 7 omitted but would have been here

Step 3A is a mapping process between regulations and sources of unnecessary regulatory burdens on business. Each regulation is tested with the sources. At the end of the mapping process, we should be able to compiles regulations with unnecessary regulatory burdens.

Figure 8 omitted but would have been here

Figure 9 omitted but would have been here

The step 3B and 3C’s main objective is to measure the burdens in various parameters (Figure 9). They are transparency, the number of procedures, regulator’s processing time, the fee charged by regulators and compliance cost to the business. This process enables us to quantify the regulatory burdens to business. The total regulatory burdens on a specific business could be determined with the identified cost multiply with the volume of transactions for each regulatory instrument. In many studies, the regulatory burdens are calculated at the first level or immediate level of regulatory instrument. However, the information obligations demand and cause additional regulatory burdens to business.

The step 4A (Figure 10 and 11) summarises some sources of unnecessary regulatory burdens by categorising them into two category namely problems with regulations themselves, and poor enforcement and administration of regulations. Once summarized, we could know which sources of unnecessary regulatory burdens faced by a business. With the information, the regulator should be able to analyse further the sources and come out with solution objectives and options to solve or minimise the regulatory burdens.

Figure 10 omitted but would have been here

Figure 11 omitted but would have been here
THE RESULT OF USING KICM VISUAL FRAMEWORK

The research conducted by us involved a small number of samples (AR cycle 2). Four junior staffs of a regulator were interviewed, one person at a time, at the beginning of the research to find out their understanding of unnecessary regulatory burdens. The staffs have been involved on some regulatory burdens project at the organization for the last 18 months. We noticed all four junior staffs could only manage to identify between four to five sources of unnecessary regulatory burdens. In most of their projects they participated, make use of engagement with business to find out regulatory issues or burdens encountered by business.

At the end of the AR cycle, the four junior staffs were called to participate in a workshop to use the visual framework for the first time. Prior to the workshop, the staffs have no knowledge about the visual framework. The workshop ran for three hours. At the end of the workshop, we have a discussion session with them. They can know and identify more sources of regulatory burdens by using the KICM Visual Framework.

The most significant feedback from the staffs was they understood the relationship between business activities and regulatory instruments. The also pointed the visual framework enhances their understanding of sources of unnecessary regulatory burdens. Most of them recommend the visual framework should be used to understand a business and its related regulations and regulatory burdens prior to their engagement with business. The understanding will help them prepare themselves and ensure all aspects of regulations that regulate business activities are covered in the engagement session.

CONCLUSIONS

The research has produced the KICM Visual Framework for identifying unnecessary regulatory burdens on business by going through some action research cycles. The visual framework was further refined with the inputs from the regulatory experts interviewed. Finally, the KICM visual framework was tested with the same samples and proven to facilitate the samples in identifying sources of unnecessary regulatory burdens on business. Although the number of samples is small, the research can be further investigated to

The KICM Visual Framework is also noted could be a potential learning tool for regulators’ staffs to study about regulatory burdens and, in particular, unnecessary regulatory burdens. The visual framework could structure and accelerate the learning process of regulators’ staffs. Eliminating or minimizing unnecessary regulatory burdens would enhance business productivity and a significant amount of saving from unnecessary compliance cost could be used by business to expand the business.

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Fisheries Subsidies and Overfishing In Malaysian Fisheries

Keywords: Fisheries subsidies, Overfishing, Malaysian Fisheries, Marine Resources, Malaysia

INTRODUCTION

Subsidies to the fisheries sector in Malaysia has existed for many years. Various categories of subsidies have been provided to the fisherman in Malaysia which include fuel subsidy, monthly allowance, fishing equipment, installation of the Automatic Identification System on fishing boats, build a jetty for fish landing, construction of fishing boats, direct capital grants for port improvements, creation of marine protected areas, artificial reefs and special housing fund to build and refurbish houses of fisherman’ (LKIM, 2014).

Various types of subsidies can contribute to the well-being of fishing communities. However, subsidies may contribute to capacity enhancement of fisheries sectors contribute to overcapacity and create the situation depletion of fishery stocks (Clark, Munro, & Sumaila, 2015; Lindebjerg, Peng, & Yeboah, 2015). Some peoples were concerned about sustainability of fishery resources, especially on the impacts of these subsidies on fishery stock. In their opinion, fishery subsidies that can be harmful to sustainable fishery such as fuel subsidy and construction of fishing boats should be banned. These groups against all types of harmful subsidies because they hope the fishery stocks will be remain healthy and effective management are being practiced. They said policy makers should practice good fishery management, which included count their fish stocks, doing science-based limits on capture and bycatch, count their fishing boats, using licenses and fishing right to limit fishing capacity, and enforce the rules.

Government should encourage subsidies that will add value to the fishing products such as processing plants and fishery marketing channels. It was important for the Government to ensure that fishery manages effectively before they are giving financial assistance to the fishing community. Fishery industry, government and consumers must realize that fishing industries are now at the unsustainable level, and needs for controlling of subsidies should be given a main priority. Discipline in fishery subsidy is extremely important because a large part of our future life depended on the oceans. The subsidy should redirect towards enhancing fish-stock, or towards restoring fish-stock. The government should recognize the problems and identifies solutions for the problems of fishery subsidies (Ofori-Danson, Sarpong, Sumaila, Nunoo, & Asiedu, 2013; Steenblik, 1998).

One of the important factors that researchers’ concern with subsidies is that the impact of this policy on the behavior of the individual, firm or industry. Since subsidies will reduce the cost of operation or make the operation more efficient. In the context of fisheries, increased profits will generally lead to an expansion in the fishing activities. In the context of fisheries, increased profits will generally lead to an expansion in the activity of the industry and, if the effect is strong enough, ultimately to the decimation of the fish stocks.
Subsidies play two additional roles: to the degree that they stimulate fishing, they may also increase the national income of the nation. As long as the fishery is underdeveloped, i.e. as long as fishing is at a level less than that which can be safely sustained, then subsidies which encourage fishing may be useful.

MALAYSIAN GOVERNMENT EXPENDITURE ON SUBSIDIES

Overall, reliable data on impact of fisheries subsidy schemes on a small scale and artisanal fishing communities are scarce. In Malaysia, LKIM estimate that the government spent about 715 million on fisheries subsidies in 2012 (Table 1). Among the subsidy components, fuel subsidy accounts for more than 66 percent (RM473.9 million) of the total value of subsidies in the year 2012.

Living allowances are the next highest subsidy which accounts for 24 percent (RM172.8 million). The purpose of living allowances was to address the issue of unstable income among fishers, especially during the monsoon season, as well as in a less conducive environment in fishing villages. For the year 2015, the Malaysian government has increased the living allowance for fisher in Zone A to RM300 from RM200 a month. For the fisher in Zone B and C, the living allowance will be increased to RM250. This policy certainly will increase the government expenditure on the fishery sectors.

Table 1: Malaysian Government Spending on Subsidies, 2011-2012

<table>
<thead>
<tr>
<th>Type of subsidy</th>
<th>2011</th>
<th>2012</th>
<th>Classification</th>
<th>Valuation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount RM (millions)</td>
<td>Percentag e</td>
<td>Amount RM (millions)</td>
<td>Percentag e</td>
</tr>
<tr>
<td>Fuel Subsidy</td>
<td>445.9</td>
<td>66.79</td>
<td>473.9</td>
<td>66.32</td>
</tr>
<tr>
<td>Living allowances</td>
<td>82.9</td>
<td>12.42</td>
<td>172.8</td>
<td>24.18</td>
</tr>
<tr>
<td>Catch Incentives</td>
<td>53.1</td>
<td>7.95</td>
<td>63.7</td>
<td>8.91</td>
</tr>
<tr>
<td>Other Support Programs</td>
<td>69.3</td>
<td>10.38</td>
<td>4.2</td>
<td>0.59</td>
</tr>
<tr>
<td>Infrastructure Development</td>
<td>16.43</td>
<td>2.46</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Total</td>
<td>667.63</td>
<td>100</td>
<td>714.6</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Sources: LKIM
Note* Others Support Program: Included Dana, LKIM Scheme, loan etc.

Fisher in zone A, B and C are entitled to receive fish catch incentives at RM0.10 per kg, while fisher from zone C2 receive a RM0.20 per kg catch incentive. The maximum catch incentive for fisher in zone A is RM150 per month, 750 per month for zone B, RM1,500 per month for zone C and RM5,000 per month for zone C2. However, trash fish is excluded from landing incentives (for boat zone B, C and C2), although this is quite important as a significant proportion (close to 40 percent) of fish landings by trawlers are now considered trash fish consist of juvenile fish of valuable commercial species, inedible fish of low market value and consumer preference. In 2012, government spends about RM63.7 million on catches incentives.

Models based on economic rationality predict that entry to and exit from fisheries are influenced by the profitability of fishing (McManus, 1997; Steenblik, 1998). However, empirical studies have shown that
fisher may reluctant to exit even when it is not profit anymore to get involved in the industry because cultural and socioeconomic factors.

**Motivation for study on fishery subsidies**

Studies on impact of fisheries subsidies, especially on fuel subsidies in Malaysian fisheries was important for three reasons. First, the fisheries sector plays an important role in providing fish as the largest single source of protein. It contributes about RM11,440 million to the Gross Domestic Product (GDP) and provides direct employment to 166,008 fishers. To ensure the fishery sector can be maintained as the main source of protein, contribute to GDP and employment opportunity, it is important to ensure that fishery resources can be maintained at a sustainable rate. If giving a range of subsidies to the fisheries sector motivate fisher to exert more fishing pressure, than the attainment of sustainability goals will be almost impossible to be achieved.

Second, studied by (Park, 2012) and (Sumaila et al., 2012), subsidies can be categories into three main categories:

i. **Beneficial subsidies**, which enhance natural capital assets, such as enhancing the growth of fish stocks through conservation, monitoring the catch rates through controlling and surveillance, stock assessment and resource surveys, fisheries habitat enhancement programs (such as Marine Protected Areas (MPA) and artificial reef) and fisheries management;

ii. **Capacity-enhancing subsidies**, which lead to disinvestment in natural capital assets. These programs will make fishing capacity expands to a point where resource overexploitation. When fishing capacity develops, then it is impossible to achieve maximum sustainable yield target (Milazzo, 1998). Capacity-enhancing subsidies include all forms of capital inputs and assistance from the government that enhance revenue and reduce cost. Example of these types of subsidies are price and marketing support, fuel subsidies, boat and fishing port construction programs, processing and infrastructure programs, or provisional of institutional support and services; and

iii. **Ambiguous subsidies**, whose impact on fish stocks are undetermined because they may lead to either enhance or reducing the natural capital assets (resource overexploitation). Example of these types of subsidies are payments to fishers to stop fishing temporarily or to maintain their income during bad times (recession or catches decline), unemployment insurance, fishers retraining programs, and boat buyback programs (Holland et al., 1999; Clark et al. 2005).

The overall objective of the study is to evaluate the socioeconomic and environmental impacts of fisheries subsidies in Malaysia. Subsidies refer to government transfer payments either direct or indirect from the public sector to the fishing sector, which aims to help the sector to make more profit or reduce the level of poverty in the sector. The study will explore the real contribution of subsidies on the welfare of fishing communities. The results of the study would contribute valuable policy inputs that help in rationalizing the fuel subsidies for fisheries in Malaysia.

**LITERATURE REVIEW**

Fisheries subsidies have gained worldwide attention because of their relationship with ecological sustainability and socioeconomic development (Munro and Sumaila, 2002). The evidence from studies suggests that fisheries subsidies contribute to the overexploitation of resources through excessive fishing effort. The evidence also suggests that subsidies if effectively utilized can improve resource conditions and livelihood of those depend on this resource (OECD, 2000). The positive contribution from subsidy towards resource conservation and livelihoods of fisher are important policy tools for rural development of coastal communities in many countries, including Malaysia. However, studies on the impacts of subsidy on resources and fisher wellbeing in Malaysia are yet to be demonstrated.
The main motivation for reform of subsidy in fisheries is that the present scheme contributes to resource overexploitation. Economic literature on subsidy shows that fisheries subsidies lead to increasing fishing effort and overexploitation of fisheries resources (Milazzo, 1998; FAO 2000; Munro and Sumaila 2002; Sumaila et al., 2012). The crucial issue is that subsidies generally motivate fisher to exert more fishing pressure and therefore the attainment of sustainability and conservation goals almost impossible to achieve (Sumaila, 2012; World Summit on Sustainable Development (WWSD), 2002).

Milazzo (1998) has drawn a distinction between ‘good’ subsidies which lead to reductions in fishing capacity, ‘bad’ subsidies are those that add directly to capacity and ‘ugly’ subsidies are defined as subsidy programs that lead to either investment or disinvestment in the fishery resource. He highlighted that ineffective management is the fundamental cause of over-fishing. However, there is considerable debate on what can be considered a ‘good’ subsidy (Arnason 1998; Munro and Sumaila 2002). A number of empirical studies investigated different categories of subsidies. Khan et al. (2006) identified and categorized the various types of fishery subsidies with a focus on the worldwide fisheries policy. They estimated that out of a total of US$26 billion worth of subsidies, about US$15 billion were bad subsidies that increased fishing capacity, approximately US$7 billion were good subsidies and the remaining US$4 billion were ugly subsidies.

Generally subsidies are provided directly to fisher in various forms, including grants, loans and loan guarantees, equity infusions, tax preferences or exemptions, and price or income support programs (Schrank, 2003; Clark et al., 2005; Khan et al., 2006). The effect of different categories of fisheries subsidies is difficult to measure. The effect of fuel and non-fuel subsidies on fisheries has been widely discussed in the literature. Most of the study relates the role of subsidies to the problem of overcapacity and overfishing, such as has been discussed at the World Summit on Sustainable Development in Johannesburg (WWSD, 2002). Several countries, including Malaysia increased fuel subsidies due to a rise in fuel prices. However the decision to provide fuel subsidies is mostly influenced by political and social conditions.

Fishery stock is a complex and precious resource. Knowledge about a fishery stock and factors that can influence fish stock is required in order for fisheries to be managed in a sustainable manner. However, management of the fishery is made difficult by the fact that the resources are largely invisible until harvested, impacts are frequently long-term, and the causes of the problem can be hard to identify (Gjertsen, 2005; Oro, Genovart, Tavecchia, Fowler, & Martínez-Abrán, 2013; Sumaila et al., 2012). Additionally, marine species may be migrating and stocks may be shared between countries.

To explain this concept of sustainable fisheries, we have to understand the factors that influencing changing of the fish stocks. Actually fishery stocks in next period are influenced by the stock at this period, net growth (plus recruitment and less natural mortality) and catch by fisher.

\[ X_{t+1} = X_t + F(x_t) - h_t \]

From the above equation, we know that apart from the catch, the fisheries sector could also face the challenge of ‘recruitment fishing’ and 'growth overfishing'. The challenge of ‘recruitment fishing’ happens when fishers deplete fishery stocks before they have a chance to spawn, effectively removing all future offspring from the fishery. While, the challenge of 'growth overfishing' occurs when fishers harvest species before they have grown to their full, adult size, disrupt the growth of fish. The use of gear such as trawls will not discriminate the type of fish species that will be caught.

Through a proper fishery management, fishery stock can be enhanced, the abundant stocks of fish in the sea will make fisher easier to do fishing activities. Enhancement of fishery stocks also enables time savings in fishing operations and hence cost of fishing. In common property resources, fishers from
diverse background participate in fishing (Meliadò, 2012). In the lucrative fisheries, fishers also come from outside the country and operates their fishing activities in local waters. Effective fisheries regulation is necessary in such a situation. The lack of enforcement of fisheries regulation fails to control overfishing. This situation means that when profits are positive, more trips are made and less trips are made while there is no profit. The problem with fisheries is that fisher will not stop their fishing effort when the rents (profits) are maximized.

According to the assumption of the Gordon Model (Gordon, 1954), used as a basis for constructing the model for open access fishery (Figure 1). As shown in the Figure 1, the revenue corresponds to the fish stock in a fishery is an inverse u-shaped curve, because an increase in fishing effort beyond a certain level does not allow the stock enough time to replenish itself and leads to a situation where the last fish is caught. As the stock falls to zero, the potential revenue also equal to zero. At point $E^*$ (maximum net economic yield ($MEY$) level) quantity of fishing efforts, revenue more than costs, the fisher will get profits (rents) from their fishing activity (Meliadò, 2012). Instead, seeing that other fisher are making money, more boats will enter the fishery, pushing effort beyond $E^m$ (maximum sustained physical yield ($MSY$) level). The $MSY$ is the point at which the marginal productivity of fishing effort is zero, corresponding to the peak in the revenue curve in Figure 1. This process will continue until all the rents have been eliminated, i.e. at $E^0$ (breakeven point level) quantity of fishing efforts. This is called the open-access equilibrium. The phenomenon is known as the *Tragedy of the commons*.

![Figure 1: Rent Elimination in an Open Access Fishery (a.k.a. The Tragedy of the Commons)](image)

With the fishery subsidy, cost curve can shift to the right side and this will make the quantity of fishing efforts increase since the rents (profits) has been increased due to the subsidy. This situation will encourage fisher to increase their fishing efforts (Figure 2). Normally the government trying to reduce the impacts of the “Tragedy of the Commons” through fishery regulation, such as restrictions on equipment, limit sizes of fish one can catch, throwback policy, minimum net size and limitation on the type of gear the fisher can use in their fishing activities.
Figure 2: Revenues, Fish Stock, Fishing Efforts and Subsidies

METHODOLOGY

Data source
The study obtained information about the type of fishing subsidies that has been given to fishing communities, benefits earned from these subsidies and views on the best possible policy directions for fisheries subsidy that will redirect funds towards promoting sustainable livelihoods and food security. Data collected for the study from three fishing districts of Peninsular Malaysia (Kedah, Perak, and Terengganu) through face to face interview. A total 246 fisher respondents were selected through a random selection process from the list of fishers with the Department of Fisheries. In order to test hypothesis, several data collection steps were undertaken.

First, focus group discussions were conducted with several stakeholder groups: resource users (fishers – captain and fishing crew), Non-government Organization (NGO), and fisheries administrator (DOF and LKIM officers) to explore the subjective experience of well-being of these resource users and their relationship to the fishery. Second, long-term fisheries data (catches, value of fish, number of boats, and number of fishers) and subsidies data were collected to understand about fishery and subsidies. Third, face to face interview was conducted with fisher to get information about their perceptions on subsidies and policy. Fourth, various stakeholders were consulted to get their opinions on the finding of the study and to evaluate policy implications of the study.

The research also collected the information on issues such as involvement of stakeholders, communications, the flow of information and trust on perceptions towards subsidy and rationalization of subsidies. It was expected that all these factors are among the human organization factors to predict the success of common-pool resource management (Ostrom & Hess, 2011; Epstein et al. 2014). Changes of policies by using authoritarian policing often not acceptable by stakeholders and can suffer from the perceptions of illegitimacy (Ali et al., 2013). It is within this situation that the perceptions of fisher (resource users) and fisheries administrators (DOF and LKIM officers) are considered an important step...
in understanding fisher desires and potential their suitability with the fisheries administrator desires (Ainsworth & Sumaila, 2005). There are more reports stated that new policies will be more successful if all stakeholders know about the status of the resource, easy to get the data and the implementation of good governance (Cinner, Daw, & McClanahan, 2009; Fischer et al., 2015; Lindebjerg, Peng, & Yeboah, 2015). Some researchers suggest information from various interest groups (stakeholders) are necessary because the stakeholder's profession and position in the economy and their perception of the current situations are a critical consideration on any implementation of the new policy.

The hypotheses of this study were as follows:

(i) The type of fisher or resource users (boat size, fishing gears, location, economic status) would be strongly related to respondents’ perceptions of the benefits of subsidizing;

(ii) The type of fisher or resource users (boat size, fishing gears, location, economic status) would be strongly related to respondents’ perceptions of policy for rationalizing the fuel subsidies;

(iii) Stakeholders in the management profession (DOF and LKIM officers) will have more positive views of all rationalizing subsidy policies comparable to resource users (fisher’).

**Institutional Analysis and Development (IAD) model**

This study used Institutional Analysis and Development (IAD) model. This model can explain the importance of community factor characteristics (attributes of community) such as fishing communities, and the state of stocks of biological or fishery (Biophysical conditions) on the success of a new program implemented by the policy makers. IAD model does not depend on the applicable rules (Rules-in-use) in ensuring a successful of a program, but more towards understanding of the purpose of the program and whether they are suitable to be implemented in particular situations.

Community factors include how communities interact, for example, between fisheries in the same zone (Zone A); or fishers in the different zone (a zone A fisher with a zone B and zone C fisher), experience, area and so on which are used as user attributes. There are also external factors (external variables) that affect a particular program that may affect the action (Action situations) and the next occurrence of interactions and outcomes. Evaluation Criteria want to show how the assessment was made on the outcome and interactions.

This model shows how a successful program, and the factors that influences the success of this program (Figure 3). Overall, we want to determine influences of the involvement of all stakeholders (such as NGOs, university, fishers, wholesalers, retailers, government), in the formulation of the new policy will make the program more successful.
RESULTS

Impacts of subsidies
The fisheries ecosystems in Malaysia are facing problems of overexploitation, degradation and pollution. The issue is whether programs that provide subsidies to the fisheries sector further worsen these problems or reduce the impacts of these problems. The data to undertake a detailed analysis of the environmental impact of subsidies on fish stocks is not available and this study just provides an overview of the impact using references to other studies and basic data on landings and resource composition.

The overcapitalization effect
There is an excessive fishing effort and overcapacity especially on the west coast of Peninsular Malaysia. The few research studies undertaken by the Department of Fisheries indicate that resources are heavily stressed and are being currently fished beyond their Maximum Sustainable Yield. Biomass estimates are said to be down to six percent of original stock levels. Analysis of standardized fishing effort and yield indicate that the 1996 effort is 135-200 percent of the level needed to harvest the Maximum Sustainable Yield (MSY).

These findings are further demonstrated in the increasing fishing effort arising from the increase in the number of trawlers and purse seiners and the number of power boats. Table 2 shows that the number of outboard-powered boats increased by 38 percent between 2008 and 2009. The total number of licensed boats increased by about six percent between 2012 and 2013. This represents a significant increase in fishing capacity (more fishing boats) in an already stressed fishing environment.

Table 2: Total Number of Licensed Fishing Boats by Tonnage, 2007-2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Non-Powered</th>
<th>Outboard-Powered</th>
<th>% Δ</th>
<th>Inboard-Powered</th>
<th>% Δ</th>
<th>Total</th>
<th>% Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>113</td>
<td>11,908</td>
<td>-</td>
<td>12,140</td>
<td>-</td>
<td>24,161</td>
<td>-</td>
</tr>
</tbody>
</table>
Catches of fish effects
The overcapitalization effect can also be determined by looking at information on landing of marine fish by different types of fishing boats. Table 3 shows landings of marine fish by trawlers in Malaysia, namely in Perlis, Kedah and Perlis according to the size of the boat. In Perlis, catches of trawlers that operate using trawls size 25 - 39.9 GRT and 40-69.9 decreasing in the last three years (2011 to 2013). Trawl fishing boats of 25-39.9 GRT catches 13,642 tones of fish in 2011, but dropped to 10,333 tones in 2013, a decrease of 18.0 percent. Similarly, the trawlers with fishing boat 40-69.9GRT catches 38.53 tones of fish in 2011, but fell to 20.67tonnes in 2013, a decrease of 46.4 percent.

In Kedah, the catch is stable, there is an increase around four percent by both size of fishing boats, 25-39.9 GRT and 40-69.9 GRT. However, in Perak, the landing of fish by trawler fishers that use 25-39.9GRT fishing boats experiencing declines in catches of 9.3 percent, but trawlers that use 40-69.9 GRT fishing boats experiencing increases in catches by 18.1% in the past three years.

### Table 3: Landings of Marine Fish by Trawlers, 2011-2013

<table>
<thead>
<tr>
<th>State</th>
<th>Year</th>
<th>Boat size (Gross Tonnage, GRT)</th>
<th>Landings (tones)</th>
<th>% Δ from 2011-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perlis</td>
<td>2011</td>
<td>25-39.9</td>
<td>13,642</td>
<td>11,193</td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>25-39.9</td>
<td>11,193</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>25-39.9</td>
<td>10,333</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2011</td>
<td>40-69.9</td>
<td>38,530</td>
<td>31,216</td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>40-69.9</td>
<td>31,216</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>40-69.9</td>
<td>20,668</td>
<td></td>
</tr>
<tr>
<td>Kedah</td>
<td>2011</td>
<td>25-39.9</td>
<td>18,187</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>25-39.9</td>
<td>15,571</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>25-39.9</td>
<td>18,876</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2011</td>
<td>40-69.9</td>
<td>17,845</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>40-69.9</td>
<td>18,664</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>40-69.9</td>
<td>18,629</td>
<td></td>
</tr>
<tr>
<td>Perak</td>
<td>2011</td>
<td>25-39.9</td>
<td>18,394</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>25-39.9</td>
<td>22,356</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>25-39.9</td>
<td>16,681</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2011</td>
<td>40-69.9</td>
<td>70,916</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>40-69.9</td>
<td>77,811</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>40-69.9</td>
<td>83,739</td>
<td></td>
</tr>
</tbody>
</table>

Source: Annual Fisheries Statistics, Department of Fisheries Malaysia (various issues)
Fishing costs effects
Subsidies affect the cost of fishing. In this section the impact of the different types of subsidies on the fishers operating in Zones A (traditional gear), B, C and C2 (trawlers and purse seiners) is explored. Some simulations are carried out to examine the impact of the withdrawal of the subsidies on the income of fishers.

The first item in Table 4 shows the calculations of the total value of catch. The total quantity of catch, was reporting on a per trip basis. To compute the monthly value of catch these trip quantities are first multiplied by the reported number of trips made per month and further multiplied by the current price of fish for the respective quantities. This incentive is given only for the quantity of food fish in the catch and the rate is set at 10 cents per kg for A, B and C boats and 20 cents for C2 boats. The maximum payment allowed for boat A is between RM150 to RM300 per month. The maximum for the B, C and C2 boats are RM750, RM1500 and RM5000 respectively. The boat C has the highest monthly catch per trip, about 8,528 kg. This is followed by boat zone B at 2,463 kg, and the traditional boat (boat A) has a catch of around 122 kg per trip.

The number of catches, and coupled with the subsidy, the monthly income is estimated at RM2,118 fishing boats for a fisher from zone A, RM 8,018 for zone B, and RM20,881 for zone C. Fishers from boat B is found most likely to benefit from fuel subsidies since fuel cost as percentage of operating cost was 67%, followed by boat C 64%, and boat B33%. If all subsidies such as fuel subsidy, catch incentives and livelihood subsidy is not provided to fishers, fishing boat A most affected because without the subsidies, their monthly income just to RM212 a month compared to boat B RM19,45 and boat C as much as RM10,676 a month.

| Table 5: Characteristics of Fishing Operations, Selected Boats by Fishing Zone |
|---------------------------------|---------|---------|---------|
| ZONE GEAR TRADITIONAL           | A       | B       | C       |
| TRIP/MONTH                      | 18      | 13      | 8       |
| INCOME/MONTH                    | 1319    | 2737    | 15116   |
| CATCH (KG/TRIP)                 | 122     | 2,463   | 8,258   |
| VALUE OF FISH (RM)              | 18,892  | 424,660 | 1,528,733 |
| CATCH INCENTIVE (RM)            | 142     | 668     | 584     |
| LIVELIHOOD SUBSIDY/MONTH (RM)   | 220     | 225     | 200     |
| BRIM                            | 54      | 54      | 0       |
| FUEL SUBSIDY/MONTH (RM)         | 382     | 4,334   | 4,981   |
| TOTAL GROSS INCOME (RM)         | 2,118   | 8,018   | 20,881  |
| PERCENTAGE INCOME FROM FUEL SUBSIDY | 18.05 | 54.06   | 23.86   |
| PERCENTAGE INCOME FROM SUBSIDY  | 37.69   | 65.87   | 27.61   |
| FUEL AS PERCENT OF OPERATING COST | 66.79 | 32.94   | 63.69   |

2. OPERATING EXPENSES
COST OF FUEL PRICE (RM/MTH)       | 7,250   | 11,600  | 40,455  |
COST OF ICE (RM/MTH)              |         |         |         |
COST OF FOOD (RM/MONTH)           | 20      | 150     | 200     |
COST OF BAIT (RM/MTH)             | 7,250   | 11,600  | 40,455  |
Finding from the survey has been supported by finding from Focus Group Discussion with participants from various types of fishers to elicit their perceptions of the impacts of subsidies on their livelihoods and fisheries. The results show that fuel subsidy is the most preferred subsidy for all types of fishing. For the artisanal fisher (boat A), fishing inputs such as boat, nets, engine, GPS, life jackets are the second preferred subsidy (grants) followed by monthly allowance subsidy.

The participants of boat B had similar preferences with boat A, while boat C participants preferred catch incentive subsidy next to the fuel subsidy. The large boats (C) participants said that subsistence allowance is less effective for the livelihoods of fisher because it makes fisher more dependent on subsidy. They thought that termination of this allowance will not affect fisher’ livelihoods. However, both A and B boat participants put importance on this monthly allowance as they found it very useful during the crisis time (Table 5).

Table 5: Ranking of Subsidies Priorities by Fishers

<table>
<thead>
<tr>
<th>Fisheries subsidy</th>
<th>Rank</th>
<th>Boat A</th>
<th>Boat B</th>
<th>Boat C</th>
<th>Boat C2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fuel Subsidy</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td></td>
</tr>
<tr>
<td>2. Living Allowance</td>
<td>III</td>
<td>III</td>
<td>VII</td>
<td>VII</td>
<td></td>
</tr>
<tr>
<td>3. Catch subsidy</td>
<td>IV</td>
<td>IV</td>
<td>II</td>
<td>II</td>
<td></td>
</tr>
<tr>
<td>4. Maximum catch subsidy</td>
<td>VII</td>
<td>VII</td>
<td>IV</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>5. Support programs, net, boat, engine</td>
<td>II</td>
<td>II</td>
<td>VI</td>
<td>VI</td>
<td></td>
</tr>
<tr>
<td>6. Grants</td>
<td>V</td>
<td>VI</td>
<td>III</td>
<td>III</td>
<td></td>
</tr>
<tr>
<td>7. Soft loans</td>
<td>VI</td>
<td>V</td>
<td>V</td>
<td>IV</td>
<td></td>
</tr>
</tbody>
</table>

CONCLUSION AND POLICY IMPLICATIONS

There are a number of issues presented by fisher which should be reviewed for better management of subsidies. The results of the survey showed that Fisher has a good understanding of fisheries trend and impact of fisheries subsidies on fisheries resources and their socioeconomic conditions over the past five years. The results demonstrated that fuel subsidy was the most important item for the fisher as it reduced fishing operation costs. Fisher received subsidies over the past five years. It appears that fuel subsidy has important implication for fisheries resource sustainability. There is a pressing need to monitor the fuel distribution procedure and utilization of fuel.

The findings showed that fisheries resources have been declining significantly over the years. The government has deployed a number of artificial reefs, and fisher has proposed protection of some artificial reefs from fishing. The results suggest that the socio economic condition of artisanal fisher has not improved significantly. Most fisher families depend solely on fishing for their livelihood. The government should undertake effective fisheries management to reduce fishing pressure in the sea. There is a need to examine alternative livelihood enhancing activities for fisher. The institutional capacity has to be developed to increase their ability to undertake various activities for alternative livelihoods such as sustainable tourism, aquaculture and seafood processing and the production value added seafood products.
REFERENCES


LKIM e-Nelayan Subsidy Management System (eNSMS)


Impact of Religiosity on Intention to Pay Zakat: Mediating Effect of Subjective Norms

Keywords: Religiosity, Intention to Pay Zakat, Subjective Norm, Socio-economic Studies, Zakat and Hubsi Commission, Kano

INTRODUCTION

Islam was originated based on the teaching of Prophet Muhammad SAW. The Arabic word “Islam” means “to surrender”, in the Koran Islam means “submission to the law or will of Allah SWT”. Muslim is one who practices Islam. Koran states that, Islam is the primordial and worldwide religion. Islam involves freely accepting Allah SWT’s directives (Von der Mehden, 1986).

In Islam, religiosity is commonly referred to as individual belief in Allah SWT, characterized by religious zeal and piety. The higher the religious zeal and piety are, the stronger the individual faith in Allah SWT, the higher the individual religiosity is (Salleh, 2012). Understanding the word religiosity is important in the field of Zakat. Hence, a lot of words are synonymous with religiosity that in the real sense are not religiosity. For example, belief, orthodoxy, pioussness, religiousness, holines, and devotion- are all not exactly equal to religiosity (Salleh, 2012). Instead, as argue by Holdcroft (2006), they are a reflection of religiosity dimensions.

Religiosity of an individual has been measured by several researchers as a multi-dimensional (Kamil, Zainol & Ram 2012; Glock, 1972; King, 1967; & Lenski, 1961). Kamil (2002) revealed that religiosity has four dimensions and it plays an important role on intention to pay Zakat. Glock (1972) uses five dimensions in measuring religiosity: the ritualistic, the intellectual, the consequential, the experiential and the ideological. King (1967) considers religiosity into 10 Dimensions: personal religious experience, assent and personal commitment, personal ties inside the congregation, participation in congregational activities, Commitment to Intellectual Search notwithstanding doubt. The remaining are the dogmatism, openness to religious growth, financial behavior and attitude, extrinsic orientation, talking and reading.

Lenski (1961) uses 4 dimensions: communal, devotionals, doctrinal orthodoxy and associational. Verbit (1970) uses 6 Components in religiosity measurement: Emotion, Doctrine, Ritual, community, Ethics and Knowledge. Although, Verbit, (1970) measured religiosity as a component. Whether religiosity is a dimension or component, the problem arises of how accurately we can identify the extent to which religiosity’s of an individual can affect his intention to pay or not to pay zakat.

In Zakat field Kamil (2002) categories factors that can lead to Zakat compliance into internal and external factors. Internal factors include the attitude, religiosity, perceived fairness and knowledge these attributes are inculcated in an individual. The external factors are enforcement of Zakat law, Zakat administration that are related to our surroundings. Kamil et al. (2012) in their study uses a survey of 227 respondents on Islamic religiosity, concludes that business owners with a higher level of religiosity are likely to comply with Zakat payment. But the problem arises on identification of highly religious individual.

AGBA 12th World Congress
Page 902 of 1173
Furthermore, religiosity is found to be a significant factor that positively influences decision to perform a good deed. Additionally, Girbert (2008) in her study confirmed the assertion made by several researchers that people with higher religious inclination comply more to religious activity than those with lesser religious preference. According to Gilbert, the relation between religiosity and cheating in the examination is negative.

Consequently, reviewed of prior literatures revealed that religiosity is a complex model (Kamil, 2012). In the field of Zakat, the religiosity decomposition into highly, moderate, low and no religious commitment was not establish in Zakat environment using subjective norms as the mediator.

Given the complexity of religiosity and its significance to entire Muslim Ummah and economy of Muslim countries in general, Zakat commission was created in Kano Nigeria with numerous objectives (Kano State Zakat and Hubsi Commission [KSZHC] 2014). Firstly, the commission was authorized to collect Zakat, Hubsi and Sadaqat from Muslim Ummah. Secondly, Zakat commission supervises all matters involving Zakat and Hubsi in Kano Thirdly, the commission was mandated to distribute fund collected to qualified Asnaf. Finally the commission had the power to invest in agreement with Islamic command (Dahiru, 2011). Furthermore, Zakat commission in Kano established forty four (44) units in all forty four (44) local government areas for the aims of collection enhancement but the collection was low. Below was the structure of zakat institution in Kano Nigeria in Figure 1.

![Kano Zakat and Hubsi Commission Structure](figure1.png)

**Figure 1: Kano Zakat and Hubsi Commission Structure (KSZHC, 2014)**

**Intention to Pay Zakat**

Ajzen (1991) argue that the intention is guided by individual behavior, which constitute attitude toward intention, subjective norms and perceived behavioral control as reveals in the theory of planned behavior. Intention to perform a given behavior is the immediate antecedent of performing behavior. Ajzen (2000) concludes that the intention to execute a behavior is strongest when a person holds positive attitudes towards the behavior. Again, where an individual hold a positive intention the tendency of his subjective
norm and perceived behavioral control will be high. Furthermore, TPB reveals that attitudinal belief, normative belief and control belief are the three fundamental idea that guided the human behavior (Ajzen 2005). In the field of zakat a lot of studies confirmed that subjective norms significantly influence intention of an individual to perform a given behavior (Ramayah et al., 2009; Venkatesh and Davis, 2000). But relationship between religiosity and intention to pay Zakat using subjective norms as a mediator is limited in the literature. Hence identification of truly highly, moderate, low and no religious commitment on individual Zakat payment is difficult. Present study will lead a way of identification of truly religious individual and his intention to pay Zakat.

Religiosity and Intention to Pay Zakat
Kamil et al. (2012) said religious, through its dimensions, components, and elements, is perceived to command the cognitive and affective functioning of persons. As such, it eventually affects his judgment. Thus, religious beliefs play a significant role in influencing the behavior of an individual. Religiosity significantly and positively influences intention.

Proposition 1: Religiosity positively influences intention to pay zakat.

Subjective Norm and Intention to Pay Zakat
Subjective norm is an essential constituent of theory of reason action. Subjective norm is a valuation of the person against the other person who is important to him/her that will influence the decision associated with his/her behavior (Ajzen & Fishbein 1980). A lot of prior research on various field confirm that the relationship between subjective norm and intention is positive and significant (Ramayah et al., 2009; Venkatesh and Davis, 2000).

However, despite the positive relationship between intention and subjective norm, still some studies reveal a mixed finding. Taylor and Todd (1995) said the role of subjective norm on intention to some extent is unclear. Similarly, Chau and Hu (2001) shows that the subjective norm do not influence intention. Based on the above review the present study argue since majority of researches are of the view that subjective norm can positively influence intention to pay zakat. Thus, the following proposition is developed.

Proposition 2: Subjective norms positively influence Intention to pay zakat.

Religiosity, Subjective Norm and Intention to Pay Zakat
The above review of literature signifies the mix findings between subjective norm and intention to pay zakat. Thus, majority of the researchers found a strong relationship between subjective norm and intention to pay zakat (Saad & Haniffa, 2014; Ajzen & Fishbein 1980; Ramayah et al., 2009; Venkatesh and Davis, 2000). Again, religiosity also proof to be significant factor of compliance to zakat payment (Kamil et al. 2012). The question arise can subjective norm mediate the relationship between religiosity and intention to pay zakat. Thus the following proposition is developed.

Proposition 3: Subjective norm mediate the relationship between religiosity and intention to pay zakat.

PROPOSED FRAMEWORK
Review of literature suggests that there is a positive relationship between subjective norms and intention to pay zakat (Saad & Haniffa, 2014; Ajzen & Fishbein 1980; Ramayah et al., 2009; Venkatesh and Davis, 2000). But some studies still are of the view that the relationship between subjective norms and intention is negative or unclear (Taylor & Todd 1995; Chau & Hu 2001). Kamil et al. (2012) reveals that religiosity significantly influence compliance to zakat payment. Kim et al. (2002) also argue that religiosity is an important factor that influence an individual toward rejecting a controversial products. Thus, the present study argue that prior studies confirm that religiosity can influence compliance to pay zakat but to can subjective norms moderate their relationship. Thus, below framework is proposed.

![Figure 2: Religiosity, Subjective norms and Intention to Pay Zakat.](image)

**CONCLUSION**

The present study, which is based on the ongoing work present the factors influencing intention to pay zakat looking at religiosity as important predictor. The study equally present subjective norm as mediating variable between religiosity and intention to pay zakat. If the present framework study is validated empirically it will use for policy decision making by the following: Kano state Zakat and Hubsi commission, government and zakat payers.

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Religious Diversity towards Job Satisfaction: A Study on Public Health Employees in Thailand Southernmost Provinces

Keywords: Religious Dissimilarity, Job Satisfaction, Public Health Employee, Thailand Southernmost Provinces, Conceptual Studies

INTRODUCTION

Thailand is officially recognized as Buddhist country with 67 million of population which 94.6% are Buddhist, Muslims 4.6%, Christian 0.7% and others 0.1% (CIA World fact book demographic statistics, 2013). Thailand possesses a self-determined public administrative structure managed by a Thai Buddhist bureaucracy, but public administration in the southernmost provinces (Pattani, Yala and Narathiwat) has been unique compared to the rest of the country since the majority population in the southernmost provinces is Muslim (Poocharoen, 2010). However, with a population of 80% majority is Thai Muslims who living in the southernmost provinces (Campbell, 2013) but still, Thai Muslim could be considered as the minority population in Thailand.

According to Aphornsuvan (2003) Thai Muslims have been seen to put more importance for higher educational attainment and hence, there is an increasing of Muslim employees who are being employed in public administration sector as government officer in the southernmost Thailand provinces. Thus, because of this increase in the number of ethnic Muslim becoming employed in the Thai government services, there is an urgent need for Thai Government HR practitioners to be aware of the respective cultural and religion diverse sensitivities. In order to further enhance the productivity and conductive working environment of such organizations located in these the southernmost Thailand provinces; an examination of the organizational environment is most opportune at this point in time.

Overview of the Southernmost Provinces in Thailand

Southernmost of Thailand placed 3 provinces which are Pattani, Yala and Narathiwat, which near to the border of Malaysia; these 3 provinces are neighboring provinces and each province has subdivided into a district (Amphoe).


Yala is subdivided into 8 districts which included; (1) MuangYala, (2) Betong, (3) Tanto, (4) Raman, (5) Krongpinang, (6) Yaha, (7) Kabang, and (8) Bannangstar.

Based on Klanarong (2009), Thai Muslims in this region often related closely to Muslim Malaysians. Muslims in the southernmost of Thailand slightly use common characteristics in culture, religion, and language with the people of Northern Malaysia. However, Thai Muslims in the southernmost of Thailand have special characteristics which distinguish them from other provinces of Thailand. The dissimilarity is not only through religion, but also through their language, Thai Muslims who living in the southernmost of Thailand are Jawi-speaking (Malay Dialect). The study of Klanarong further explained that in daily life, people in Pattani, Yala, and Narathiwat use a Malay dialect to communicate rather than Thai language.

Muslims in Thailand locate in three configurations defined by geography (Yusuf, 2007):
I. Melayu speaking Muslims, this community live in southernmost region (Pattani, Yala and Narathiwat provinces). This region composed Muslim about 80% (Campbell, 2013) of the entire Thai Muslim population.
II. Thai speaking Muslim, this community included in upper South region such as Satun, Songkla, Nakorn Si Thammarat, Krabi, Phuket, and Phangnga.
III. The multi-ethnic of Thai speaking Muslim, they live in the central provinces include Bangkok and Ayudhaya and also live in north and northeast Thailand. This Muslim community is a multi-ethnic of Thai, Persian, Malay, Indian, Chinese, and Indonesian.

However, there were numerous of the Muslim migrants from neighboring countries lived in Thailand for economic settle reason and also Thai Buddhists converts to Islam either throughout marriage or religious conversions.

**Overview of Healthcare Sector in the Southernmost Provinces of Thailand**
Healthcare employees are very important people for the public health system. The presence of high skilled, motivated staff is a key aspect of healthcare system performance. According to Chief Nursing Officer of the “Calgary Health Region of Canada” said that “nurses play an important role in the healthcare system, and we know that it is important to maintain a positive and rewarding work environment for nurses and all healthcare workers. Job satisfaction studies are an excellent tool to help nurses and management achieve this goal. It supports the region's efforts to retain and attract nurses and to provide the best possible care for the community” (As cited in Sridharan, Liyanage & Wickramasinghe, 2008).

Public health is a fundamental of the healthcare system to minimize the effects of disease, injury and disability. Public Health Center in Thailand Southernmost Provinces (Pattani, Yala Narathiwat) is governed under the Public Health Ministry. The main objective of Public Health Center in the southernmost region is to promote a healthier lifestyle among the population in Pattani, Yala and Narathiwat. This is essential in order to sustain the province healthcare service.

**Problem Statement**
Based on the study, numerous researchers (Kantabutra & Rungruang, 2013; Kantabutra & Saratun, 2011; Sarker, Crossman & Chinmeteepituck, 2003; Nakhata, 2010; Rattananan, 2000; Senasu & Singhapakdi, 2014; Saratun & Rungruang, 2013; Saekoo, 2011; Dhanasarnsilp, 2005; Napompech, 2011; Ngotngamwong, 2013; Ongkasuwan, 1995; Ussahawanitchakit, 2008; Phromket, Thanyaphirak & Phromket, 2012; Phattanacheewapol & Ussahawanitchakit, 2008; Takumpunya, 2009; Saenswang, 1997; Treputtharat & Tayiam, 2014; Nantsupawat, Srisuphan, Kunaviktikul, Wichaikhum, Aungsuroch & Aiken, 2011; Laimek, 2014; Tongpiam, 2000; Kunaviktikul, 1995; Kunaviktikul, Nuntasupawat, Srisuphan & Booth, 2000; Tyson & Pongruengphant, 2004; Masauthon, 2003; Ketchirathitikan, 2010; Jaikhodee & Prachusilpa, 2010; Jaidee, 2007) had studied on employees job satisfaction in Thailand with diversified professions but none has investigated the satisfaction of employee while there is a religious
dissimilarity among employees in workplace. Hence, there is a gap with regard to the problem of religious diversity and job satisfaction for organizations in the southernmost Thailand provinces.

Additionally, the shortage of healthcare human resources has been concerned in many countries around the world (Alameddine, 2012). This is similar to Thailand, it has been reported that the numbers of healthcare employee’s turnover in Thailand southernmost is increasing in recent years (พยาบาลสามจังหวัด [Nurse in the southernmost provinces], September 2013). Therefore, this research will begin to fill this gap by studying further the interactions between religious diversity and job satisfaction among public health employees in the southernmost Thailand provinces.

**LITERATURE REVIEW**

The impact of religiosity toward employee performance and job satisfaction was observed in several studies (Kutcher, Bragger, Rodriguez-srednicki & Masco 2010; Ghazzawi & Smith; 2009; Ghazzawi, Smith & Cao, 2012; Ali, Khan, Mushtaq, Khan & Naqvi 2013; Zaman, Nas, Ahmed, Raja & Khan, 2013; Jaramillo, 2011; Schroder, 2003; Esparza, 2010; Brown, 2005; Yousef, 2001; Jungklang, 2007; Hayati & Caniago, 2012).

As Kutcher et al. (2010) studied to seek the role of religiosity (religious practices, beliefs, motivation) toward employee’s reactions to burnout, job satisfaction and organizational commitment, the findings showed that religiosity was related to employee’s burnout, job satisfaction and organizational commitment among employees and the relationship among them were positively related. Kutcher et al. (2010) further described that some organizations strongly support the expression of religion believe at workplace such as hiring chaplains of various religious for counseling or providing space for employees to prayer groups which its go beyond the legal obligation for employers to offer those religious practice accommodations to employees at workplace.

In addition, Ghazzawi et al. (2012) suggested that the degree of individual religious intensity does have an effect toward job satisfaction. The study also found that employee who believes in religious faith might be more satisfied on the job than non-religious employee and the stronger of the religious faith, also the higher level of job satisfaction.

Ghazzawi and Smith (2009) also explained that religious faiths are the value systems which the individual’s religious faith could influence employee work attitudes. Employees who believe on their faiths might see hard-working work as a way to help mankind growth; as a Hindu might see it as a way to please the Gods, In Islam, Prophet Mohammed moralized that “hard work caused sins to be absolved” (Yousef, 2001) hence it is a powerful motivator for Muslims who work to obey God. An employee who perceives work as a means to express their faith will be more likely to build an effort to be a good employee. In returns, employers will respond positively which leads to increase levels of employee job satisfaction.

Ali et al. (2013) studied the moderating role of Islamic Work Ethic (IWE) on the relationship between employee commitment and job satisfaction among employees in Pakistan banking sector. The results of the study showed the Islamic Work Ethic directly affects both employee commitment and employee job satisfaction and the Islamic Work Ethic moderates the relationship between employee commitment and job satisfaction. Moreover, Yousef (2001) also investigated the moderating role of the Islamic Work Ethic on the relationship between organizational commitment and employee job satisfaction among Muslim employees in numerous organizations in the United Arab Emirates (UAE). The study found the Islamic Work Ethic affects directly toward both organizational commitment and job satisfaction, and it moderates the relationship between these two variables.
Religious Diversity towards Job Satisfaction: A Study on Public Health Employees in Thailand Southernmost Provinces

Rokhman and Hassan (2012) defined The Islamic Work Ethic as the set of moral values which differentiate right from wrong in the Islamic perspective and the Islamic Work Ethic guides Muslim employees’ behavior in the workplace. Yousef (2001), Ali et al. (2013), Rokhman and Hassan (2012) further explained that the concept of the Islamic Work Ethic (IWE) is based on the Quran, the sayings and practices of Prophet Mohammed which The Quran encourages humans to gain skills, commit to work, avoid laziness and misuse of time in unproductive activity.

While Hayati and Caniago (2012) investigated the impact of Islamic Work Ethic (IWE) on intrinsic motivation, job satisfaction, organizational commitment and job performance among Islamic banking employees in Bandar Lampung, Indonesia. The study showed that the Islamic Work Ethic had higher impact on intrinsic motivation and organizational commitment than job satisfaction and job performance. Besides, the study suggested job satisfaction and intrinsic motivation moderates the relationship of the Islamic Work Ethic (IWE) on organizational commitment and job performance.

Zaman et al. (2013) also studied on Islamic Work Ethic (IWE) and job satisfaction; the researchers examined the mediating factor of Intrinsic Motivation between Islamic Work Ethic (IWE) and employees’ job satisfaction. The study found three direct relationships which are IWE had positively correlated to Intrinsic Motivation, IWE had positively correlated to employees’ job satisfaction and Intrinsic Motivation had positively correlated to employees’ job satisfaction. All the relationships were significantly related with each other and lastly, the study found that Intrinsic Motivation mediated the relationship between IWE and employees’ job satisfaction.

Zaman et al. (2013) further explained that Intrinsic Motivation is a motivation of an individual from internally rather than from any external reward such as salary or bonus. Intrinsic Motivation happens when individual employee gets motivation from the nature of his work or from the feeling of satisfaction when completing on a duty.

Moreover, Jungklang (2007) studied the relationship between religiosity and job satisfaction in the Buddhist way. The study indicated that there was a significant positive relationship between Buddhist characteristic and job satisfaction among Investor Club Association officers. The study also showed that the factor of Buddhist practice significantly predict the job satisfaction.

Marques (2010) believed that Buddhist practices carry a high level of development to the quality of employee’s life at workplace. Buddhism focuses more on practical matter instead of focusing on a supreme being such as how to guide human lives, how to arrange human minds, and how to hold everyday lives peaceful and healthy. Marque also found that employees who being faithful to the Buddhist belief are encouraged to cooperate with each other or work as a team as much as they can. However, the rivalry is not an encouraged due to the powerful mindset of respect, donations, and helpfulness in the philosophy of Buddhism.

Beside that Schroder (2003) found only some studies have investigated job satisfaction and its intrinsic and extrinsic facets on religious private universities sector therefore Schroder examined the mediating role of religious commitment has a potentially impact on the relationship between organizational commitment and job satisfaction among employees in the religious private university of The United States. The investigation indicated that overall job satisfaction and its intrinsic and extrinsic facets were impacted by demographic characteristics such as age, educational level, and occupational field. Organizational commitment was correlated to age and educational level. Schroder also indicated that religious commitment had a mediating impact on the relationship between job satisfaction and organizational commitment among employees.
Brown (2005) also investigated job satisfaction and its relationship to organizational commitment, religious commitment among full-time employees of Northern Caribbean University. The study examined whether there were significant differences in the levels of overall, intrinsic, and extrinsic job satisfaction as well as organizational and religious commitment influenced by demographic characteristics such as occupational field, age, gender, length of employment, and educational level. Moreover, the study also investigated the relationship between organizational and religious commitment toward overall, intrinsic, and extrinsic job satisfaction.

The result of study revealed that employees were mainly satisfied with their responsibility, relations with colleagues and works itself. The slightest level of satisfaction was found for organizational procedure, working conditions, and compensations. The study showed overall job satisfaction and its intrinsic and extrinsic facets were impact by demographic characteristics such as job field, gender, age, education level, and length of employment. Organizational commitment was related to age and length of employment. Religious commitment was related to occupational field, age and level of education. Lastly, the study found that organizational commitment was the greater predictor towards job satisfaction compared with religious commitment.

Esparza (2010) studied on the impact of workplace stress toward job satisfaction, moderated by religious coping. The study was conducted among university employees in The United Stated. The result revealed women employees utilize religion to cope with the workplace stress more than men; however religious coping did not have a significant correlation between workplace stress and job satisfaction.

In addition, Jaramillo (2011) believed that any employees who approach their work as a calling are more probable to report higher life satisfaction and job satisfaction than those employees who do not. Jaramillo investigated the relationship between work as a calling perception towards life satisfaction and job satisfaction using religiosity as moderator among Christian employees in Western University, Canada. The study showed that calling and religious value significantly impacted life satisfaction and job satisfaction but only intrinsic religiousness moderates the relationship between work as a calling perception towards life satisfaction and job satisfaction, extrinsic religiousness did not significantly impact life satisfaction or job satisfaction.

The concept of intrinsic and extrinsic religiousness has been explained by Allport and Ross (As cited in Sell, 2000 & Roundtree, 2007). According to Allport and Ross, an extrinsic religiousness characterized those people who view their religion as a tool to serve their own desire and using religion as a tool to achieve non-religious goals. People who have high external religiousness are possibly to meet social demands rather than what religion requires. Allport and Ross also described those who believed on intrinsic religious orientation would view his religion with a focus on God rather than the rewards obtained.

THEORETICAL FRAMEWORK

Religious Dissimilarity towards Job Satisfaction Model
The model was developed by Cunningham (2010) to study the impact of religious dissimilarity towards job satisfaction. According to the figure 1, the study specified that religious diversity positively impacted perceived value dissimilarity from the others; however it held a negative relationship towards job satisfaction. Cunningham also found that religious diversity and religious identity has negatively related with one another which means if employees considered themselves to be less religious dissimilarity toward their colleagues, their religious personal identity will be increased. This is consistent with the study of Ullah, Usman, Niazi, Farooq, Afzal and Khan (2012) the relationship between religious difference among employees and job satisfaction was negatively related. However, being dissimilar from other colleagues in the workplace affected employees perceived value dissimilarity such as a perception
of they are treated pretty unfair (Boonlong, 2007), and this perception may affect toward employees job satisfaction in any organization.

Figure 1: The Impact of Religious Identity on the Relationships between Religious Dissimilarity, Value Dissimilarity, and Job Satisfaction Model Developed by Cunningham.

According to the study area is focusing on the religious diversity among Public Health Employees in the southernmost of Thailand provinces therefore the career in the Buddhism and Islamic perspective will be discussed due to the workforces in this workplace consist of Thai Buddhism and Thai Muslims.

**Career in the Buddhism Perspective**

According to Marques (2010) workplace spirituality is the key perspective required for all Buddhists workforces, this practice brings a high level of quality enhancement among employees who work in both public and private industry sectors. The study also described that it is necessary for all Buddhist workforces to practice on the following mindsets; “Buddhism as a pro-scientific philosophy”, Buddhism believed that the knowledge of science is very importance phenomenon. Buddhism particularly encourages in technology development (Kaplonski, 2012) as it is a knowledge development in order to enhance humankind being. “Buddhism as a source of greater personal responsibility”, Buddhists have strong believed in the principle of karma (MacKenzie, 2013; Marques, 2012), they believed that present incidence is a result of prior actions and future conditions depend on what they do in the present therefore this mindset lead to a greater on self-responsibility behavior. “Buddhism as a healthy detachment motivator”, a strong value in Buddhists belief is detachment. All Buddhists need to control their mind by paying attention on wisdom (Warren, 2012), then calm and dispassionate (Koopmann-Holm, Sze, Ochs & Tsai, 2013) would be the result toward the painful. “Buddhism as a greater collaboration motivator”, employees who hold on the Buddhist mindset are encouraged to share the knowledge, not to keep them. Buddhism encourages the attitude of collaborating and respecting as the believing of performing something good will produce some good karma in the future (Thanissaro, 2012). “Buddhism as the motivator of a productive view”, any businesses and careers engaging a negative toward the quality of life is not allowed in Buddhism view (Thanissaro, 2012).

Buddhism carries on the practice of right livelihood which is not bring damage to other beings such as producing weapons and bombs. Furthermore, Marques (2012) has explained that believe in the basic goodness of human nature is highly significant in Buddhism perspective. While right livelihood of any businesses and works are honorable respected in Buddhism hence workforces need to keep the faith in both fundamental and universal ethic values.
Career in Islamic Perspective: Islamic Accommodation in the Workplaces

Religious diversity is now a social reality in the workplace (Ball & Haque, 2003). Any organization faces with a multiculturalism or religious diversity among employees, it could be challenges for the management team to support and fulfill job satisfaction among their employees.

With regards to Muslim employees, Kelly (2008) described that practicing Islamic in the workplace deals with a challenge in the recent workplace environment along with the spiritual needs, food needs and specifically the dress code of women workforces. The most religious need of Muslims is the obligatory prayer five times a day (Ball & Haque, 2003) which the prayer is not an informal thing but it has to be performed at particular times of the day.

Durrani (2001) explained that Muslim employees need to perform five time daily prayers. Muslim employees can pray at their worksite or any other space where it is quiet, clean, and dry. Some organizations may require Muslim employees to pray during their break time (Killian, 2007; Wattana, 2006). Yet it is necessary for employers to take into account on how long an individual employee needs to perform prayers. Some Muslim employees may only need to take ten minutes for each prayer, and simply pray alone in their room but others Muslim may require longer and prefer to pray in congregation especially for Friday Prayer which compulsory for all Muslim men to perform at the mosque. Organization rule should be flexible where employers can consult with their employees about all possible alternatives.

Ball and Haque (2003) further explained that the most argued characteristic of the Muslim workforce in the workplace is appearance and attire. Islam proposes both males and females behave and dress humbly. For female, Muslim females must wear loose fitting, non-revealing the whole body except the face and hands. For males, some Muslim males wear a small head covering, called a Kufi. Muslim males also grow a beard however it is not compulsory but it is encouraged to do so and the beard has become a character of devotion to the teachings of the Prophet and Muslim brotherhood.

Durrani (2001) also explained on employees’ leave for Hajj and Religious Occasions. All Muslims are required a pilgrimage to Mecca, Saudi Arabia for performing the Hajj at least once in their lifetime. The timing of the Hajj is decided by the lunar calendar and takes place roughly two months after the end of Ramadan. Additionally, leave may also be requested for religious festivals; however, it may not be possible to determine dates accurately until it is much nearer the time of the festival and the main religious festivals that employees need to be taking a leave are Aidil-Fitri and Aidil-Adha (Boonlong, 2007).

Job Satisfaction of Public Health Employees in Thailand

Based on the literatures reviewed, it was found that the factor of nature of work (Tongpiam, 2000; Brewer et al., 2012; Rapheephan, 2013; Kunavikitkul, 1995; Jaikhodee & Prachusilpa, 2010), rewards and compensation (Tongpiam 2000; Kunavikitkul, 1995; Tyson & Pongruengphant, 2004; Ketchiratthitikan, 2010; Takumpunya, 2009) and staff relations (Tongpiam, 2000; Kunavikitkul, 1995; Nantsupawat et al., 2011; Kunavikitkul et al., 2000; Brewer et al., 2012; Ketchiratthitikan, 2000; Takumpunya, 2009) were most supported factors which associated toward job satisfaction among Public Health employees in Thailand.

According to Tongpiam (2000) showed that there was a negative relationship between job pressure and job satisfaction in terms of pay and coworkers among Thai nurses who work at hospitals in Bangkok, Thailand. Furthermore, Thai nurses showed that they dissatisfied with their pay and opportunities for promotion but most of them showed satisfaction with their coworkers. Additionally, Kunavikitkul (1995)
explained that specialized nurses in three government-operated regional university hospitals in Thailand were satisfied with the job followed by satisfaction with supervision and co-worker. They were neither satisfied nor dissatisfied with their work itself and present pay but were dissatisfied with promotion opportunities. Most nurses had high intent to continue in their current jobs but intent to stay for only 1 year however they had low intent to continue for the next 5 years. While Kunaviktikul et al. (2000) showed that dissimilarity in the characteristics of colleagues was the most influence reason of conflict among specialized nurses in local hospitals while interruption of another party’s goal was the least effect cause.

Tyson and Pongruengphant (2004) found that nurses in public hospital had satisfied with their job which the level of satisfaction was increasing, the reason would attribute to improvement in rewards and compensation system and organizational support. Moreover, Brewer, Kovner, Yingrengreung and Djukic (2012) studied in terms of job satisfaction and desire to stay at work among nurses who just registered to be a nurse in 2009. The results showed that nurses had better working conditions and there was a better relationship between nurse and doctor.

Lastly, Rapheephan (2013) indicated that job satisfaction, motivation and organizational citizenship behavior are significantly impact on the organizational commitment. However, the role of job safety is moderated the relationship between job satisfaction, motivation, organizational citizenship behavior and organizational commitment.

RESULTS AND DISCUSSION

Thailand is a multicultural country encompassing with a multi-ethnic society (Sungtong, 2007) especially in southernmost of Thailand, the majority population is Thai Muslim who leave in this region together with Thai Buddhists. Hence, this diversity is definitely reflected in public administration structure in this area, and it requires unique practices to deal with this significant diversity.

Based on the study, Thai government started offering religious freedom for the practice of Islam as a religion for the Thai Muslim workforces. As Poocharoen (2010) Thai government possesses a self-determined public administrative structure managed by a Thai Buddhist bureaucracy but public administration in the southernmost provinces has been unique compared to the rest of the country since the majority population is Muslim. Poocharoen also explained that Thai Government tried to use the process of adapting their human resource management practices to manage with the diversity which characterizes the Thai Muslim workforce in Southernmost of Thailand.

Thai Muslim politicians in the southernmost were the key person in facilitated as an ethnic movement working to address developmental problems facing Thai Muslim in southernmost region. Yusuf (2009) clarified that due to the greater political representation of Thai Muslims in southernmost, the Thai national government has realized more on Islamic concerns and reformed its policies to accommodate the religion demands for Thai Muslims such as education system (Boonlong, 2007) the Thai government has applied basic Islamic education to public school in the southernmost, Muslim women are permitted to wear the Hijab at workplaces and allowed to wear the Hijab appearing in the photo of identity card or passport, the Thai government has also accommodated for pilgrims included any Thai Muslim government workforces to the annual Hajj in Saudi Arabia, they are granted for official holidays to celebrate of Islamic religious festivals such as the Aidil-Fitri and Aidil-Adha, Additionally Thai government has facilitated for Provincial Councils of Islamic Affairs to administer Muslim affairs at the national and provincial phase.
Proposed Conceptual Framework of Job Satisfaction among Public Health Employees in Thailand Southernmost Provinces

As discussed in section 2.4; the factor of nature of work, rewards and compensation, and staff relations were most supported factors which associated toward job satisfaction among Public Health employees in Thailand. Therefore, those three factors would be chosen as independent variables in this study, job satisfaction is the dependent variable and the framework also includes moderating variable of religious diversity on the relationship between nature of work, rewards and compensation, staff relations toward job satisfaction.

Figure 2: Proposed Conceptual Framework of Job Satisfaction among Public Health Employees in Thailand Southernmost Provinces

CONCLUSION

Although the majority of population in the southernmost region in Thailand is Thai Muslims but most of the workforces in government sectors in this region conversely are Thai Buddhists. Prior studies found that the reasons caused by low levels of education and the lack of fluency in the Thai language among Thai Muslims. Moreover, Thai Muslims who have graduated from Islamic institutions also have obscurity to get employ due to the Thai Ministry of Education refuse to recognize foreign Islamic universities. However, Thai Government still needs to use the process of adapting their human resource management practices to manage with the diversity which characterizes the Thai Muslim workforces in Southernmost of Thailand due to the increasing of Thai Muslim workforces in the southernmost region.

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The Impact of Leadership on Employee Stress at Commercial Bank in Malaysia

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**INTRODUCTION**

Stress is a worldwide epidemic and has recognized as a major challenge for employee’s health issue. The American Institute of Stress (2014) reported that job pressure is the top cause of stress at work and the stress is brought by the relationship with bosses and work overload. There is about 60% of workers viewed their job is stressful (The American Psychological Association, 2015) and 26% workers admitted that they are very often burned out or stressed by their work (The National Institute for Occupational Safety and Health, 2014). Neelamegam and Asrafi (2010) have conducted a survey to examine the issue of stress and found that about 45% workers acknowledged that stress is a major problem in their work. In addition, a survey conducted by Statistic Canada (2009) showed that around 39% of employees are slightly stressed at work; 25% are relatively stressed while 5% of employees are extremely stressed at workplace. In Malaysia, stress is also a serious issue as it is indicated that about six out of ten workers are suffered from stress (Malaysian Psychiatric Association, 2007) and about 50% of private sector employees experience high level of stress (Yin-Fah, Foon, Chee-Leong & Osman, 2010).

Stress at work can be a real problem to the organizations as well as to the employees. Employee who experience stress would less likely to contribute his/her efforts to the organization, thus, causing decline in quality of work, low commitment, poor job performance, less productivity and decline in organizational effectiveness (Biswas & Biswas, 2010; Liu, Liu, Mills, & Fan, 2013). The American Institute of Stress (2009) indicated that about 80% of patients visiting primary care physicians are complained about stress-related problem such as insomnia, chest pain, depression, heart decease, headaches, fatigue, and high blood pressure because unhealthy level of stress affect employee’s health and immune system. The American Institute of Stress (2014) reported that stress costs U.S. industry about $300 billion per year in pay for workplace accident, absenteeism, turnover, productivity decline, medical cost, legal cost and also insurance cost. Thus, stress could be a financial burden for organization to pay for stress related health care cost and loss of productivity. As such, organizations should be aware of the cause of stress and protect employees from stress.

**LITERATURE REVIEW**

Stress generally refers to feelings of worry, depression, anxiety, tense, loss of control and nervousness in normal daily life. European Agency for Safety and Health at Work (2002) defines job-related stress as “a pattern of emotional, cognitive, behavioral and physiological reactions to adverse and noxious aspects of work content, work organization and work environment…” (p. 8). Workers are said to experience stress when their individual capacity is not able to cope with the demands at work environment. In the same vein, stress is a physiological or psychological adaptive response to the interaction of external events like environment and people (Gibson, Ivancevich, Donnelly, & Konopaske, 2009).
When a person encounters hassles and demands from the working environment and he/she finds it exceeding his/her ability to cope, stress will emerge (Montgomery & Rupp, 2005). However, different people will display different signs/symptoms of stress. Stress can be noted through four symptoms i.e. physical stress, psychological stress, emotional stress and behavioral stress (Gibson et al., 2009). Physical symptoms of stress are related to ailments which are detectable from the physical health condition e.g. headaches, insomnia, high blood pressure, coronary heart disease and chest pain. Psychological stress refers to mental health condition where inability to concentrate, forgetfulness, and frequent negative thought. Emotional stress is the feeling of anxiety, depression, anger and helplessness, which are related to their affective and emotions. Behavioral symptoms of stress are referred to the actions taken by employees such as absent from work, withdrawal, isolation, increase alcohol consumption and drug abuse, loss of appetite, crying for no reason and decrease in productivity.

In an organization, leaders is the one who stands in a better position to put a curb on employee stress (Cheng-min & Bor-wen, 2009) because leaders have the ability to influence employee’s value, emotion and motivation (Burns, 1978). However, leader sometimes might create stress to employees (Strodeur, D’hoore, & Vandenberghe, 2001) if he/she is closely monitors the performance of employees, continuously gives directions and instructions and continually places high performance expectations. These leadership behaviors could generate high pressure and stress to employees. Unfortunately, leaders usually are underestimate their behaviors and not aware that their leadership styles could cause employee to suffer from stress (Offermann & Hellmann, 1996; Strodeur et al., 2001).

Although transformational leadership is viewed as the most effective leadership to engage employee’s positive behaviors and reduce employee’s negative emotions, but some aspects of transformational leadership such as intellectual stimulation may produce employee in view of the leaders constantly exerting their high expectation on employees to search for better and creative ways of doing things and solving problems. On the other hand, transactional leader, known as autocratic leader, can induce employee stress because of the control-oriented behavior where the leader tend to micro manage employee’s work activities, do not empower to employees and do not consider employee’s needs (Katcher & Synder, 2007).

Even though it is generally agreed that leader behaviors could possibly influence employee stress, surprisingly the effect of leadership on employee stress has received little attention in empirical studies (Offermann & Hellmann, 1996; Sosik & Godshalk, 2000) because most of the studies are focused on burnout (De-Hoogh & Den-Hartog, 2009; Rowold & Schlotz, 2009). Burnout is more severe than the occurrence of the stress as it is the extreme level of stress (Newstrom & Davis, 2002) where employee suffered over a long period of time and caused him/her emotional detached and isolated himself/herself from job and organization (Luthans, 2008). Leadership is found to be inducing and also reducing employees’ stress in workplace. Employees who work with autocratic leaders are reported to have high levels of stress whereas employees who work under charismatic leader were found to have less stress experience. This study therefore sought to examine the relationship between leadership and stress, rather than burnout, is because if stress if not managed well at the initial stage, it will have deleterious effect to the organization. Specifically, this study intends to investigate the effect of leadership on various stress symptoms namely physical stress, psychological stress, emotional stress, and behavioral stress.

Offermann and Hellmann (1996) asserted that leaders may not notice that their behavior can attribute to employee stress. They conducted a survey from multiple perspectives to examine upper-level leaders, leaders themselves and lower-level leaders. The respondents of study are formed by the mid-level managers from a multinational bank in Washington. Data was collected from leaders themselves, the bosses of leaders and subordinates. They found manager’s stress was higher when their leaders are less participative, delegate less, communicate less and have high level of control and goal pressure.
Sosik and Godshalk (2000) used transformational and transactional leadership to examine job related stress and found only transformational leadership has a negative relationship to job-related stress. The study however failed to find any relationship between transactional leadership and job-related stress. This finding is similar to the study by Hetland et al. (2007) who examined transformational and transactional leadership on burnout and found a negative relationship between transformational leadership and burnout. Further, the study also found no relationship between transactional leadership and burnout.

Strodeur et al. (2001) investigated transactional and transformational leadership on the level of emotional exhaustion suffered by employees. Emotional exhaustion is intense stress experienced by employees over a long period of time. The study found that all dimensions of transformational leadership were negatively related to emotional exhaustion. However, the results for transactional leadership were mixed. Contingent reward was found to have a negative relationship to emotional exhaustion. Active management-by-exception and passive management-by-exception had a positive relationship with emotional exhaustion. While the study of De-Hoogh and Den-Hartog (2009) found charismatic leadership was negatively related to burnout. Previous studies have examined job-related stress without looking at the specific symptoms of stress (Liu, Siu & Shi, 2012), hence this study attempts to look at the influential effect of leadership behavior on the various stress symptoms i.e. physical stress, psychological stress, emotional stress, and behavioral stress. Therefore, the following hypotheses are proposed:

Hypothesis 1: Transformational leadership is negatively related to physical stress.

Hypothesis 2: Transactional leadership is positively related to physical stress.

Hypothesis 3: Transformational leadership is negatively related to psychological stress.

Hypothesis 4: Transactional leadership is positively related to psychological stress.

Hypothesis 5: Transformational leadership is negatively related to emotional stress.

Hypothesis 6: Transactional leadership is positively related to emotional stress.

Hypothesis 7: Transformational leadership is negatively related to behavioral stress.

Hypothesis 8: Transactional leadership is positively related to behavioral stress.

**METHODOLOGY**

The study was carried out within a sample of employees drawn from nine commercial banks in Malaysia. All the full-time bank employees were involved in the study. Questionnaire was used to collect the data and was sent to bank managers. Bank managers were then distributed the questionnaires to their employees. The questionnaire consisted of general demographic information, leadership behaviors i.e. transformational and transactional leadership, and stress symptoms i.e. physical stress, psychological stress, emotional stress and behavioral stress. Questionnaires were administrated in both English and Bahasa Melayu. The questionnaires were collected two weeks after distribution with a response rate of 59% which a total of 474 usable questionnaires were returned. The measurement for stress symptoms was adapted from various sources (e.g. Health and safety stress questionnaire, 2003; Layne, 2001; Pejtersen & Kristensen, 2004; UCU model stress questionnaire, 2010) whereas leadership was adapted from Bass and Avolio (1995).
Factor analysis was conducted to ensure the validity of the measurement items and the underlying dimensions for each construct (Hair, Anderson, Tatham, & Black, 1998). Reliability analysis was conducted to ensure the items are measuring the construct. All reliabilities are shown above 0.80 which indicated as strongly reliable for the items measured (Nunnally, 1978).

**FINDINGS**

The respondents were made up of 184 (39%) male and 290 (61%) female. 38% of the respondents were below 30 years old, 43% were between 31 and 40 years old, and 19% were over 40 years old. Most of the respondents (61%) were married. Many respondents are the bank officer/executive (33.8%). Majority of the respondents are the front-end workers which comprises of front line department, sales and marketing department and customer service department The average working experience of the respondents was 9 years (SD = 7 years). Most of the respondents (74%) had worked with their current leader more than one year and fewer than 6% had worked with their current leader less than 6 months.

A multiple regression analysis was performed to test the multivariate effects of leadership behavior on various stress symptoms. The results of analyses are presented in Table 1

<table>
<thead>
<tr>
<th></th>
<th>Physical Stress</th>
<th>Psychological Stress</th>
<th>Emotional Stress</th>
<th>Behavioral Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational</td>
<td>-0.26**</td>
<td>-0.24**</td>
<td>-0.31**</td>
<td>-0.24**</td>
</tr>
<tr>
<td>Transactional</td>
<td>0.31**</td>
<td>0.31**</td>
<td>0.34**</td>
<td>0.19**</td>
</tr>
<tr>
<td>F Value</td>
<td>37.85</td>
<td>36.08</td>
<td>51.44</td>
<td>19.43</td>
</tr>
<tr>
<td>P Value</td>
<td>0.0001</td>
<td>0.0001</td>
<td>0.0001</td>
<td>0.0001</td>
</tr>
<tr>
<td>R²</td>
<td>0.14</td>
<td>0.13</td>
<td>0.18</td>
<td>0.08</td>
</tr>
</tbody>
</table>

Note: **p < .01

The results indicated that transformational leadership and transactional leadership were significant predictors. Transformational leadership was found negatively related to physical stress (β=-0.26, t=-5.98, p=.0001), psychological stress (β=-0.24, t=-5.55, p=.0001), emotional stress (β=-0.31, t=-7.37, p=.0001) and behavioral stress (β=-0.24, t=-5.11, p=.0001) whereas transactional leadership was found positively related to physical stress (β=0.31, t=7.04, p=.0001), psychological stress (β=0.31, t=7.11, p=.0001), emotional stress (β=0.34, t=7.93, p=.0001) and behavioral stress (β=0.19, t=4.17, p=.0001).

The findings indicated that both transformational leadership and transactional leadership explained 14% of the variance in physical stress, 13% of the variance in psychological stress, 18% of the variance in emotional stress and 8% of the variance in behavioral stress. The findings of this study support all the hypotheses that transformational leadership is negatively related to stress symptoms and transactional leadership is positively related to stress symptoms.

**DISCUSSIONS**

This study examined the relationship between leadership and stress by looking at several symptoms of stress. The findings indicate that both transformational leadership and transactional leadership significantly influence stress symptoms. Specifically, the study found an inverse relationship between transformational leadership and all four stress symptoms, i.e. physical stress, psychological stress, emotional stress and behavioral stress and a positive relationship between transactional leadership and all
four stress symptoms. This can be implied that transformational leadership was found to be mitigating employee stress while transactional leadership was found to be inducing employee stress.

A transformational leader who constantly allows employees to participate in decision making, inspire employee’s motivation, considerate to employee’s feelings and encourages two-way communication could generate a favorable working environment to employees and may help lower employees stress. Employees may feel less stressed working in a harmonious and cooperative work environment (Fisher, 2010). In addition, a transformational leader empowers employees through emotional appeal, which in turn reframe the stressful conditions as opportunities for growth (Lyons & Schneider, 2009). This finding is consistent with De-Hoogh and Den-Hartog’ (2009) study who reported a negative correlation between charismatic leader and employees burnout.

In contrast, a transactional leader is one who continually gives instructions, too control-oriented, passively waits for things to go wrong and does not provide individual support to employees (Strodeur et al., 2001). This type of leader merely controls their subordinates and makes them follow the desired standard without providing any resources or supports to the employees. Employees will feel an imbalance in their relationship with the leader and it may increase dissatisfaction toward their leader. Hence, employees tend to withdraw themselves from developing a deeper sense of connection with the leader (Epitropaki & Martin, 2005) and this may cause greater physiological, psychological, emotional, and behavioral effects, and as a result, employees may experience high levels of stress. This finding is consistent with Rowold and Schlotz (2009) who reported a positive link between transactional leadership and chronic stress.

**IMPLICATIONS**

Stress is very costly to organizations to pay for the impact of stress in medical costs, turnover, productivity decline, and workplace accidents. Employees who suffered from stress did also refrain from engaging positive behaviors at workplace such as helping, courtesy, responsible, sportsmanship and contribute extra efforts. It is crucial for bank leaders and managers to aware, manage and prevent employee’s stress by establishing effective stress-prevention programmes. The idea of the stress-prevention programme is to educate the employees as well as the leaders about the information and consequences of stress and also provide some useful tips in managing stress at the initial stage. If employees do not manage stress at the initial stage, it will become intensive and prolonged stress which is dangerous and unhealthy to the employees. Bank leaders and managers can also promote some health programmes, which consist of fitness activities and counseling in order to help employees coping with stress.

Not to forget leaders can either increase or decrease employee stress. Transformational leadership has the power to reduce employee stress while transactional leadership is the main source that causes employees to experience high level of stress. Leaders can be trained to be charismatic and concern for people. Such training may help leaders to develop a more supportive, inspirational and considerate style when communicating and interacting with employees. As such, the quality of relationship with the leader may help employees to mitigate their stress level. Being aware of the level of stress of employees is helpful for leaders so that they can take the necessary steps to reduce it. Consequently, leaders have to identify which type of leadership behavior can work in mitigating or inducing the stress of employees, and thus, leaders need to adjust their leadership styles accordingly.

**CONCLUSION**

Having little stress is good to push individuals to work productively in the workplace. However if the stress level is overwhelming or reaches an extreme level, it may be counterproductive and have
The Impact of Leadership on Employee Stress at Commercial Bank in Malaysia

deleterious effects on employees. Stressed employees will tend to reduce their commitment, decrease work productivity, absent from work, always reporting sick, experience anxiety and depression. These consequences of stress can negatively impact an organization. Organization therefore may be burdened from the cost of stress. One of the factors theoretically possible to influence employee stress is leadership behavior. While some types of leadership behavior can induce stress, other types of leadership behavior can be mitigating in nature. This raises the question on the need for management or leaders of organization to demonstrate appropriate leadership behavior when they interact with their employees.

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INTRODUCTION

The significant contribution of construction industry towards nation social economic is widely acknowledged. Contributions of construction industry within a country can be measure by Gross Domestic Product (GDP). For example, Malaysia construction industry has averagely around 2% to 3% of total Malaysia GDP. In addition, construction industry also has provided job opportunities around 10% of total Malaysian workforce (Department of Statistic Malaysia, 2011). However, rapid development of construction has increased the complexities of project. Thus, due to the significant of this industry, tremendous of afford has been done by Malaysia government toward enhancing construction industry. For example, the Construction Industry Development Board (CIDB) has rapidly promoting an innovative construction technique which is called Industrialised Building System (IBS) among the Malaysian construction practitioner. The rapid development technology in manufacturing has opened a new opportunities for construction industry. IBS is “an innovative process of building construction using the concept of mass-production of industrialised systems, produced at the factory or onsite within controlled environments, that includes the logistic and assembly aspect using proper planning, coordination and enhancing value to end users” (M. N. M. Nawi, 2012)

The current of situation in construction Malaysia such as increasing demand in housing (Yoke, Hassim, & Kadir, 2003) and increasing foreign worker (Hamid et al. 2011) has illustrates the need of new construction technique such as IBS. The advantages of BIM such as reducing overall cost and project duration, reducing number of workers and waste, increasing productivity and quality, has been widely discussed in literature (Anuar, Kamar, Hamid, & Alshawi, 2010; Azam, Hamzah, & Mahanim, 2009; Lou & Kamar, 2012; Mydin, Phius, Sani, & Tawil, 2014). However, IBS project in Malaysia has been domination by traditional method which is based on fragmentation approach (CIDB, 2009; Nawi, Osman, & Che-Ani, 2014). This situation led to unutilised of IBS techniques that required high level of collaboration among the project stakeholders. The used of fragmentation concept in IBS project especially in planning and design phase can negatively affect project process and outcomes (Nawi, Lee, & Nor, 2011). Fragmentation in construction also led to lack of communication among the project stakeholder which is has been considered as a major problem particularly in supply chain (Mohamad, 1999).

In nutshell, the successful of IBS project is highly depend on level of collaboration among the project stakeholder. Research suggests the improvement of current procurement and project delivery towards an integrated and collaborative team approach to deal with this issue (Bourn, 2001; Egan, 2002; Nawi, Lee, and Nor, 2011). Thus, this paper aims to develop a framework for team integration for IBS project in Malaysia.

A Framework for Team Integration in Malaysia Industrialized Building System (IBS) in Construction Project

KEYWORDS: Industrialised Building System (IBS), Integration, Integrated Practiced, Malaysian construction industry, Qualitative Study
Integrate Team Approach

Teamwork has been widely considered as solution towards improving organization performance (Nelsan & Holt, 1999). This is due to the ability of team work that consist of people who has expertise, knowledge, skill and experience which is more capable to deal with complex problems (Baiden, 2006; Harris, & Harris, 1996). Most of the literature has defined teams as a group and vice versa, neither perceiving nor implying any distinctions between them (Fisher et al 1997). Even though the term of group and team most likely share the same definition, yet both of the term is fundamentally different (Hayes, 2002). For example, some author has defined group as a collection of individual skilled people for a purpose and each of member has responsible to reinforce individual performance by sharing information in order to achieving their goal (Baiden, 2006). Meanwhile, a team is a one of the portion of group that has been created with a specific and common goal. The term of integration is mostly used to illustrate group, teams or teamwork. In literature, a number definition of integration has been developed (Baiden, 2006; Dainty, Briscoe, and Millett, 2001; Howell, 1996).

However, the term of integration has been used in construction industry to represent a collaborative work of environment culture create by all stakeholder who involved with project delivery in construction project (Vyse, 2001). For example, the existence of high level collaboration among project stakeholder in design and construction of project can increase the effectiveness project delivery (Akintoye, 1994; Fleming & Koopelman, 1996). This is due to the ability of team work that consists of people such as designer who has expertise, knowledge, skill and experience which is more capable produce an effective design of the project (Baiden, 2006; Harris, & Harris, 1996). As a result, numerous of research has been performed in order to improve team integration especially in design phase (Baiden, 2006; Buzell, 1995; Song, Mohamed, and AbouRizk, 2006). Furthermore, in order to deal with fragmentation concept and limitation of traditional method, an integrate concept project delivery called Integrate Project Delivery (IPD) has also been developed (Khemlani, 2010;Perlberg, 2009, Trigunasyah, 2006). In addition, Nawi, M. et al (2012) has investigate a critical success factor for improving team integration in IBS project. They highlighted there were 3 critical success factors such as people, technology, and process. The indentification of critical success factors is significant for development of team integration framework for IBS project. However, there is no study attempt to investigate on development of framework that focus on what is strategy of industry players in team integration and how it was implemented in IBS project.

RESEARCH METHODOLOGY

The findings obtained in this paper were collected through qualitative nature in form of focus group discussion (industry workshop). The advantages of focus group is increase the interaction between participant and enable them to freely share views, opinion based their own experience (Wee & Kevern, 2001;Gibbs, 1997). According to Robson (2004), workshop is the most suitable approach for qualitative data collection. This is because collection data from several participants at the same time can increase amount and range of data. Thus, in order to achieve the objective of this study, the adoption of focus group is more suitable for development and validation of proposed framework.

The workshop in this study has been conducted through collaboration between The Construction Industry Development Board (CIDB); Construction Research Institute of Malaysia (CREAM); IBS Centre; and the University of Salford, UK. 6 of construction practitioner who has different division (designer, contractor, manufacture, government, and developer) have been selected as a participant in this workshop. The selection of participant in this study based on several criteria such as at least 5 years working experience, completed several of local IBS project, possess sufficient qualification, knowledge and skills in their field. Table 1 illustrates respondent profile who involved in this workshop.
This research has been particularly focused on identifying the process and strategy for implementing team integration in Malaysian IBS construction projects. Therefore, the process flow or method of implementation, the question: “What is your strategy and how was it implemented (the team integration approach) into an IBS project?” was asked to understand the process of implementation that has been used among the different multidisciplinary of IBS practitioners towards team integration.

The findings from the workshop identified that several strategies had been implemented in order to improve the level of team integration in current Malaysian IBS projects. According to participants P1 and P2, work had been carried out to convince and educate IBS clients, especially the Malaysian government, about integrated team practice. The participant from the design department stated that:

‘Mostly we will meet the Government representative, such as the IBS unit at the Public Works Department, to explain the best method for implementing the IBS system for an integrated delivery team’ - Participant P8

At the same time, efforts have been made to introduce a new collaborative procurement method or tool for integrated design practice such as Integrated Project Delivery to the client. As stated by the participant in the planning department:

‘After explaining many times the benefits of a new procurement or project delivery method, our client would agree to use IPD together with BIM in their project’ - Participant P1

In addition to this, two participants (P1 & P6) also underlined that the implementation of integration frameworks in IBS projects can be improved either through the modification or customisation of procurement processes for integrated practice. The participants, however, admitted that the traditional procurement method is still valid and can to be applied to IBS projects, but it needs some improvement, as explained by participant P6 below; ‘It is normal in our project to modify or make some changes to the traditional method, including design-and-build procurement, in order to improve the level of integration among project team members’ - Participant P6

The participants also found a new factor, which had not previously been discussed in the literature, to spur on the implementation of team integration in the Malaysian IBS projects. Participants (P2, P3, and
P5) pointed to a lack of coordination in the current structure and practice between manufacturers and design consultants. For example, participants P2 and P5 criticised the inefficient management and poor monitoring systems of IBS players in the Malaysian construction industry. Participants would like an independent agency, such as a third party consultant, to lead and monitor the entire design process among IBS practitioners. As highlighted by participant P2;

‘There is a desperate need for a ‘one-stop-centre’ as a place where design, manufacturing, and construction are conducted under one roof. In other words, the role of this centre is to lead and integrate all the stakeholders, such as manufacturers, consultants, and contractors of the IBS project. However, it needs support from the client or Government to realise this, otherwise the implementation would be illegal’ - Participant P2

CONCLUSION

Based on the finding, all the workshop participants agreed and confirmed that improving team integration and communication among stakeholders involved during the design stage of IBS projects significantly adversely affects successful IBS implementation in the Malaysian construction industry. This is due to the characteristic of team integration that can ensure high level of collaboration in term of sharing knowledge, expertise and information that led to the effective delivery of project. However, the involvement of all IBS players such as manufacturers, designers, and contractors was required in order to avoid duplication of effort and especially to convince and educate the Malaysian Government or private clients about integrated team practices. Furthermore, the participants agreed that an appropriate framework for achieving effective integrated design teams in Malaysian IBS projects needs to be developed to detail how IBS practitioners (including manufacturers, suppliers and contractors) can become involved integratively and to share their skill, knowledge and experience within a conducive work environment. The participants also conceded, with no opposition, the benefits of an integrated design team approach for IBS projects.

The nature of qualitative data has enable researcher in identification strategy and how the implementation of team integration among in IBS construction project. Thus, this paper has captured the strategy of team integration and how it was implemented in IBS construction project. In addition, this framework can be seen as a guideline for Malaysian IBS stakeholders to improve team integration during the IBS design stage. It can be used by anyone involved during the design stage of IBS projects, including the client. There are, however, some uncertainties as to what extent such a framework will contribute to the implementation of integrated approach in Malaysian IBS context.

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The Impact of Project Manager and Project Team Competency and Authority towards Waste Management Practices Success

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The Impact of Project Manager and Project Team Competency and Authority towards Waste Management Practices Success

Keywords: Waste Management Practices, Project Manager, Project Team Competency, Project Team Authority, Waste Management Practices, Malaysia

INTRODUCTION

Environment and development are usually cannot be Construction industry involvement is very important in order to achieve environmental sustainability through the improvement of its management practices (UNEP-IETC, 2002). Over the last few years, a diverse number of public and private sector in many countries have given increased attention to the problems of excessive natural resources consumption, depletion and degradation, waste generation and accumulation and environmental impact and degradation. Based on these issues, construction industry could be considered as one of the mega contributor to the environmental issues. According to Wenblad (2001), the beginning of year 2000 has seen an increasing demand for changes from conventional construction to greener construction approach which has given more consideration on the Waste Management Practices (WMP) in every single construction project.

WASTE MANAGEMENT PRACTICES

Previous studies have identified a number of benefits in implementing waste management for construction industry (Tam, et al., 2006). Pollution prevention, better allocation of resources, better regulatory compliance, evaluation of risks and plans for preventing potential problems are among the various benefits that can be achieved through the improvement of waste management (Tibor, 1996). According to Begum et. al (2009), majority of the Malaysian construction stakeholders put low priority on the issues of waste management. Data shows that approximately 40% of the generated waste portion globally originates from construction and demolition of buildings (Kulatunga et al., 2006). In general, construction waste is bulky, heavy and is mostly unsuitable for disposal by incineration or composting.

By and large, construction waste origins are related to design changes, leftover material scraps, no-recyclable/re-useable packaging waste, design/detailing errors, and poor weather (Faniran and Caban 1998). Further, a study of attitudes of architects and contractors toward the origins of construction waste indicates that construction waste is related to design, site operation, procurement routes, material handling and sub-contractor’s practices (Osmani et al. 2006). Osmani et al. (2007) went further to compile and group the main sources of waste factors in terms of construction life cycle stages, comprising contractual, design, procurement, transportation, on-site management and planning, material storage, material handling, site operation, residual, and other.

PROJECT MANAGER AND PROJECT TEAM AUTHORITY AND COMPETENCY
Bayliss, (2002) in his report mentioned that delivering success requires the concerted effort of the project team to carry out the various project activities and project manager who, at the centre of the project network, is responsible for orchestrating the whole construction process. Project manager and project team related factors are very important towards delivering success. The project manager is key stakeholder in a construction project and his competence is a critical factor affecting project planning, scheduling, and communication (Belassi&Tukel, 1996). While project team according to Chua et al. (1999), could be defined as the key stakeholders which include the client, contractor, consultants, subcontractors, suppliers, and manufacturers. The skills and knowledge of the project team is important as they can work together according to their background expertise in each area (Barki et. al 1993; Cameron and Mayer, 1998; Clemons, 1998). This factor can be regarded as the willingness of the involved parties to integrate continuously to solve problems (Brensen& Marshall 2000; Cheng et al. 2000, Cheng et al. 2004). Teamwork by all the involved parties is expected to balance the attainment of short-term objectives with long term goals and achieve both individual and joint missions without raising the fear of opportunistic behaviour (Mohr and Spekman 1994; Romancik 1995). The importance elements of project manager and project team related factors are the knowledge, skills, abilities, and experience of the team as well as selection of the right team members, which should not only be technologically competent but also to understand the company and its business requirements (Kapp, 1998). This was further supported by Shamas and Ogunlana (2007) where they agreed with this assertion and notes that comprehension, commitment, competence and communication are fundamentally essential for organization success.

According to Chua et. al (1999), Walker (1995), Chan and Kumaraswamy (1997); Songer and Molenar (1997); Belassi and Tukel (1996) and Hassan (1995), these factors are related to the project manager and project team members which include client’s experience, nature of client, size of client’s organization, project team leaders’ experience, technical skills of the project team leaders, planning skills of the project team leaders, organizing skills of the project team leaders, coordinating skills of the project team leaders, motivating skills of the project team leaders, project team leaders’ commitment to meet cost, time and quality, project team leaders’ early and continuous involvement in the project, project team leaders’ adaptability to changes in project plan, project team leaders’ working relationship with others and support and provision of resource.

Research Objectives
This objective of this research was to identify the relationship between project manager and project team competency and authority towards WMP success.

RESEARCH METHODOLOGY

Data Collection
For this research, quantitative research approach was chosen because it has the ability of surveying a large random sample at lower cost and shorter time spent. By using the questionnaires, researchers can also avoid bias (compared to observation and schedule method) and provide provision to the respondents to give genuine responses and to make sure that researchers are able to measure the responses in more accurate situation (Emory, 1991). Each questionnaire will be accompanied with a cover letter, purpose of the study, request for cooperation, guarantee of the privacy of the data given and instructions on how to answer the questionnaire. The questionnaire is design by using English language. The data will be collected through:

i. Postal Survey
ii. Questionnaire distribution through International Construction Week
iii. Interviews with the aid of questionnaire.
There some activities have been taken in order to encourage the respondents to participate in this research and therefore increasing the percentage of the response rate as the following:

i. Questionnaires were mailed with a cover letter ensuring anonymity and confidentiality, and a stamped reply envelop. The cover letter explained the purpose of the study.

ii. The high response rate is attributed to the follow-up telephone calls to the managers in the sample in order to encourage participating and filling up the questionnaire.

iii. The researcher sent a reminder letter to late respondents, requesting and

iv. Reminding them to respond as soon as possible.

v. Other strategies that were used include e-mails, and deliver softcopy to the respondents, in order to make it more convenience for them and to increase the response rate.

vi. Delivering questionnaires by hand during visiting some of the respondents’ firms, and help them to answer the questionnaire in order to increase the response rate.

Research Instruments
The instrument for Waste Management dimensions variables was adapted from Peireira et. al (2005), Osmani et.al (2006), Osmani et.al (2007), De Silva and Vithana, (2008), Kulatunga et. al (2006). The measures of variables contain 11 items. A four-point Likert-type scale rating from 1=strongly disagree to 4= strongly agree was used for all Waste Management factors dimension variables items. The details of Waste Management dimension variables items are presented in the following Table 1.

<table>
<thead>
<tr>
<th>Waste Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Most of our projects have adequate planning about waste reduction.</td>
</tr>
<tr>
<td>2. Most of our partners concerned about waste reduction.</td>
</tr>
<tr>
<td>3. Our organization is looking forward towards systematic waste reduction management.</td>
</tr>
<tr>
<td>4. Our organization always been provided with enough information of how to handle the waste reduction.</td>
</tr>
<tr>
<td>5. We don’t have any problem to handle the waste reduction program because of the existence of legal framework.</td>
</tr>
<tr>
<td>6. We don’t have any problem to handle the waste reduction program because of the existence of bestpractice guidance.</td>
</tr>
<tr>
<td>7. We don’t have any problem to handle the waste reduction program because of the enforcement mechanism.</td>
</tr>
<tr>
<td>8. We don’t have any problem to handle the waste reduction program because of the awareness and understanding among stakeholders.</td>
</tr>
<tr>
<td>9. My company provided training program according to environmental protection.</td>
</tr>
<tr>
<td>10. We always have motivation to handle the waste reduction because the senior management encouraged us to do so.</td>
</tr>
</tbody>
</table>
The instrument for Project Manager and Project Team Competency and Authority dimensions variables was adapted from Chua et al., (1999), Bayliss, (2002), Chan and Kumaraswamy (1997), Dissanayaka and Kumaraswamy (1999). The measures of variables contain 7 items. A four-point Likert-type scale rating from 1=strongly disagree to 4= strongly agree was used for all Project Manager and Project Team Competency and Authority dimension variables items. The details of Project Manager and Project Team Competency and Authority dimension variables items are presented in the following Table 2.

<table>
<thead>
<tr>
<th>Project Manager and Project Team Related Factors</th>
<th>Variables Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>PM and project team members competency</td>
</tr>
<tr>
<td>2.</td>
<td>PM and project team members experience</td>
</tr>
<tr>
<td>3.</td>
<td>PM and project team members authority</td>
</tr>
<tr>
<td>4.</td>
<td>PM and project team members technical capability</td>
</tr>
<tr>
<td>5.</td>
<td>PM leadership skills.</td>
</tr>
<tr>
<td>6.</td>
<td>PM and project team members commitment</td>
</tr>
<tr>
<td>7.</td>
<td>PM and project team members adaptability to changes</td>
</tr>
</tbody>
</table>

DATA ANALYSIS

At the end of data collection, the data was analysed by using Statistical Package for Social Science (SPSS). Reliability analysis was conducted on the items measurement. A correlation test was done to gauge the preliminary results and relationship between variables. The data was systematically assessed on the data entry accuracy or errors. The mean, standard deviation, frequency and histogram were analysed. At this stage, the researcher would get to observe the overall data before detail analysis.

VALIDITY AND RELIABILITY ANALYSIS

Finally, the data would be subjected to reliability test by using Cronbach alpha coefficient to check the internal consistency of composite score of the variables. A scale is found to be reliable if the is 0.70 or higher (Nunally, 1978). The data was also subjected to exploratory factor analysis to examine if an item belongs to the measured being assigned (Bryman and Bell, 2007). Compared to other items with relatively low correlations with measure-score, true items have more variance relating to the common factor among the items and contribute more to the measure of reliability. Factor analysis techniques would be used to gauge if the dimensions converged into the defined variable through structural equation modelling (Arbuckle, 2007). The goodness fit of the model assesses the overall fit, comparative fit and model parsimony (Hair et al., 2009).

This section presents the reliability of the instruments used. There were two (2) constructs which are:
1. Project Manager and Project Members Competency and Authority
2. Waste Management Practices

Table 3: Reliability Levels of Instruments – Cronbach Alpha

<table>
<thead>
<tr>
<th>Construct</th>
<th>Pilot Study</th>
<th>Real Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager and Project Members Competency</td>
<td>0.749</td>
<td>0.865</td>
</tr>
<tr>
<td>and Authority</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste Management</td>
<td>0.938</td>
<td>0.915</td>
</tr>
</tbody>
</table>

Table 3 exhibits the comparison of Cronbach alpha values of each construct between the pilot study and the real study. Based on the table presented above, there is sufficient evidence to suggest that the reliability of the construct was acceptable as the Cronbach alpha values are more than 0.7 (Nunally, 1978).

Descriptive Summary of Respondents
The data of this study was gathered from 122 companies to represent the construction stakeholders in Malaysia. The following table 4 presents the descriptive summary of demographic information of the respondents.

Table 4: Background Information of the Respondents

<table>
<thead>
<tr>
<th>Variables</th>
<th>Companies</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Experienced</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>less than 1 year</td>
<td>18</td>
<td>14.8</td>
<td></td>
</tr>
<tr>
<td>1-5 years</td>
<td>30</td>
<td>24.6</td>
<td></td>
</tr>
<tr>
<td>6-10 years</td>
<td>31</td>
<td>25.4</td>
<td></td>
</tr>
<tr>
<td>more than 10 years</td>
<td>43</td>
<td>35.2</td>
<td></td>
</tr>
<tr>
<td>Education Background</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PhD</td>
<td>7</td>
<td>5.7</td>
<td></td>
</tr>
<tr>
<td>Masters</td>
<td>14</td>
<td>11.5</td>
<td></td>
</tr>
<tr>
<td>Degree</td>
<td>66</td>
<td>54.1</td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td>13</td>
<td>10.7</td>
<td></td>
</tr>
<tr>
<td>Certificate</td>
<td>5</td>
<td>4.1</td>
<td></td>
</tr>
<tr>
<td>STPM</td>
<td>2</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>SPM</td>
<td>15</td>
<td>12.3</td>
<td></td>
</tr>
<tr>
<td>PMR</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>PMR</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

AGBA 12th World Congress
Page 936 of 1173
The Impact of Project Manager and Project Team Competency and Authority towards Waste Management Practices Success

### Numbers of Employees

<table>
<thead>
<tr>
<th>Numbers of Employees</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 50</td>
<td>79</td>
<td>64.8</td>
</tr>
<tr>
<td>50 – 100</td>
<td>12</td>
<td>9.8</td>
</tr>
<tr>
<td>101 – 300</td>
<td>10</td>
<td>8.2</td>
</tr>
<tr>
<td>301 – 500</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>More than 500</td>
<td>18</td>
<td>14.8</td>
</tr>
</tbody>
</table>

### Years of Organizational

<table>
<thead>
<tr>
<th>Years of Organizational</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 years</td>
<td>17</td>
<td>13.9</td>
</tr>
<tr>
<td>5 – 10 years</td>
<td>30</td>
<td>24.6</td>
</tr>
<tr>
<td>11 – 20 years</td>
<td>39</td>
<td>32.0</td>
</tr>
<tr>
<td>More than 20 years</td>
<td>36</td>
<td>29.5</td>
</tr>
</tbody>
</table>

Regarding the role of every construction stakeholders, 31 companies (25.4%) are developers or clients, 57 companies (46.7%) are contractors, and the balance of 34 companies are consultants (27.9%). The study found that 18 respondents (14.8%) have less than a year experience, 30 respondents (24.6%) have 1 to 5 years experiences, 31 respondents (25.4%) have 6 to 10 years experiences and 43 respondents (35.2%) have more than 10 years experiences. For those respondents who have less than a year experience, they are still reliable due to the reason that all of them have professional qualification. In term of education background, 7 respondents hold PhD (5.7%), 14 respondents hold Masters Degree (11.5%), 66 respondents hold First Degree (54.1%), 13 respondents hold Diploma (10.7%), 5 respondent hold Certificate (4.1%), 2 respondents have Malaysian Higher School Certificate (STPM) (1.6%) and 15 respondents have Malaysian School Certificate (SPM) (12.3%). The companies participated in this study exhibited the following statistics. 79 companies (64.9%) hired less than 50 staff, 12 companies (9.8%) hired between 50 to 100 staff, 10 companies (8.2%) hired between 101 to 300 staff, 3 companies (2.5%) hired between 301 to 500 staff and 18 companies (14.8%) hired more than 500 staff. In term of the years of experience of the companies in the construction industry which were represented by the years on incorporation of the companies, 36 companies (29.5%) were in the construction industry for more than 20 years, 39 companies (32.0%) were in the industry for more than 10 years, 30 companies (24.6%) were in the industry for more than five years and the balance of 17 companies (13.9%) were in the industry for about 1 to 5 years.

### HYPOTHESIS TESTING

In order to test the hypotheses, multiple regressions and the correlation method were utilized. Multiple regressions were used in order to identify the relationship between two or more independent variables whereas the Pearson correlation was used to test the relationship between one dependent and one independent variable. In addition, these two tests had different objectives. The Pearson correlation indicates the association between variables while multiple regressions analyze the relationships by allowing prediction on the relationship between the predictor and the criterion variable.
Figure 1: Project Manager and Project Team Competency are positively related to Waste Management Practices Success

Table 5 below presents the summary of the test results on the relationships between the Project Manager and Project Team Capability and Authority towards Waste Management Practices Success.

**Table 5: Test Results on the Relationships between the Project Manager and Project Team Capability and Authority towards Waste Management Practices Success.**

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>R</th>
<th>P</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager and Project Team Competency and Authority are positively related to Waste Management Practices Success</td>
<td>0.290</td>
<td>p&lt;0.01</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Table 6: The Strength of the Relationship between the Variable

<table>
<thead>
<tr>
<th>Scale</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Per cent</strong></td>
<td>±0.1 to ±0.29</td>
<td>±0.30 to ±0.49</td>
<td>±0.50 and above</td>
</tr>
</tbody>
</table>

Source: Cohen et. al (2000)

In order to determine the strength of the relationship between the variables, Pallant (2001) suggests the following: when the value is 0, it indicates there is no relationship, while a correlation of ±1.0 indicates that there is a perfect positive or negative relationship. In order to interpret the values between 0 (no relationship) and 1 (perfect relationship), Cohen et. al (2000) suggestion was used (refer Table 6). When $r = ±0.1$ to ±0.29, the relationship is said to be small, when $r = ±0.30$ to ±0.49, the strength is medium while when $r$ is ±0.50 and above, the strength is large.
The result presents that the correlation coefficient is \( r = 0.290 \) at \( p<0.01 \). The results demonstrate that Project Manager and Project Team Competency and Authority have significant relationships with the Waste Management Practices Success. This suggests that in order to meet the requirements of Waste Management Practices Success, set by construction stakeholders in Malaysia, there should be supported by Project Manager and Project Team Competency and Authority. The results of Pearson product-moment coefficient correlation test expose that the independent variables are significantly associated and correlated with the requirements of Waste Management Practices Success in construction industry.

**CONCLUSION**

This study has successfully taken into consideration on the issues of generalization. In attempting to gather information from the construction stakeholders, the selected companies were surveyed. The orientations of the respondents in terms of their backgrounds and scope of works are different. Therefore, this study has fulfilled the characteristic of a fundamental research, i.e. generalizability. However, there are limitations that are beyond control of this study. This study involved construction stakeholders that include the consultants, client and contractors. The structure of the companies in terms of their background, scope of work, experiences and capability are different. Nevertheless, by considering them in the study, it might provide some insights on the perceptions of the companies that will reflect on the whole construction stakeholders in Malaysia. The respondents of this study were people that represent each organisation. Due to this study is cross sectional by nature, it seems impossible to capture all aspects in the organisation that the staff in the company might encounter.

**REFERENCES**


Occupational Stress among Teachers at Secondary Schools in Perak

Keywords: Stress, Work Load, Work Hours, Financial Problem, Family Conflicts, Work Location.

INTRODUCTION

Teachers are the providers of knowledge, who educate, foster and nurture students to become someone in their life and also to create a knowledgeable person. The learning process takes place in a school that will help to facilitate the learning process and school is the workplace of the teachers.

There has been much research on occupational stress. The occupational stress terminology is used interchangeably with work stress and/or job stress but its meaning refers to the same thing (Larson, 2004). Job stress has long been an important concept in the study of employees’ responses to their work environments. The many challenges in the work environment, characterized by heightened competition, increased work targets, threats of job loss, organizational change, lack of time, lack of space, continuous technological development, conflicting demand from organizational stakeholders McHugh, (1997), increased the use of participationary management and computerization (Murray (2007)), greater uncertainty and others have resulted in higher work stress.

Work stress is a major issue in the occupational safety and health aspect as well as organizational well-being (Williams & Cooper, 2002) since it risks the employees’ health and organizational success (Noblet, Rodwell & McWilliams, 2001). Occupational stress can cause unusual and dysfunctional behavior at work and contribute to poor physical and mental health (WHO, 2004). Job stress has long been an important concept in the study of employees’ responses to their work environments.

The many challenges in the work environment, characterized by heightened competition, increased work targets, threats of job loss, organizational change, lack of time, lack of space, continuous technological development, conflicting demand from organizational stakeholders (McHugh, 1997), increased use of participatory management and computerization (Murray and Forbes, 1986). Stressful employees are more likely to be unhealthy, poorly motivated, less motivated and less safe at work (WHO, 2004). Work related stress also has been related to organizational problems such as absenteeism, high turnover, poor job performance, accidents and errors, and alcohol and drug abuse (Manshor, Fontaine, and Chong, 2003) and burnout (Mimura and Griffiths, 2003). Beyond absenteeism, ‘presentism’ or being present physically at work, but working less productively can also be the impact of work stress (Caverley, 2005).

In Malaysia, the same phenomenon may hold true because the weakening of global economy during the last several years has resulted in substantial downsizing and retrenchments within the electronics sector which accounted for 60% of the country’s total export (Bank Negara Malaysia, 2001). The main objective of this study is to examine the relationship of sources of occupational stress and among teachers in Ipoh, Perak.

High demands in the education field which is to be fulfilled through various education system reformations creates stressful situations for the teachers and this stressful situations affects the emotion,
psychology and physiology of the teachers. (Jasmani, 2009). The teachers are experiencing stress in their life whether its’ because of their family life or work life. Stress is created due to three categories of factors that are known as environmental factor, personnel factor and organization factor (Jaafar, 2003). This stresses does impact the teachers in their teaching profession. Stress that the teachers experience are from the effect of stressors such as workload, work hour, work location which is closely related to the environment of the workplace, where else stress that is created by stressors such as family and financial problems related to personal issues of the teachers.

LITERATURE REVIEW

School is an organization that is often bombarded with the burden of various tasks and at times the tasks are unplanned but which arise from an unexpected situation (Abdul Shukor, 1986). In discussing about workload that the teachers are engaged, Minister of Education Datuk Hishamudin (2005) urges the school administration not to burden the teachers’ with jobs that are outside their scope of duty such as administration tasks, collecting money for school donation, solving school drainage problem and etc. because it really burdens them. He addressed the problems that the teachers are facing currently during a function Perak Matriculation College. Task that are not related to teaching such as administration tasks, co-curriculum programmes, meetings and student welfare programmes are burdening the teachers according to Jasmani (2009). Besides that the teacher are also responsible in implementing the co-curriculum outlined for the school, attend courses, do research and other tasks that are necessary and which are assigned to them. (Zakiah, 2003).

Teachers are spending almost half of the day at the school. They are to do so or because of the workload they have to complete and they are also need to stay back to supervise the student during co-curriculum activities and also needed to attend meetings after work hour. Complaints have been made by the teachers to NUTP regarding long work hours. Teachers usually leave school at 2.30 pm before the year 2012 and beginning year 2012 teachers are needed to work until 3.00pm by the school head masters but it is only happens occasionally, where most of the time teachers leave the school as late as 6.00pm (Berita Harian, Oct 11, 2013). Sometimes the unfinished work of these teachers is brought to their home to be finished. He added that these conflicts are cause by time based factors such as long working hours and other factors that hinders time to be spent with their family.

According to Jasmani (2009) teacher’s profession is a challenging profession that their task is not only to educate the student but also to spend most of their time in solving the school issues such as student’s misbehaviour and also clerical works.

Teachers stress due to personal factors
There are researches carried out on work-family relationships. There are two aspects that were identified which are work-family conflict and family-work conflict and the effects from these aspects known to be spill overs. There are negative and positive spill overs from both aspects in which where there will be spill over either negative or positive from work to family and family to work. (Farber (2001); Faridah & Zubaidah (1998). Whether the spill over is from work to family or from family to work both type of spill overs create tension and stress that can be reflected into each aspects of life(work and family). Schaufeli & Baker (2004) summarized the definition of conceptualized work-family conflict as a type of inter-role conflict where the issues of family and work are interconnected to each other and creates pressure to an individual and also creates conflict when some set of pressures (family pressure) lowers the ability to cope with other sets of pressure (work issues).

Since the teachers are burdened with high workload and long work hours, teachers are to sacrifice their physical and mental health and relationships (in some cases) to fulfil their responsibilities Wood & Budden, (2006). This creates a situation where demands within the family clashing with work responsibilities, the home or work stress is likely to spill over to other spheres of life (Richard (2006).
problem in the personal lives of the teachers can be a potential stressor since they act in a feedback loop between work and the outside environment, Hepburn (2001).

The interrelationships between the personal life and work life of these teachers can explain that when there are stressful events in the personal lives of these teachers, it can exert negative effects on feelings of well-being at work and consequently lead to a high degree of stress. (Feitler & Tokar (2004)).

**Work Load**
The amount of work or task that is expected to be done. Work load creates stress when the work becomes overloaded and the worker could not bear it. Work overload is the situation in which people have too much work to do. (Cambridge dictionaries online). It is the thoughts that one would be having in their mind as having too much work to do. According to Lawrenson & McKinnon (1982) workload becomes the major work domain predictors of work-family conflict, and is one of among five factors that creates work stress. According to Dunn (2000) in his research on 258 teachers in Pennsylvania and 166 voluntary teachers found that teachers are experiencing stress due to high workload that put them in a situation to bring the uncompleted work to their home and complete it after work hour or on weekends. It identifies teachers have more work to be done and their work load is heavy.

A research done by Mohamad & Sew from the faculty of Education of Universiti Teknologi Malaysia on 50 respondents from 3 schools with the title “The factors that spur work stress among teachers of SJK (C): A research in 3 schools in the “Federal Territory of Malaysia” founds that time constrains and workloads are the major factors that lead to stress among the teachers (Lawrenson & McKinnon, 1982). In the research done by Zakiah (2003), found that the workload factor to be in the fifth ranking as stressful and where else in the study done by Boey, Chan & Ko (2008) the work load factor is in the fourth ranking.

**Work Hours**
The amount of time which a worker is legally bound to work in a day according to the work contract (Jaafar 2003) identified work time factor that causes stress among workers. This problem of teacher was complaint by NUTP (Berita Harian, 2010/04/01) which says teachers are forced to work every Saturday because they are involved in many activities, although there is a circular permits teachers to take leave twice a month on Saturdays. When it concerns about stress, the employees have a high tendency towards high level of stress (William & Cooper, 2003 and Jasmani (2003) in her study on High School Teachers’ Perceptions of Their Working Environment in Alor Star: A Grounded Theory Study on Several studies has highlighted teacher concerns about the need to extend the work hour to meet increasing job demands. Faridah & Karim (1998) considered that it was “impossible” for teachers to accomplish all the demands and tasks in the allocated time. Meetings were an additional workload demand, with teachers reporting 2.3 hours per week outside the school day spent in meetings directly related to their job. The study by Jasmani (2005) found an average 47-hour work week for teachers. Considering all time either at school or performing work-related tasks, even if performed simultaneously with others, yielded an average of approximately ten and a quarter hours per day of work invasiveness.

**Family Conflict**
Family and work are interrelated and both are capable of affecting one another and also capable of affecting the quality of life (Saldmond & Ropis 2005). The major challenges faced by employees are to balance their work and family lives. Family is an important part of the economic process, and when a person was employed directly the employer receives the employee obligations towards his family (Fairbrother, & Warn, (2003); Esteve, 2000). Claims relating to family and finances can be a major source of job stress in organization able to make the work more complicated pressure (Lindblom, Linton & Bryngelsson, 2006). Facts have shown that intra- Organizational extra organizational and influence the
process of working pressure and it is hard to prevent. Extra organizational are external factors such as family problems and financial problems that would affect the teachers work stress. Although some study shows that marital status is not always a determinant and that in some cases those who have happy marriages and get support from their spouses tend to be happy and successful in professional life as well and be less stressed (Baeler & Bryson 2008), a happy marriage life between a husband and wife is important so that the problems that the teachers face in the marital life’s would not be a contributing factor to teachers stress.

**Financial factors**
Financial factors may also affect the working pressure, financial difficulties will lead to the individual looking for extra work, additional work can add family opinion but at the same time with the steal and cause fatigue individual. Similarly, financial loans like personal loans, buy a car, and buy a home loan is also a source of job stress to an individual or employee. Huberman & Vanderberghe (1999) conducted a research on “Factors Contributing To The Causes Of Work Related Stress And Its Impact On Performance Of Teachers in where they found that most of the teachers having low pay, high work load, role overload, bad school management and larger class sizes that being the major causes of stress in their work place. Salary received by the teachers becomes the major determinant in determining the teacher’s financial status and when it is insufficient, the teachers involve themselves with other part time job that could support them financially (Kyriacou and Sutcliffe 1978). These work stressors such as work load, work hour, work location, financial problem and family problem/conflict can be related and can be explained through the Model of Work Stress by Tatar & Horencyzk, (2003). The information gathered from this research can provide information to the Education Departments on how to overcome stress among teachers and will be reference to universities and schools.

**Location factor**
The location in which the teachers are dispersed in terms of their work location or living location. An issue was cited from the news picked from the Bernama (Kuala Lumpur 27, October, 2010) news by CUEPACS on its website (29 October 2010) regarding the separation of the married couples from the aspect of location that they live and work. This issue was brought up by some Parliament members of Malaysia who was having an opinion that any action of separation in the working region of the married couples whatever so whether it regards of job promotion or any other measure would not only will raise up their living cost but also may cause other social problems.

The hypothesis in this study are;

**Hypothesis**
Several hypotheses have been developed in this study based on the research questions and objectives of the study, the hypotheses are as bellow:

**Ho1:** There is no significant relationship between workload and stress.

**Ho2:** There is no significant relationship between work hour and stress.

**Ho3:** There is no significant relationship between family factor and stress.

**Ho4:** There is no significant relationship between financial factor and stress.

**Ho5:** There is no significant relationship between work location factor and stress.

**Ho6:** Occupational stressors have no significant relationship with stress.

**Ho7:** Occupational stressors have no significant influence on stress.

**METHODOLOGY**

Respondents in this study consisted of 550 teachers attached to 4 randomly selected schools in Ipoh they were SMK Anderson, SMK St. Michael, SMK Buntong and SMK Methodist ACS. A total of 550
questionnaires were distributed to the schools. It took one month for the researcher to distribute and collect the responses but only 329 teachers completed the questionnaire.

Measurements Using Occupational Stressors

The independent variables in this study consist of occupational stressors which consisted of work load, work hour, family factors, financial factors and work location. The occupational stressors were measured using The Occupational Stress Inventory-Revised (Osipow, 1998), namely the Occupational Roles Questionnaire (ORQ) which originally has 60 items. The questionnaire was used by Murugayah (2008) who conducted a study on government officers of administrative and professional level in Malaysia. Originally, The OSI-R has three components, i.e. Occupational Roles Questionnaire (ORQ), Personal Strain Questionnaire (PSQ) and Personal Resources Questionnaire (PRQ). Salmond and Ropis (2005) who made a mixed-method and comparison study between medical-surgical and home care nurses in the United States found that the former experienced higher stress than the latter. In examining relationship of job stressors and general well-being of the nurses, it was found nurses who experience higher level of stress will report higher negative mood, vice versa.

Ho (1996) found that there are significant and positive relationships between the teacher stress measures and the GHQ. In conducting a research on a university staff, Dua (1994) found that general stress and work related stress are associated with poor physical health, poor psychological and emotional health and high job dissatisfaction. Malek, Mearns and Flin (2010) made a comparative study between Malaysian and the United Kingdom firefighters and found that the sources of occupational stress have significant negative correlations with psychological wellbeing among firefighters in the United Kingdom and Malaysia.

METHOD OF ANALYSES

Response and Profile of Respondents

At the end of the period, of the 550 questionnaires sent out, 329 useable response were obtained representing a response rate of 59.81 per cent. The sample is shown in Table 1, it shows that the greatest numbers of teachers are from SMK Anderson (51.4%), 53.8% are female; majority of them are 46.5% years old and about 42.6% of the respondents are single, As for races 86.6% of the respondents are Malay, about 44% of the respondents are teachers of grade DG44 and 76.3% of the respondents are degree holders, 23.7% are masters holders and 23.7% and 64.4% had served from 1 – 5 years.

<table>
<thead>
<tr>
<th>Demographic variable</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>school</td>
<td>SMK Anderson</td>
<td>169</td>
<td>51.4</td>
</tr>
<tr>
<td></td>
<td>SMK St. Michael</td>
<td>37</td>
<td>11.2</td>
</tr>
<tr>
<td></td>
<td>SMK Buntong</td>
<td>26</td>
<td>7.9</td>
</tr>
<tr>
<td></td>
<td>SMK Methodist ACS</td>
<td>97</td>
<td>29.5</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>152</td>
<td>46.2</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>226</td>
<td>68.7</td>
</tr>
<tr>
<td>Age</td>
<td>≤ 25 years old</td>
<td>32</td>
<td>9.7</td>
</tr>
<tr>
<td></td>
<td>26 – 30 years old</td>
<td>153</td>
<td>46.5</td>
</tr>
<tr>
<td></td>
<td>31 – 35 years old</td>
<td>86</td>
<td>26.1</td>
</tr>
<tr>
<td></td>
<td>36 – 40 years old</td>
<td>38</td>
<td>11.6</td>
</tr>
<tr>
<td></td>
<td>41 – 45 years old</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>≥ 46 years old</td>
<td>15</td>
<td>4.6</td>
</tr>
<tr>
<td>Marital status</td>
<td>Single</td>
<td>140</td>
<td>42.6</td>
</tr>
</tbody>
</table>
Occupational stress
All hypotheses were tested by using inferential statistics. For the first to sixth hypotheses, they were tested by using Pearson Correlation; for the seventh hypothesis, multiple regression was used, and hierarchical multiple regression was used to test the seventh hypotheses.

Usage of Pearson correlation
Pearson correlation was used to test hypotheses 1 to 6. The analysis was meant to determine whether occupational stress and the six dimensions of occupational stress have any relationship with stress. The output is shown in Table 2.

Table 2: Results of Pearson correlation analysis between Occupational Stress and Psychological Well Being.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>STRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Overload</td>
<td>.351</td>
</tr>
<tr>
<td>Work Hour</td>
<td>.341</td>
</tr>
<tr>
<td>Family Factors</td>
<td>.362</td>
</tr>
<tr>
<td>Financial Factors</td>
<td>.05</td>
</tr>
<tr>
<td>Work Location</td>
<td>.03</td>
</tr>
</tbody>
</table>
The result of the analysis shows that there is a significant relationship between work load and stress. The correlation value of this variable of $r = 0.351$, means that a positive and low relationship exists between the two. Thus Ho1 is rejected. The result shows that work hour has significant and positive relationship with stress. The relationship between the two is moderate because the $r$ value $= 0.341$. Thus, Ho2 is rejected. The result of the analysis shows that there is an average significant correlation between family factors and stress. The correlation value of $r = 0.362$ indicates that the two variables are positively and moderately correlated. Thus, Ho3 is rejected. The result shows that financial factors and stress is not significantly related. There’s no relationship between financial factors and stress. Since the correlation value, $r = 0.05$, work location and stress is low but is not correlated. Hence, Ho4 is accepted. There is no significant correlation between work location and stress as the $p$-value $> 0.05$. Thus, Ho5 is accepted. The work location and stress is not significantly correlated as the $r$ value of $0.03$, $p > 0.05$. Thus, Ho5 is accepted. There is a significant positive relationship between occupational stressors and psychological stress ($r = 0.404$, $p < 0.05$). Since the $p$-value is 0.404, it indicates that the relationship between the two variables is a moderate relationship. We may infer that higher scores on occupational stressors are associated with higher score on stress (higher score indicates low level of stress). As a conclusion, we have to reject Ho5 as Ha5 is substantiated.

**Usage of multiple regression**

A multiple regression analysis is used to test Ho7. Multiple regression tells how much of the variance in the dependent variable can be explained by the independent variable. From the model summary indicated in Table 3, we can see that the $R^2$ value is 0.388 which means that independent variable only explains 38.8% of the variation in the dependent variable. The adjusted $R^2$ value is 33.8% which means that the dimensions of occupational stressors contributed only 33.8% of stress. The remaining 61.2% were contributed by other factors not included in this study.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Beta</th>
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<th>Significant t</th>
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<tbody>
<tr>
<td>Work load</td>
<td>.268</td>
<td>5.453</td>
<td>.000</td>
</tr>
<tr>
<td>Work hour</td>
<td>.240</td>
<td>4.833</td>
<td>.000</td>
</tr>
<tr>
<td>Family Conflict</td>
<td>.250</td>
<td>5.096</td>
<td>.000</td>
</tr>
<tr>
<td>Financial Factors</td>
<td>.036</td>
<td>.717</td>
<td>.477</td>
</tr>
<tr>
<td>Work Location</td>
<td>.035</td>
<td>.716</td>
<td>.475</td>
</tr>
</tbody>
</table>

The regression analysis on all five dimensions of occupational stressors were significant at $p < 0.05$, at $F = 45.597$. However, it was found that only three dimensions were significant which have $p$-value $< 0.05$, namely work load, work hour and family conflict. Another two dimensions, i.e. financial factors and work location were not significant to stress since the $p$-value of each was 0.477 and 0.475. We may conclude by saying that at least 3 dimensions of stress, namely work load, work hours and family conflict have impact on stress. Hence, Ho7 is rejected.
RECOMENDATIONS

The result shows that the mean score for work load is the highest (3.848) among all dimensions of occupational stress. This indicates that teachers perceive that heavy workload is the main factor which contributes to their stressful condition. This finding is in agreement with the documented sources of stress in the international literature. Many researchers (Manshor, Fontaine & Chong, 2002; Murray-Gibbons and Gibbons, 2007; Emilia and Hassim, 2007; Cai & Zhang, 2008; Ho, 1996, Fairbrother & Warn, 2003; Salmond & Ropis, 2005; Bulger 2007) found that heavy workload is one of the main factors which causes stress across all types of occupations, namely managers, nurses, chefs, nurses, teachers, naval officers, policy advisors and permanent night workers.

As expected from the result of correlation analysis, a multiple regression analysis shows that only three dimensions of occupational stressors have a significant influence towards stress, namely work load, work hour and family conflict. As indicated by the multiple regression analysis, 38.8% of stress is due to occupational stressors, whereas another 61.2% were contributed by other factors not included in this study.

Undeniably, organizational factors can lead to poor emotional health. Dua (1998) found that apart from physical health and job dissatisfaction, emotional health are also the direct impacts of general stress and occupational stress. Marzabadi & Tarkhorani (2007) found that organizational factors are among the causes of stress and burnout. According to Murphy (as cited by Wood & Bulger, 2007), understanding the causes of job stress by measuring it accurately and identifying problem areas, implementing interventions and re-evaluating the situation could prove useful. Hence, the researcher has come up with seven recommendations to improve the present situation, as well as to cater the problems brought by the five dimensions of stress, namely work load, work hour, family conflict, financial factors and work location.

Stress survey
This survey should be administered to teachers across all states in Malaysia. Through this survey, Ministry of Education can study what the pattern of occupational stress looks like and immediate actions must be taken if the stress level shows an increment or a tendency to increase.

Stress management program
Stress management training program should be designed for all teachers so that they can learn more about stress, its effects and how to cope with it. In this regard, Ministry of Education should collaborate with the National Institute of Occupational Safety and Health (NIOSH) in organizing the courses.

Job rotation
All ministries/departments should give more attention to job rotation. As of now, there are a significant numbers of teachers who have been given the same additional task except teaching should be assigned to other task.. Job rotation should be made compulsory to all teachers.

Mentoring
A mentoring programme is an official programme aims at personal developmental relationship in which senior teachers who have more experience or more knowledge help and guide less experienced or less knowledgeable teachers. In other words, it provides a way for a mentee or junior teachers to release their stress and ask opinion of his/her mentor on how to overcome stressful situation.

Sports and Recreational Facilities
Ministries education should provide recreational facilities such as gymnasium, sports equipment etc. for the staff. These facilities should be made available to all staff after office hours. Sporting activities and
exercise are among the important ways to ease stress because they help to flush stress hormones like adrenaline out of the body.

Counselling service
Counselling is a professional guidance in resolving personal conflicts and emotional problems (FreeDictionary.com). The counsellor focuses on enhancing the stress of the client, such that the client is then able to reach his/her full potential. A trained counsellor may be able to help in a number of ways. It can enable the client to develop a clearer understanding of his/her concerns and help him/her acquire new skills to better manage his/her problems. The counsellor can offer a different perspective and help him/her think of creative solutions to problems.

Time management
Teachers should learn how to effectively manage their time. They should know how to prioritise their works when a lot of works are delegated to them at the same time. Teachers must be able to delegate their works to their subordinates. They have to spend time to coach and guide students on how to do their works, in the long run, it is worthwhile.

Communication
Since occupational stress may be attributed by lack of effective communication, organization should encourage effective communication among its staff whether it is upward, downward or horizontal communication. Effective communication can also be practiced at home, between spouses or with other family members.

Research Limitation
This study acknowledges several limitations. First, the time duration to complete this research is very limited. As such, data collection cannot be expanded beyond other district or state. Second, this study is a cross-sectional design in which data were gathered at one point within the period of study. This may not be able to capture the developmental issues and/or causal connections between variables of interest.

Future Research
Future research should be conducted to identify the relationship between occupational stress and physical health among teachers. It is also recommended that the scope of the research be broadened to teachers in all states in Malaysia. Further, future research should also consider longitudinal research in order to capture the development and/or causal connections between occupational stress and psychological health and/or physical health.

CONCLUSION
This study has been fruitful in identifying the relationship between occupational stress and stress. It is hoped that this study would trigger an interest from all relevant parties related to teachers to dwell further into the research questions, particularly, those related to stress of teachers who have contributed significantly to the public service, particularly students, and the nation’s development. It is also hoped that afterwards, teachers can live a healthy life and are able to balance it in almost every aspect. Stress should go mainstream and become a strategic issue that is routinely considered by all organizations, both in private and public. This is so because if the teachers’ well-being is well taken care of, it’s a win-win situation for the teachers and schools alike.

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Effects of Green Marketing Strategy on Firm Performance

Keywords: Green Marketing Strategy, Firm Performance, Conceptual Studies

INTRODUCTION

As the competitive landscape is being drastically changed by the increasing concern toward environmental sustainability, firms are beginning to determine how the adoption of “green” marketing practices can benefit or harm their performance (Leonidou et al., 2013A). The increasing sensitivity of the public, strictness of regulations, and amount of pressure from stakeholders have driven professionals to consider “green” issues in their corporate decisions (Leonidou et al., 2013A; Hult, 2011). Environmental products and services, such as green vehicles, have also attracted increasing attention from customers (Kotler, 2011; Luchs et al., 2010). However, although corporate managers are beginning to include such issues in their agenda, the sustainability of their marketing strategies has been insufficiently documented in empirical studies (Cronin et al., 2011). Therefore, the effects of adopting environmental marketing practices remain relatively unknown among the managers and policy makers of contemporary firms (Chabowski et al., 2011).

Professional and academic communities have been paying an increasing amount of attention toward ecological issues since the early 1970s, during which environmental concerns have emerged for the first time in history. The grave consequences of these issues have prompted several stakeholder groups, such as customers, regulators, and the public, to continuously pressure firms to adopt sustainable practices (Leonidou et al., 2013B). Accordingly, the line that separates business firms from the biophysical environment has produced several interesting topics that have been investigated in a significant amount of literature (Leonidou and Leonidou, 2011).

Although this relatively new topic has been investigated in several valuable studies, additional research must be conducted to address the other issues that are critical to such topic (Cronin et al., 2011), particularly on how the adoption of green marketing strategies can affect the performance of firms (Leonidou et al., 2013B). The extant literature primarily focuses on manufacturing firms, whose inputs and outputs severely affect the environment (Leonidou et al., 2013B). Further studies must investigate other businesses, such as the production of clean, energy efficient, and green vehicles, which can minimize the dependence of several economies on fossil fuels and help reduce CO2 emissions. Therefore, additional green marketing studies on the transport sector are warranted. The transportation of passengers and cargo uses approximately 20% of the global energy supply and contributes more than 20% of CO2 emissions (Koets and Hoon, 2014). The large increase in the number of operating vehicles has also significantly increased the local energy demand. The pollutants that are emitted from these vehicles are likewise detrimental to the environment. This case is especially prominent in the Amman-Zarqa region in the middle of Jordan, which houses approximately 60% of the total population and 70% of the urban population (Al-Ghandoor, 2013 A). Approximately 82.8% of all registered vehicles in Jordan are privately owned (Al-Ghandoor et al., 2013) and have conventional internal combustion engines.
Therefore, Jordan can achieve its long-term climate goals and reduce its dependence on fossil fuels by replacing these vehicles with alternative fuel vehicles (Koetse and Hoen, 2014).

CONCEPTUAL MODEL

The hypothesized model linking the relationship between Green marketing strategy includes green product, green price, green promotion, green distribution, green people, green process, and green physical evidence with firm performance includes both financial and non-financial performance is depicted in Figure 1.

**Figure 1: Proposed Conceptual Model**

**GREEN MARKETING STRATEGY**

Green marketing strategy, which denotes a set of marketing tools and elements, allows a firm to serve the target market and achieve organizational goals without harming the natural environment (Al-Salaymeh, 2013). At the same time, it facilitates product sales. Active involvement in environmental protection motivates family and friends to purchase green products, thus furthering the sustainable development in the country (Gopalakrishnan and Muruganandam, 2013).

In the sustainability literature, green marketing encompasses marketing practices, policies, and procedures that take into account the natural environment concerns; these activities aim to generate revenue and provide outcomes that fulfill the product or product line objectives of both the organization and individuals. Hence, the concept of green marketing mix pertains to the elements that are designed to achieve the strategic and financial goals of a firm, particularly in terms of reducing their negative (or increasing their positive) effects on the natural environment. This concept is consistent with the view that each element of the marketing mix is created and executed in a manner that reduces the detrimental effects on the natural environment. This conceptualization of the green marketing mix is congruent with previous definitions of environmental and green marketing (Leonidou et al., 2013A).

The term “green marketing mix” emerged in 1989. The Environmental Protection Agency of the Queensland government tackled the concept of green marketing in a manner that is similar to how the
“classic” marketing is defined, that is, by specifying the factors comprising the 4Ps. The agency further described green marketing as the process of “developing and promoting products and services that satisfy your customers’ wants and needs for quality, performance, affordable pricing and convenience without having a detrimental impact on the environment.” In effect, the agency developed the 4Ps within the green context (De Craecker and De Wulf, 2009).

The marketing mix model has been viewed in a different light as various streams of marketing emerged (i.e., services marketing, business-to-business marketing, relational marketing, and macro marketing). Thus, an extended marketing mix comprising seven Ps (i.e., product, price, promotion, place, process, physical evidence, and people) has been put forward (Booms and Bitner, 1981; Gordon, 2012). This marketing framework developed by Booms and Bitner (1981) extends the 4Ps theory by McCarthy (1960). Mohammed and Pervaiz (1995) conducted an exploratory survey that used the 7Ps marketing mix as a generic framework. Results of a survey involving participants to the U.K. Marketing Education Group Conference in Salford (1992) and the European Marketing Academy Conference in Aarhaus, Denmark (1992) indicated a high level of dissatisfaction with the 4Ps among European academics (Larashati et al., 2012).

In the current study, the rationale for the focus on the green marketing mix is two-fold. First, a number of firms may position themselves as specialist green suppliers by identifying and targeting segments of more environmentally aware customers; however, the majority of firms are not wont to relinquish their current market positions despite growing interest in green issues. Most firms are therefore faced with the challenge of implementing their existing marketing strategies by creating and deploying marketing programs that are relatively “greener” than their previous marketing undertakings. Second, from a causal adjacency perspective, the outcomes of firm performance are more likely to be linked with the realized behaviors that are particularly evident in green marketing programs rather than with the more comprehensive environmental strategy objectives of a firm, for instance, the HSBC goal of “zero carbon footprint” and the Wal-Mart strategy of encouraging supplier sustainability (Leonidou et al., 2013A).

Marketing mix denotes the different means through which a company brings a product or a service to the market. Responsiveness toward environmental issues is required of the marketing mix within the green marketing context. Marketing mix in the service sector is known as the “extended marketing mix.” Marketing mix is commonly known as the “4Ps framework,” which consists of product, price, place, and promotion. In the extended marketing mix, however, three additional Ps comprise the framework, namely, people, physical evidence, and process; thus, the structure is termed as the 7Ps framework. As underscored by the green marketing philosophy, each element in the marketing mix must convey “greenness” at every step of the process—from product development to product launch (Arseculeratne and Yazdanifard, 2014).

Notwithstanding the high level of dissatisfaction with the 4Ps, their framework is considered the most significant for introductory and consumer marketing alike. Meanwhile, the 7Ps framework has been highly accepted as a generic marketing mix by the respondents in the current study.

**Green product**

A product could be called “green” if its production process is ecofriendly and less damaging to the environment. Every business is responsible for reducing the environmental pollution in its production process. The raw materials comprising a product must be obtained in such a way that natural resources are preserved. As previously discussed, waste management is highly essential in this aspect. Business must develop an ecofriendly design and a packaging that minimizes pollution and hazards. The sunk costs of product improvements are substantial; nevertheless, these costs are justifiable because they are likely to boost product sales. Reverse logistics (i.e., a technique in which customers return to the business used
Green products emanate from product-related decisions and actions that aim to preserve or benefit the natural environment through energy and/or resource conservation as well as pollution and waste reduction. Both strategic and tactical approaches may be involved in such undertakings. The process of packaging and labeling products in an environmentally friendly manner is a tactical challenge several firms face. For instance, in France, Hewlett-Packard addressed this challenge by selling its laptops in a ready-made carrying case, thus reducing the use of disposable packaging for laptops by 97% (Belz and Peattie, 2009). Nestlé likewise confronted this challenge by reducing the size of paper labels on its bottled water brands by 30% (Ottman, 2011). In the strategic context, firms may opt to use green product design techniques, which often drive changes in the manufacturing processes. The challenge is to create new environmentally friendly products (e.g., biodegradable, recyclable) at the outset rather than adopting “end-of-pipe” solutions for existing products. SC Johnson rose to this challenge by modifying its manufacturing process and subjecting all of its products to a reformulation to eradicate the use of polybutylene terephthalate (Esty and Winston, 2009). Similarly, Nike introduced the Air Jordan XX3 shoes, which are primarily made of recycled materials and use a small amount of glue in their construction (Ottman, 2011).

The underlying principle of green products is the prevention, reduction, and elimination of the detrimental environmental effects on water, air, and soil. These products therefore represent an effective tool for resolving waste-, noise-, and ecology-related problems while producing beneficial goods and services (OECD, 2009). The development of green products aims to reduce the environmental effects of the production, usage, and disposal of products and services; the process involves the selection of “environmental-friendly” materials, waste reduction, attainment of energy efficiency, and adoption of end-of-life strategies, among others. Sustainability is a complementary factor in the development of green products. Sustainability, which denotes the conscious minimization of the impact on the environment and increased usage of recycled materials, conveys the 6R concept of recover, reuse, recycle, redesign, reduce, and remanufacture (Tomasin et al., 2013). An increasing number of customers have expressed their environmental concerns and inclination to purchase green products as well as the willingness to pay relatively higher prices for these products (Tseng and Hung, 2013).

Key to the success of organizations is their capacity to fulfill customer needs and wants, particularly those that pertain to the environment. These organizations prioritize the satisfaction of their customers; in doing so, organizations attempt to establish a good reputation in the minds of customers via the deployment of strategies that are beneficial to both the customer and the environment. A number of organizations willingly withdraw from the market any of their products that they consider detrimental to the well-being of customers and the environment and that could jeopardize their reputation and overall status as responsible entities (Al-Salaymeh, 2013).

Green products have become increasingly significant as our global village expands and public concern for the environment increases. Within this context, companies continually design and produce greener products as well as promote these products along with their brand images by communicating their greenness to customers through various channels. “Eco-labeling” is an effective approach for informing the customers about how green the company products are. Third-party organizations typically issue eco-labels. These labels present the environmental properties of a product in a textual or graphical form, and they are found on the product itself, on the packaging, or in the manual. Green Seal, Energy Star, and WEEE (Waste Electrical and Electronic Equipment Directive) are some examples of eco-labels (Lee and Huang, 2011).
Green products come in various forms. They are recycled from former goods and then reused. These products are considered efficient—they save water, energy or gasoline, and money. Green products have less detrimental effects on the environment. They have environmentally friendly packaging and green, evidence-backed labels. Thus, companies should ensure that products meet or even exceed customer expectations and, at the same time, remain cognizant of environmental issues (Larashati et al., 2012). The heightened ecological awareness of consumers is evident in their purchase of environmentally friendly cars, particularly petrol–electric hybrid vehicles. The Prius model of Toyota is touted as the market leader in this category of “greener cars.” In 2009 to 2010, Prius outsold all of the other types of cars in Japan, a leading market for automobile trends. Notwithstanding widespread reports about quality and safety issues, sales of Prius continually grow. To respond to the high demand for petrol–electric hybrid cars, Toyota introduced in Australia a second and larger hybrid vehicle and branded it Camry. Other car manufacturers have followed the lead of Toyota via their own environmentally friendly models. This trend indicates the sustained demand for this type of light-duty passenger vehicle. The Prius is marketed by Toyota as an environmentally better alternative to conventional vehicles because it consumes less fuel and has lower emissions (Chua et al., 2010).

A number of local and international green marketing-driven firms manufacture hybrid cars to balance revenue requirements with their responsibility for reducing the environmental effects of pollution. For instance, through the Prius, Toyota brings benefits to both consumers and the natural environment, given the ecologically sound features of the Prius, including the use of an emission-reducing gasoline, which decreases carbon dioxide and nitrogen dioxide emissions into the atmosphere. Consequently, pollution is decreased, in the process creating a positive impact on the environment. The argument is that a sufficient number of people who buy a Prius could have a large impact on global warming. Nevertheless, the gargantuan sales of this type of car are an inadequate solution to environmental problems such as global warming. Amid the escalation of fuel prices, Toyota developed Prius purportedly to save on fuel cost, and this factor can be positively construed by consumers. Consumers with particularly strong environmental concerns tend to be ecologically conscious and thus prefer hybrid cars. Hence, Prius adequately satisfies consumer demand for an eco-friendly product. Consumers consequently express immense satisfaction toward the eco-friendly product, which in turn boosts the positive judgment and reputation of Toyota and all of its products (Yan and Yazdanifard, 2014).

Leonidou et al. (2013A) demonstrated evidence of the significant performance payoffs of the manufacture of the right products and suggested the positive effect of green products on the product market performance of firms.

Green price
The process of going green is expensive in terms of installing new technology and equipment, training people, absorbing external costs, and converting waste into recycled products. These costs are inevitably integrated into the final price of a product. Green price is therefore a premium price, which further increases with the addition of the cost of promotion. These expenses must be rationalized by marketing efforts; at the same time, consumers must be encouraged to shell out a premium price. These imperative actions must be further justified through persuasive advertising messages. Nevertheless, eliminating the packaging material could decrease the prices of green products, as several businesses have experienced; these businesses consider this proposition a desirable one, especially when packaging costs constitute a huge part of the unit cost (Arseculeratne and Yazdanifard, 2014).

The practices of green pricing consider both the economic and environmental costs of production and marketing, while simultaneously providing value for customers and a fair profit for business (Martin and Schouten, 2012). From the tactical perspective, firms can undertake pricing actions, such as rebates for returning recyclable packaging and charging higher prices for environmentally unfriendly products. For instance, Coca-Cola established a “recycle bank” as a form of rewarding U.S. customers for their bottle-
Environmental Leadership And Employees’ Organizational Citizenship Behavior Towards The Environment (OCBE): Psychological Distance As A Moderating Variable

recycling efforts. In the United Kingdom, retailer Marks & Spencer encourages the use of environmentally friendly shopping bags by charging customers for plastic carrier bags (Belz and Peattie, 2009). From the strategic perspective, firm can deploy techniques such as life-cycle costing (e.g., incorporating product costs from research to disposal) to determine prices for products within the sustainability context. For instance, customers of the German utility E.ON (2011) have the option to purchase green electricity at higher prices to reflect the costs of sustainably generating power. Similarly, Seventh Generation sells its range of environmentally friendly household cleaners at considerably higher prices than regular alternatives to reflect the higher product costs (Dahlstrom, 2011).

The concept of price is simple, but its breadth is often met with confusion. At its most basic definition, price pertains to a group of monetary values that are replaced by the benefits and the possession or use of products or services. In this regard, customers use their monetary power to benefit from the product or service, and those who intend to obtain green products shoulder the higher prices emanating from the additional costs [i.e., research and development (R&D)] of the production process (Al-Salaymeh, 2013). Given the importance that people give to price, marketers must offer additional values that enhance the various aspects of the products, such as performance, function, design, and visual appeal. Consumers tend to pay the premium price when they perceive the extra value of products (e.g., green benefits) to be desirable. The prices of environmentally responsible products frequently decrease once the product life cycle is considered (Larashati et al., 2012).

The existence of a segment of customers who are willing to pay premium prices for green products allows the prevalence of green marketing approaches. Moreover, the potential gains from this customer segment provide companies with the motivation and rationale for developing green products and engaging in green operations and marketing practices, such as recycling, reusing materials, and forming alliances with green supply chains. However, the recent global economic downturn has challenged the fundamental premise of paying premium prices for environmentally friendly products, as consumers cut back on their green product purchases and opted to patronize traditional low-priced goods (Sharma and Iyer, 2012).

The realm of green cars illustrates this phenomenon. These cars are primarily designed to achieve fuel efficiencies and reduce energy consumption. Consumers typically incorporate these aspects and other environment-related concerns into their purchase decisions. For instance, would-be consumers of the new Chevrolet Volt must consider the zero-fossil fuel consumption with the price differential for this car vis-à-vis less expensive cars that produce more carbon dioxide emissions. Companies benefit the environment by implementing green marketing initiatives and ensuring that these initiatives would translate into superior value propositions for consumers (Manjunath and Manjunath, 2013).

Leonidou et al. (2013A) revealed evidence of the significant performance payoffs of effective pricing practices and indicated the positive effect of green pricing on the return on assets (ROA) of firms.

**Green distribution**

Green distribution denotes the selection of channels in a manner that minimizes environmental damage. Most of the damages to the environment occur during the transportation of goods. Hence, firms must implement safety precautions on the delivery of products (Arseculeratne and Yazdanifard, 2014).

Green distribution programs entail activities that are related to monitoring and improving environmental performance in the demand chain of the firm (Martin and Schouten 2012). Working with channel partners to develop product reuse or disposal arrangements and ensuring that customers are able to return recyclable materials are two tactical initiatives that firms could undertake in their pursuit of green distribution. For instance, Hewlett-Packard has formed a partnership with Staples in its “authorized recycling location” program for printer ink cartridges (Matthews 2011). From the strategic perspective, firms may develop policies that require suppliers and distributors to comply with environmentally
responsible standards as part of their respective marketing roles. Firms may likewise establish “eco-alliances” with channel partners to enhance the environmental effects of their joint activities, such as restructuring logistical procedures to increase their environmental efficiency (e.g., fewer and fuller cargos) (Dahlstrom, 2011). For instance, leading global consumer goods firms in the world, such as Pepsi, Nestlé, and L’Oreal, have collaborated with Tesco, one of their largest retail partners, to forge a supply chain leadership coalition; this collaboration advances strategies for reducing the carbon footprint of their supply to consumer distribution activities (Leonidou, 2013A).

Distribution is an essential activity in the marketing process and is one of the pillars of the marketing mix. Retailers and distributors serve their interests by strengthening their relationship with their clients; a two-way distribution system that is underlined by the green marketing philosophy ensures the relevance and permanence of this relationship. The recycling process underpins the two-way distribution system, which entails the recycling of the remnants of materials used (i.e., empty containers, plastic bags) to their places of production, or point of sale. Many countries adopt this system in distinct ways. For instance, specialized organizations in the United States re-collect plastic and glass containers; they have a contractual relationship with trademark-owning organizations to whom they send the pre-sorted empty containers in exchange for a certain amount of money (Al-Salaymeh, 2013).

Ascertaining the location and availability of products considerably affects the intention of firms to attract consumers. Customers are typically reluctant to exert extra efforts to simply purchase green products. Moreover, the location and the corporate image must be aligned (Larashati et al., 2012). Leonidou et al. (2013A) revealed evidence of the significant performance payoffs of adopting effective distribution practices and indicated the positive effect of green distribution on the product market performance of firms.

**Green promotion**

Green marketing likewise involves promoting the material of a business. Sales promotions, direct marketing, public relations, and advertising are some of the means of conveying to the customers the core message of greeneness; the latter two approaches are the most extensively used platforms for projecting the green outlook of a firm. Going green, which aims to bridge the business and the community, can sometimes require a major public relations initiative. Publicizing products and rationalizing their features and prices are two goals that green advertising could achieve (Arseculeratne and Yazdanifard, 2014). For companies, green promotion programs are an effective means of informing stakeholders about their environmental preservation efforts, commitment, and achievements (Belz and Peattie, 2009; Dahlstrom, 2011). From the tactical perspective, firms can undertake programs that are designed to reduce the detrimental environmental effects of their marketing communication efforts (Kotler, 2011). For instance, Dell uses roughly 50% recycled paper in its direct mail catalogs, and it has directly linked all of its printed promotional materials to carbon-offsetting programs (Belz and Peattie, 2009). From the strategic perspective, firms can use green promotion tactics to communicate the environmental benefits of their goods and services, such as advertising environmental claims, publicizing environmental efforts, and integrating environmental claims into product packaging. For instance, to communicate the environmental impact of its products, Timberland introduced a green index rating system (Ottman, 2011). In the United Kingdom, Procter & Gamble successfully deployed a campaign to reduce the washer temperatures of consumers, which benefitted from the technological advancements of Ariel; in the process, annual savings of 60,000 t of carbon dioxide were realized (Belz and Peattie, 2009).

Promotion is a vital element of the main green marketing mix; it refers to the communication process that aims to build a relationship with customers by informing and persuading them to purchase green products. Moreover, promotion seeks to connect the firm with its customers and transfer its orientations and environmental image to them via product- or service-related marketing messages. Promotion consists of a group of integrated elements called promotional mix elements (i.e., environmental advertisements
and posters, sales and public relations promotional activities, personal sale, and packaging), which facilitate the success of the promotional process (Al-Salaymeh, 2013).

Smart green marketers must utilize green marketing and communication tools and practices to reinforce their environmental credibility. Several companies have adopted this guideline (Larashati et al., 2012). For instance, Toyota is significantly using gas/electric hybrid technology in its product line. It is likewise making the single largest R&D investment in the hydrogen car in an attempt to promote itself as the first eco-friendly car company in the world (Dash and Das, 2012). Moreover, consumers can be directly targeted via product advertisements, such as those for the battery-powered Reva car and Toyota car (Dash and Das, 2012).

Leonidou et al. (2013A) demonstrated evidence of the significant performance payoffs of effective promotional practices and indicated the positive effect of green promotion on the ROA of firms.

**Green physical evidence**

The lack of information causes most customers to become unaware of the significance of green products. Businesses can fill this void using various green promotional strategies. Customers specifically require concrete information on the capacity of green products to solve and avoid environmental problems (Arseculeratne and Yazdanifard, 2014). In other words, customers should be provided with physical evidence of the overall efficacy of greenness across the system, from the organizational operations and strategies to the products sold in the market (Larashati et al., 2012).

**Green people**

Consumers with a preference for green products tend to be more receptive to direct marketing channels. To establish its positive image, a firm can specifically employ public relations. Meanwhile, to identify the specific customer needs and guide consumers toward the use of environmentally friendly products, a firm must conduct market research; market research typically yields in-depth findings that other forms of direct marketing are incapable of generating (Arseculeratne and Yazdanifard, 2014). To ensure an organization-wide commitment to the green marketing philosophy, firms must provide the administrative staff and employees with both technical attributes and a strong belief in preserving the environment. Moreover, the entire workforce must have at its disposal a range of tools for advancing the principles of green marketing. The development of green products requires immense creativity. Thus, staff and employees themselves should possess the creativity to bring green products into fruition; this characteristic allows them to tailor products according to customer needs and environmental requirements (Al-Salaymeh, 2013).

Firms that profess their concern for green strategies must reflect such concern in their daily operations. Moreover, this concern should be manifest in the tasks of every employee. Employees who exhibit a green mindset and commitment must necessarily be equipped with the proper training that would allow them to perform their jobs with the quality and consistency required by a green philosophy. Firms must continually provide employees with opportunities to perform a green job and demonstrate green culture values. More importantly, firms should further increase employee awareness of greenness by conducting eco-cycle training. Employees who drive should likewise receive training in eco-driving techniques. Gathering information about the performance of competitors in the aspect of greenness and sharing this information with the organization are necessary as well (Solvalier, 2010).

People use green communication (Solvalier, 2010) to carry out the responsibility for developing green services or products. The provider must inculcate a green mindset and be adept in implementing this thinking in the daily activities (Larashati et al, 2012). By contrast, green people pertain to staff members who are educated on and involved in green matters or green corporate culture (Solvalier, 2010).
Green process
Certain adjustments to internal processes are required of companies that decide to adopt green marketing as a business strategy. A restructuring of the business process is particularly essential. Expecting the marketing function in an organization to solely effect a turnaround through green marketing is an erroneous assumption. To successfully achieve this turnaround, other functions in the organization must be actively involved, and their actions and decisions must be totally aligned. Moreover, achieving a competitive advantage entails making changes to the philosophy of the company. At the same time, strategic fit must be attained by aligning the marketing strategy with the overall business strategy (Arseculeratne and Yazdanifard, 2014).

Fundamental transformations in the production processes in the organization are an integral element of the green marketing concept. Congruence with the orientations of green marketing (i.e., green operations) are at the core of these transformations; it can be achieved by reducing the amount of consumption of used energy, cancelling defective products in the productivity process, reducing damage and loss, and resolving the depletion of natural resources. Significant changes to procedures are required in the process of presenting green products, ensuring the consistency of organizational objectives under the direction of green marketing (Al-Salaymeh, 2013).

The green processes of a company and the greenness commitment of its upper management commitment must be prioritized. A shaded green or extreme green strategy becomes viable in an organizational environment that successfully differentiates a brand in an honest, credible, and enduring manner (Solvalier, 2010). Examples of green processes include the eco-labeling of stores, eco-certifying warehouses with ISO 14000, launching the brand “I love Eco,” which is consistent with the tenets of eco-labeling, and greening the entire service life cycle, including raw materials, production, logistics, transportation, warehouses, stores, and offices (Solvalier, 2010).

Process, which denotes the methodology for providing the services, demands serious attention, such that the process can be executed properly and in accordance with the principal objectives. The greenness of the entire system should be prioritized to ensure the successful implementation of a comprehensive green marketing strategy (Larashati et al., 2012).

FIRM PERFORMANCE

Performance is a critical concern for companies. The major drivers of firm performance are resources that are unique, invaluable, and difficult to imitate and replace (Holsapple and Wu, 2011). Excellent firm performance is likewise at the core of competitive advantage. A number of scholars provide similar definitions of performance, but their criteria for measuring performance vary. Therefore, the research topic of a study should determine the performance measurement index to be used (Evans and Davis, 2005).

Performance evaluation is frequently used as the basis of the reward and punishment scheme in any company, and selecting the most suitable measurement index has become more important than ever. Chakravarthy (1986) cited the pitfall of traditional financial measures, such as return on equity and return on sales, that is, these measures are incapable of distinguishing the differences in performance between firms. Moreover, traditional financial accounting measures, such as return on investment and earnings per share, can provide misleading signals with regard to continuous improvement and innovation (Kaplan et al, 1996). Germain et al. (2001) classified performance control into two types, namely, internal performance, which is related to issues such as cost, product quality, and profit level; and benchmark performance, which compares cost, quality, customer satisfaction, and operations against a standard (i.e., industry norm, practices of leaders). Current remuneration systems support the strong orientation of executive culture toward short-term financial performance measures and the obliviousness to personnel...
concerns (Fliaster, 2004). This situation highlights the unsuitability of financial measures based on traditional accounting practices, with emphasis on short-term indicators (i.e., profit, turnover, cash flow, and share prices), in terms of evaluating firm performance. By contrast, the increasing importance of non-financial measures, such as customers, investors, and stakeholders, has been observed (Chang Lee et al., 2005). To obtain the benefits of both financial and non-financial measures, Maltz et al. (2003) proposed five performance indexes for evaluating firm performance, namely, financial performance, market/customer, process, people development, and future. On the basis of the results of the preceding discussion, the current study integrates financial and non-financial measures for evaluating firm performance.

The marketing literature indicates the advantages of pursuing green initiatives, such as larger financial gains and market share, high levels of employee commitment, increased firm performance, and enhanced capabilities. Environmentally responsible actions likewise increase customer satisfaction and firm value and reduce threats to the company, thus increasing firm valuations. However, green promotional initiatives also yield negative stock returns. At the same time, cost savings may be obtained from green practices. Firms that reduce pollution and inputs that may cause waste would obtain cost-saving advantages. Green firms, in particular, can likewise rapidly recover their financial outlay for green efforts by achieving energy efficiency and waste reduction. For instance, DuPont invested $50 million on energy-saving undertakings in 2008 and successfully recovered this investment after only one year, thus bringing future cost-saving advantages to the firm. The benefits and positive effects of green initiatives on firm performance are indisputable, but a more in-depth understanding of the impact of green marketing strategies on firm performance should be obtained (Cronin et al., 2011).

Firms denote a collection of individuals; in many respects, firm experience the accumulation of individual problems at the corporate level. From a neoclassical economic perspective, firms are responsible for creating value for shareholders; nevertheless, more comprehensive types of performance are significant as well. The underlying principle is accurately defining the value of what is created. Marketing and management theorists suggest the development of multidimensional measures of value, such as the triple bottom line (TBL) that includes social and environmental value, in addition to financial value. The financial performance of a firm remains the principal focus. Studies that compare the performance of traditional and responsible firms continue to apply traditional financial measures rather than multidimensional TBL-type measures. The concept of increasing the financial bottom line is emphasized, thus explaining the intensifying research interest in targeting green consumers and extracting more value from them rather than solely focusing on the impact of marketing on society. An alternative view points out the transformational role of green marketing and its contribution to consumers, society, and the environment. For the environment, however, profit, sales, and other financial or marketing measures lack relevance. Polonsky (2011) argued that nature is not properly represented on corporate management boards nor is it factored into most corporate decisions.

Wanjohi et al. (2013) identified a positive relationship between environmental practices in the service industry and performance. Businesses have increasingly focused on sustainability, given the capacity of sustainable practices to strengthen reputation, boost employee morale, realize cost savings, and benefit the environment. Occasionally reviewing firm performance is essential in view of the constantly shifting environment. Mustafa et al. (2012) cited the importance of performance in the planning and control processes in a company. Previous studies have principally utilized financial performance measures in evaluating firm performance. However, both financial and non-financial measures are required in assessing firm performance due to the historical nature and rigidity of most of the financial measures (Govindarajan and Gupta, 1992; Ittner and Larcker, 1998; Mishra and Suar, 2010).
CONCLUSION

This paper extensively reviews the literature in the field of green marketing strategy and highlights that firms that adopt green marketing strategy (green product, green price, green distribution, green promotion, green people, green process, and green physical evidence) are expected to generate more profits than those firms that do not adopt such strategies. The current paper is expected to contribute to the extant body of literature that focuses on green marketing strategy, and the financial and non-financial performance of firms. Despite promotion from scholars and policy makers, several fundamental issues in green marketing, such as the relationship between green marketing strategy and firm performance, remain under investigated. The reviewed and analyzed the seven factors green product, green price, green distribution, green promotion green people, green process, and green physical evidence indicated that the green marketing strategy effect positively on the financial and non-financial performance of firms.

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Environmental Leadership And Employees’ Organizational Citizenship Behavior Towards The Environment (OCBE): Psychological Distance As A Moderating Variable

Keywords: Environmental Leadership, Organizational Citizenship Behavior towards the Environment, Psychological Distance

INTRODUCTION

Global warming and climate change has become a rigorous worldwide topic that poses many dangers to the environment and human systems (Robertson & Barling, 2013) which eventually affect human health (McMichael, Woodruff & Hales, 2006; Patz et al., 2005). Worse still, it impacts heavily on low-income countries (Haines et al., 2006) and developing countries (Hoegh-Guldberg & Bruno, 2010). Population and urbanization has been identified as the main factors contributing to global warming and climate change. Population on the earth is not likely to stop growing and is expected to increase to 9.6 billion in year 2050 to 10.9 billion in year 2100 (Gerland et al., 2014), and most of the increase in population occur in the continent of Africa and Asia. Without doubt Malaysia too has experienced continues growth in population. According to Malaysia’s Statistics Department, the Malaysian population has tripled since 1963 and reached 30 million on February 2014 (The Star, February 26, 2014). The crucial increase of population in Malaysia and rapid process of urbanization places a great challenge to Malaysia’s government agencies in terms of service delivery processes (Mutalib, 2013) one of the major service deliveries concerns is environmental waste disposal.

THEORETICAL FRAMEWORK

Study in industrial and organizational (I-O) psychology has increasingly focused on the features and reasons of “green” employee behavior (Bissing-Olson et al., 2013) and organizational greening initiatives (Ones & Dilchert, 2012a). In addition, human activity has caused dramatic climatic changes (Robertson & Barling, 2013). Environmental programs should be contingent with employees’ behaviors (Daily, Bishop & Govindarajulu, 2009), therefore promoting employees’ pro-environmental behavior inside the organization is important (Robertson & Barling, 2013; Ones & Dilchert, 2012a; Paillé & Boiral, 2013), “it is imperative that public agencies should play significant roles in sustainable development.”

In this regard, Roberts & Diederichs (2002) suggested that proper leadership is essential. Egri & Herman (2000) and Ramus & Steger (2000) stated that the organization’s environmental management success very much depends on the environmental leadership. This study would like to propose that organizational employees’ reactions to organizational citizenship behavior towards the environment (OCBE) depends on his or her perception of leadership greening encouragement and support (Blok et al., 2015; Graves, Sarkis & Zhu, 2013; Robertson & Barling, 2013; Ones & Dilchert, 2012b; Egri & Herman, 2000). The study by Blok et al., (2015) showed that environmental leadership has a profound influence on employees’ pro-environmental behaviors.
Boiral & Paillé (2012) have developed and validated an instrument named OCBE to capture three dimensions on a 10-item scale i.e., eco-helping, eco-civic engagement and eco-initiatives and lately Paillé and Raineri (2015) used this instrument to measure OCBE eco-initiatives dimensions, while Lamm, Tosti-Kharas & Williams (2013) established a single dimension scale instrument with 12 indicators.

Even though construct of OCBE was advanced based on the idea and constructs of organizational citizenship behaviour (OCB) (Boiral & Paillé, 2012), yet, construct of OCBE and OCB seemed related but distinct in nature; OCBE are mainly focused on the wider environment wherein the organization runs and employees behavior related to environmental issues abound (Lamm, Tosti-Kharas & Williams, 2013). Both constructs are categorized as a discretionary behavior and fall under the construct of extra-role behaviors (Lamm, Tosti-Kharas & Williams, 2013) and voluntary in nature (Norton, Zacher & Ashkanasy, 2014) in industrial and organizational psychology literature. Boiral (2009, p. 223) defined OCBE as “individual and discretionary social behaviours that are not explicitly recognized by the formal reward system and that contribute to a more effective environmental management by organizations.”

Based on the idea of OCB and organizational performance tie (Smith, Organ & Near, 1983), Daily, Bishop & Govindarajulu (2009) had extended the relationship between OCBE and environmental performance by proposing that OCBE is positively related to environmental performance. Their argument was that employees who exceed their job descriptions to advance an environmental friendly practice and assist workmates in environmental related behaviour would eventually help to boost the organizational environmental effectiveness and efficiencies. The study by Temminck and colleague’s also show that employees who engage in voluntary environmental activities can contribute to a decrease of environmental damage by organizations (Temminck, Mearns & Fruhen, 2013). Thus characteristics of OCBE framework are summarized in Figure 1.

![Figure 1: Framework of OCBE](image)

O’Connor, Bord & Fisher (1999) pointed out that the behaviour pertinent to climate change is somewhat complicated. Therefore, an environmental leadership as a variable alone in estimating OCBE is rather simple, so this study proposes an exogenous variable of psychological distance as a moderator to better explain the employees’ environmental behaviors (Spence et al., 2011; Spence, Poortinga & Pidgeon, 2012).

Construal level theory (CLT) is a theory of psychological distance (Trope & Liberman, 2003), in which psychological distance effects individuals’ thinking and behaviour (Trope, Liberman & Wakslak, 2007). Past studies have shown that psychological distance constructs influence intellectual construal and, consecutively, steer human’s prediction, evaluation, and behaviour (Trope, Liberman & Wakslak, 2007). Psychological distance constructs are generally divided into four dimensions i.e., temporal distance, spatial distance, social distance, and hypotheticality, e.g., how certain it is that an event will happen.
(Spence, Poortinga & Pidgeon, 2012). Each dimension is related to the person’s psychological decision making (Trope, Liberman & Wakslak, 2007).

Trope & Liberman (2003) established that temporal distance may affect a persons’ reaction to future events. Spence, Poortinga & Pidgeon (2012) and Spence et al., (2011) study on environmental and promoting sustainable behaviour showed that lower psychological distance was commonly related with higher levels of concern about climate change and greater readiness for environmental friendly behaviours, such as preparedness to reduce energy use. Spence et al., (2011) pointed out that individuals have no initiative to alleviate climate change due to lack of first-hand experience. Their study stated that individuals across the UK showed that flooding experiences had a significant relationship with perceptions relating to climate change, those who had flooding experiences showed significantly higher levels of concern about the effects of climate change. The available instrument to measure psychological distance of climate change is a 10-item scale (with good reliability i.e., cronbach’s $\alpha = 0.76$) based on indicators from the study of Spence et al. (2011) and Spence, Poortinga & Pidgeon (2012).

As far as is reasonably known, until this point of time, there are no methodical studies on various aspects of psychological distance as an exogenous variable interact with environmental leadership on environmental friendly behaviour for instance OCBE. Thus, in order to gain a better understanding of employees’ OCBE, this new framework is proposed as shown in Figure 2.

![Figure 2: New Framework of OCBE](image)

CONCLUSION

Even though environmental leadership may function as an exogenous variable interact with psychological distance of climate change in predicting person’s environmental friendly behaviours. Study also advocate that potential exogenous variable which may function as an exogenous variable in interacting with psychological distance would be environmental attitudes and knowledge (Schlegelmilch, Bohlen & Diamantopoulos, 1996), organizational climate (Norton, Zacher & Ashkanasy, 2014; Norton, Zacher & Ashkanasy, 2012) green co-worker climate (Norton, Zacher & Ashkanasy, 2014), environmental concern
Environmental Leadership And Employees’ Organizational Citizenship Behavior Towards The Environment (OCBE): Psychological Distance As A Moderating Variable

(Kaklamanou et al., 2015; Bamberg, 2003), green identity (Kaklamanou et al., 2015), environmental belief (Chou, 2014), environmental policies (Norton, Zacher & Ashkanasy, 2014; Ramus & Steger, 2000) and personality (Swami et al., 2011).

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The Star, February 26, 2014.


Knowledge Sharing in Malaysia Small and Medium Family Businesses: The Influence of Family Commitment and Psychological Ownership

Keywords: Knowledge Sharing, Knowledge Donating, Knowledge Collecting, Family Commitment, Psychological Ownership, Small and Medium Family Businesses

INTRODUCTION

This study aims to examine the influence of family commitment and psychological ownership on knowledge sharing in Malaysia small and medium family businesses (SMFBs). Knowledge sharing is important to any organizational success, including family businesses, because it is the most strategically-important resource possess by organizations (Grant 1996, p. 376) and a prominent source of value creation (Nonaka, 1991; Teece, Pisano & Shuen, 1997). Besides, knowledge sharing also provides the organizations with potentials for increased productivity (Cabrera & Cabrera, 2002), retention of intellectual capital (Lin, 2006), as an organizational innovation (Darroch & McNaughton, 2002) and the improvement of work-quality and decision skills, problem solving efficiency and competency (Syed-Ikhsan & Rowland, 2004; Yang, 2007).

These benefits are extremely essential to small and medium family businesses as to counter few constraints facing by them such as lack of capability in installing sophisticated information technology systems that facilitate knowledge sharing. Furthermore, previous studies also indicate that in SMEs, knowledge is more likely to be created, shared, transferred and applied via people-based rather than information technology-based mechanism (Zhou, Tan & Uhlancer, 2007b) and the entrepreneurs and managers’ “know-how” is important to the SME firms (Wiklund & Shepherd, 2003). Zhou, Tan & Uhlancer (2007b) also shared the same conclusion when based on a large sample of Dutch SMEs, they found that more than half of their respondents who are owners/entrepreneurs play an important role in knowledge sharing. Besides, family businesses also tend to practise centralization of control and knowledge (Basly, 2007; Zahra, Neubaum & Larrañeta 2007), unlikely to participate in knowledge network (Ahmad & Daughous, 2010) and developed their own network structure that exclude outsider (Lin, 2013). As a result, employees might have limited access to resources such as external knowledge (Miller, Breton-Miller & Lester, 2010; Schulze et al., 2001).

On the other hand, family business is assume to have different resources than nonfamily business due to the systematic interaction and involvement of family, business and individual family members, which terms as familiness (Habbershon & Williams, 1999). Due to their embeddeness in the family relations and history, family business has provides the avenue for the development of intangible resources, such as knowledge that difficult for rivals to imitate (Arregle et al., 2007; Carney, 2005; Habbershon & Williams, 1999; Habbershon, Williams & MacMillan, 2003). As mentioned by Fernández, Montes, and Vázquez, (2000), among the intangible resources, employees “know-how” and skills specific to the firm’s activities are not marketable. In the family business context, the owner/manager’s training, experience, judgement, intelligence, relationships and insight no doubt can be considered the human capital resources (Barney, 1991) which are intangible in nature because they are valuable, rare, inimitable and non-substitutable. As
such, knowledge sharing among family business members especially from those who are experienced, skilful, and informational-riched owner-managers or managerial level employees deem to be paramount important to the development of employees’ competencies, survival as well as continuity of the family business. But there is scant of research on the factors influencing knowledge sharing in the family business context. As such, this study tries to fill in this gap by researching if family commitment and psychological ownership influence knowledge sharing in the small and medium family business.

**LITERATURE REVIEW**

**The Link between Knowledge Sharing, Family Commitment and Psychological Ownership**

Knowledge sharing is part of the effort of knowledge management (Zhou, Tan & Uhlner, 2007a) and the concept of knowledge sharing and knowledge transfer can be combined by defining knowledge sharing as voluntary activities (process) of transferring or disseminating knowledge from one person to another person or group in an organization (Hansen, Nohria & Tierney, 1999). Previous researches indicate few variables influencing knowledge sharing, such as incentive systems and personal expectation (Cheng, Ho & Lau, 2009), trust, communication, information systems, rewards and organization structure (Al-Alawi, Al-Marzooqi & Mohammed, 2007), enjoyment in helping others and knowledge self-efficacy (Lin, 2007b). All these factors are related to either organizational, technology or individual factors but not in family business context.

In the family enterprises context, researches indicated that variables such as trust (Al-Alawi, Al-Marzooqi & Mohammed, 2007; Alam et al., 2009), social network (Abrams, Cross, Lesser & Levin, 2003) and commitment (Hislop, 2002; Van den Hooff & De Ridder, 2004; Van den Hooff & Van Weenen, 2004) are associated with knowledge sharing. Hislop (2002) argues that commitment is important because workers with high levels of organizational commitment are (i) less likely to leave; (ii) more likely to be highly motivated; (iii) will probably be more willing to provide extra discretionary effort, and (iv) be generally more willing to share their knowledge within the organization. Besides, employees with job satisfaction and organizational commitment also contributing to positive behaviour, such as knowledge sharing (de Vries, van den Hooff, & de Ridder, 2006; Lin, 2007a) Organizational commitment also found to be positively influence both the willingness to donate and collect knowledge (Van den Hooff & De Ridder, 2004; Van den Hooff & Van Weenen, 2004). Therefore, it is assume that family commitment toward the family business will positively affect knowledge sharing among the family business employees.

Based on the link between commitment and knowledge sharing, it is hypothesised that:

H1: There is a positive relationship between family commitment and knowledge donating of SMFB.
H2: There is a positive relationship between family commitment and knowledge collecting of SMFB.

**Psychological Ownership**

Till to date, there is no universal definition or theory on the concept of psychological ownership. However, the initial studies on psychological ownership emerge from the studies of self and nonself region in psychology (Pierce, Kostova & Dirks, 2001). Van Dyne and Pierce (2004) define psychological ownership as “the psychologically experienced phenomenon in which an employee develops possessive feelings for the target”. In this study, psychological ownership is defined as the individual employees’ feeling of possession toward the family business (Van Dyne & Pierce, 2004). Psychological ownership emphasizes employee in ownership of organizations. Pierce, Kostova & Dirks (2001) noted that the routes that led to psychological ownership are controlling the target, coming to intimately know the target, and investing the self into the target. They represented psychological ownership as a single, one-dimensional closed system variable.

Henssen et al. (n.d.), view that family business can also be defined from the ownership context, especially its psychological component that grasps the essence and the components perspectives since current
researches failed to offer an established and unified definition of family business. Thus, this study aims to study the influence of psychological ownership toward knowledge sharing in family business which in turn affects family business performance.

In the family business context, this study assume that the family business owner and family member employees do experience the routes that led to psychological ownership in where he/she is controlling the target (the family business), coming to intimately know the family business and investing themselves in the target because they are involve in the family business. As Chirico (2008a & 2008b) suggested, “psychological ownership” is one of the contributor to create, share and transfer a knowledge-related human capital in a business (and family) environment in which members of the family firm involved in the succession (predecessors and successors). Ikävalko, Phikala & Kraus (2010) also found that SME owner-manager may have strong feelings of psychological ownership that influence their ability to manage the firm purely as an economic instrument.

Thus, based on the literature review, it is hypothesised that:
H3: There is a relationship between psychological ownership and knowledge donating of SMFB.
H4: There is a relationship between psychological ownership and knowledge collecting of SMFB.

METHODOLOGY

In this study, SMEs is taken as the sample frames since there is no readily available database for SMFEs in Malaysia. SMEs database provided by the SME Corp was to identify the eligible respondents. As such, small and medium family enterprises are defined following the below criteria: (i) manufacturing firm that have sales turnover not exceeding RM50 million or full-time employees not exceeding 200 workers; and (ii) for services and other sectors, sales turnover not exceeding RM20 million or full-time employees not exceeding 75 workers (SME Corporation Malaysia), (iii) the business owner/management perceives the business as family enterprise, and where one of the following four criteria is met: (a) at least one of the family member on managerial level (CEO/manager/executive/officer/supervisor), (b) family control at least 10% of all shares, or (c) at least two family members are employed in the family enterprise, or (d) the family is represented on the Board of Directors. 500 self-administered questionnaires were sent out in early 2014 and yield 220 responses. After screening the questionnaire based on the inclusion criteria, 167 valid and usable responses are yielded. To analyse the data, the Partial Least Squares (PLS) - SmartPLS 2.0 software (Ringle et al., 2005) software is adopted.

Questionnaire to measure knowledge sharing practices is adopted and adapted from Lin’s (2007b) research. In Lin’s study, knowledge donating construct consists of three items which assess the degree of employee willingness to contribute knowledge to colleagues while knowledge collecting was measured using four items derived from Van den Hooff and Van Weenen (2004), which referred to collective beliefs or behavioral routines related to the spread of learning among colleagues. In Lin’s studies, the composite reliability of knowledge donating was 0.78 and 0.80 for knowledge collecting, respectively. A modified version of 7-items version F-PEC- Commitment subscale (Klein, Astrachan & Smyrnios, 2005) by Chrisman et al., (2012) was adapted to measure the family commitment toward the family business. As reported in Chrisman et al., (2012) studies, the Cronbach’s alpha for these items was 0.96. To measure psychological ownership, questionnaire developed by Van Dyne and Pierce (2004) was adopted. Based on three field studies, the questionnaire showed acceptable internal consistency reliability (cronbach’s coefficient alpha of 0.87, 0.90, and 0.93) in each of the samples.
RESULTS

Respondents’ Profile
Majority of the respondents are male (60.5%); married (80.8%); having certificate/diploma (41.3%); business owner (61.1%) and own by either multifamily (31.1%) or married couple (25.7%), or one owner (25.7%) with very minority business ownership by sibling/cousin/ others.

Measurement Model Assessment
In this study, reflective measurement model is examined via convergent validity i.e., indicator factor loading, composite reliability (CR) and average variance extracted (AVE) and discriminant validity i.e., cross loading of the indicators and Fornell-Larcker’s (1981) criterion.

<table>
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<th>Measurement Indicators</th>
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<th>AVE</th>
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</table>

*Family Commitment (FCom), Psychological Ownership (PO), Knowledge Sharing-Knowledge Donating (KS_Don) and Knowledge Sharing-Knowledge Collecting (KS_Col).

<table>
<thead>
<tr>
<th>Model Construct</th>
<th>Measurement Indicators</th>
<th>Standardized Estimates</th>
<th>T-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCom</td>
<td>FCom1</td>
<td>0.7729</td>
<td>22.9108</td>
</tr>
<tr>
<td></td>
<td>FCom2</td>
<td>0.6952</td>
<td>14.3500</td>
</tr>
<tr>
<td></td>
<td>FCom3</td>
<td>0.7580</td>
<td>19.7340</td>
</tr>
</tbody>
</table>
As demonstrated in Table 1 and Table 2, results display that majority of the indicators’ factor loading are greater than the suggested value of 0.7 (Hair et al., 2010) and empirical t values is greater than 1.96. Thus the results specify that indicators in this study are highly loaded and significant on their respective constructs. Hair et al., (2014) highlighted that indicator loading between 0.40 to 0.70 is to be consider to remove if by removing that increase composite reliability and average variance extracted (AVE). In this study, even thought indicators of FCom2, PO1, PO4, PO6 and PO7 are slightly lower than the value of 0.70, however we decided to retain as composite reliability and average variance extracted is above cut off value, hence no indicators are removed.

A second condition to evaluate convergent validity is by checking at the composite reliability. Composite reliability shows to the degree to which a set of items shows internal consistency to the latent construct (Hair et al., 2010) with taking account for dissimilar factor loading for dissimilar items (Hair et al., 2014). As demonstrated in Table 1, the composite reliability varying from 0.8892 to 0.9296 which go beyond the suggested value of 0.7, hence indicate adequate convergent validity (Fornell & Larcker, 1981; Hair et al., 2010; Nunnally & Bernstein, 1994).

Third condition to examine is average variance extracted (AVE). AVE refers to the average variance extracted among a group of indicators from the same constructs. Hair et al., (2014) recommended that values of AVE should be higher than 0.5 as to show that own constructs accounted for over half of the variance from the constructs’ indicators. Result of Table 1 illustrates that the values of AVE of study constructs were varying from 0.5359 to 0.7337, hence reveal sufficient amount of convergent validity.

Table 2 show the summary results of the model construct namely family commitment, psychological ownership, knowledge sharing-knowledge donating and knowledge sharing-knowledge collecting.
reveal in Table 2, all the 4 constructs showed an adequate level of validity in measuring their respective constructs since the loadings and t values are statistically significant (Chow & Chan, 2008).

**Discriminant Validity**

<table>
<thead>
<tr>
<th>Indicators</th>
<th>FCom1</th>
<th>PO1</th>
<th>KS_Don1</th>
<th>KS_Col1</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO1</td>
<td>0.1533</td>
<td>0.6919</td>
<td>0.2281</td>
<td>0.1820</td>
</tr>
<tr>
<td>PO2</td>
<td>0.4198</td>
<td>0.8283</td>
<td>0.4341</td>
<td>0.4970</td>
</tr>
<tr>
<td>PO3</td>
<td>0.4168</td>
<td>0.8065</td>
<td>0.3903</td>
<td>0.3259</td>
</tr>
<tr>
<td>PO4</td>
<td>0.1639</td>
<td>0.6728</td>
<td>0.2258</td>
<td>0.1392</td>
</tr>
<tr>
<td>PO5</td>
<td>0.4550</td>
<td>0.7591</td>
<td>0.4326</td>
<td>0.4327</td>
</tr>
<tr>
<td>PO6</td>
<td>0.4546</td>
<td>0.6902</td>
<td>0.3934</td>
<td>0.3878</td>
</tr>
<tr>
<td>PO7</td>
<td>0.1693</td>
<td>0.6565</td>
<td>0.1667</td>
<td>0.1267</td>
</tr>
<tr>
<td>FCom1</td>
<td>0.7729</td>
<td>0.4098</td>
<td>0.3960</td>
<td>0.4362</td>
</tr>
<tr>
<td>FCom2</td>
<td>0.6952</td>
<td>0.3853</td>
<td>0.4181</td>
<td>0.3550</td>
</tr>
<tr>
<td>FCom3</td>
<td>0.7580</td>
<td>0.3904</td>
<td>0.4391</td>
<td>0.3986</td>
</tr>
<tr>
<td>FCom4</td>
<td>0.8341</td>
<td>0.4045</td>
<td>0.4484</td>
<td>0.4747</td>
</tr>
<tr>
<td>FCom5</td>
<td>0.8212</td>
<td>0.4275</td>
<td>0.4479</td>
<td>0.4159</td>
</tr>
<tr>
<td>FCom6</td>
<td>0.8117</td>
<td>0.4288</td>
<td>0.4373</td>
<td>0.4463</td>
</tr>
<tr>
<td>FCom7</td>
<td>0.7627</td>
<td>0.3354</td>
<td>0.3840</td>
<td>0.4344</td>
</tr>
<tr>
<td>FCom8</td>
<td>0.7651</td>
<td>0.3205</td>
<td>0.4434</td>
<td>0.4171</td>
</tr>
<tr>
<td>FCom9</td>
<td>0.7124</td>
<td>0.3209</td>
<td>0.4505</td>
<td>0.4836</td>
</tr>
<tr>
<td>KS_Don1</td>
<td>0.4315</td>
<td>0.4747</td>
<td>0.8712</td>
<td>0.5487</td>
</tr>
<tr>
<td>KS_Don2</td>
<td>0.5098</td>
<td>0.4375</td>
<td>0.8835</td>
<td>0.6042</td>
</tr>
<tr>
<td>KS_Don3</td>
<td>0.4884</td>
<td>0.3386</td>
<td>0.8134</td>
<td>0.5435</td>
</tr>
<tr>
<td>KS_Col4</td>
<td>0.4020</td>
<td>0.4270</td>
<td>0.5141</td>
<td>0.7874</td>
</tr>
<tr>
<td>KS_Col5</td>
<td>0.4789</td>
<td>0.3984</td>
<td>0.5001</td>
<td>0.8119</td>
</tr>
<tr>
<td>KS_Col6</td>
<td>0.4926</td>
<td>0.5570</td>
<td>0.5609</td>
<td>0.8617</td>
</tr>
<tr>
<td>KS_Col7</td>
<td>0.4785</td>
<td>0.3858</td>
<td>0.6202</td>
<td>0.8616</td>
</tr>
</tbody>
</table>

*Family Commitment (FCom), Psychological Ownership (PO), Knowledge Sharing-Knowledge Donating (KS_Don) and Knowledge Sharing-Knowledge Collecting (KS_Col).

Cross loading and Fornell-Larcker’s criterion were used to check for the discriminant validity. The cutoff value of 0.7 is suggested (Hair et al., 2010; Hair et al., 2014) as a sign to evaluate the goodness of indicators’ loadings. As show in Table 1 and Table 3 majority of the indicators’ loading go beyond the cutoff value of 0.7 (with 5 indicators slightly lower than 0.7, however this study decided to retain as composite reliability and average variance extracted is above cut off value) and all the indicators load well on their own construct as contrast to the loading on others constructs.

In order to calculate the discriminant validity, the square root of the AVE for each construct should be greater than the values of the correlations with others construct in the model both horizontally and vertically. Fornell & Larcker, (1981) requested that similar construct should share more variance of its indicator as compare with other construct.
Table 4: Discriminant Validity – Fornell-Larcker Criteria

<table>
<thead>
<tr>
<th>Construct</th>
<th>FCom</th>
<th>KS_Col</th>
<th>KS_Don</th>
<th>PO</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCom</td>
<td>0.7716</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KS_Col</td>
<td>0.5586</td>
<td>0.8313</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KS_Don</td>
<td>0.5578</td>
<td>0.6614</td>
<td>0.8566</td>
<td></td>
</tr>
<tr>
<td>PO</td>
<td>0.4929</td>
<td>0.4700</td>
<td>0.4867</td>
<td>0.7321</td>
</tr>
</tbody>
</table>

*Family Commitment (FCom), Psychological Ownership (PO), Knowledge Sharing-Knowledge Donating (KS_Don) and Knowledge Sharing-Knowledge Collecting (KS_Col).

*Diagonals (in bold) represent the squared root of AVE while the other entries represent the intercorrelation values between constructs.

As established in Table 4, the bolded parts stand for the square roots of the AVE and non-bolded values stand for the intercorrelation value between constructs. Hence, result suggested that all off-diagonal elements are lower than diagonal elements of square roots of AVE in their row and column, thus confirmed that the criterion is assumed and discriminant validity is verified.

**Hypotheses Testing**

Once the measurement model validity and reliability is established, study proceeds with path analysis testing for hypotheses. Table 5 present the results of path coefficients and hypotheses testing. Path coefficients values were obtained from PLS-SEM algorithm, essentially, beta values ($\beta$) close to 0 values are non-significant, nonetheless, bootstrapping technique to calculate the empirical $t$ value and standard error (SE) is required (Hair et al., 2014). For an alpha ($\alpha$) of 5% and one-tailed tests, path coefficient is assumed to be significant if empirical $t$ values are greater than 1.645. Bootstrapping techniques with 5,000 re-sampling were employed with 167 cases (Preacher & Hayes, 2008).

Table 5 indicated that relationship with family commitment and knowledge sharing-knowledge donating ($\beta$=0.3942, $t=4.3584$), relationship with family commitment and knowledge sharing-knowledge collecting ($\beta$=0.4110, $t=5.0357$), relationship with psychological ownership and knowledge sharing-knowledge donating ($\beta$=0.2904, $t=4.7082$), and lastly relationship with psychological ownership and knowledge sharing-knowledge collecting ($\beta$=0.2558, $t=3.8462$) is significant and $t$ values is higher than 1.645 ($\alpha$ of 5% and one-tailed tests). Thus hypothesis 1, 2, 3 and 4 are supported.

**Table 5: Path Coefficients and Hypotheses Testing**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relationship</th>
<th>Path Coefficients</th>
<th>Standard Error</th>
<th>$t$-value</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>FCom $\rightarrow$ KS_Don</td>
<td>0.3942</td>
<td>0.0905</td>
<td>4.3584</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>FCom $\rightarrow$ KS_Col</td>
<td>0.4110</td>
<td>0.0816</td>
<td>5.0357</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>PO $\rightarrow$ KS_Don</td>
<td>0.2904</td>
<td>0.0617</td>
<td>4.7082</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>PO $\rightarrow$ KS_Col</td>
<td>0.2558</td>
<td>0.0665</td>
<td>3.8462</td>
<td>Supported</td>
</tr>
</tbody>
</table>

*Family Commitment (FCom), Psychological Ownership (PO), Knowledge Sharing-Knowledge Donating (KS_Don) and Knowledge Sharing-Knowledge Collecting (KS_Col).

**FINDINGS AND DISCUSSION**

Result findings suggested that both family commitment and psychological ownership acts as antecedent to knowledge sharing practices in Malaysia small and medium family businesses. It is not surprising that there is a positive relationship between family commitment and knowledge sharing (both knowledge donating and collecting). In fact, high degree of family commitment and dedication to the family business
is a common and unique feature of family business as compare to nonfamily businesses (Cabrera-Suárez, De Saa-Perez, & García-Almeida, 2001). A similar reaction was seen in Jamaluddin’s (2010) studies who acknowledge that commitment and common interest constitute one of the business growth decisions among the Malay small family businesses and often knowledge sharing in term of exchanging information take place through a family discussion before the owner makes the final decisions. As a conclusion, this finding also consistent with previous studies such as done by, Hislop (2002), and Van den Hooff and De Ridder (2004).

As for the findings of the positive relationship between psychological ownership and knowledge donating and collecting, present finding indicates that the family business owners/employees do experience the routes that led to psychological ownership in where they are not only controlling the family business, knowing the family business well but also investing themselves in the family business through knowledge sharing. Thus, the finding confirmed the suggestion of Chirico (2008a & 2008b) that “psychological ownership” is one of the contributor to create, share and transfer a knowledge-related human capital in a business (and family) environment in which members of the family firm involved in the succession (predecessors and successors). Besides, the findings also consistent with Ikävalko, et al., (2010) who found that SME owner-manager may have strong feelings of psychological ownership that influence their ability to manage the firm purely as an economic instrument.

This study adds to the body of knowledge by providing empirical evidence on the influence of family commitment and psychological ownership toward knowledge sharing in small and medium family businesses. One of the limitations of the study is that the sample was drawn from owner-manager or managerial level employees in the small and medium family businesses, thus future research may examine the effect of different group of employees (e.g. managerial vs non-managerial, family employees vs nonfamily employees) if they moderate the relationship between commitment and knowledge sharing as well as psychological ownership toward knowledge sharing.

REFERENCES


Unlocking the Barrier of Implementing
Product-Service System: Knowledge-Based Perspective

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Driving Shareholder’s Wealth: Economic Value Added Versus Traditional Measures

Keywords: EVA, Traditional Measures, Shareholder’s Wealth, Dividend Policy, Malaysia

INTRODUCTION

In a market driven economy many companies will create wealth. Other companies, however, will undoubtedly destroy it (Grant, 2003). For corporate managers, wealth creation is fundamental to the economic survival of the company. No company may continue to exist if it fails to create sufficient wealth for their shareholders. In other words the company not generating value addition in their wealth will struggle to survive and over a period of time will be either a subject of takeover or liquidation. The linkage between the value based performance measures and creation of shareholder wealth has been the debatable issues for academicians and practitioners in the last decade. Corporate managers and executives have engaged in the debate on whether the new value based economic measures are highly significant for shareholder wealth creation than the old traditional performance measures. However, the manager's decisions favor the interest of non-shareholders or stakeholders at the expense of shareholders (Brigham and Ehrhardt, 2013).

Financial statement failure in determining the firm's true value has drawn wide research focus in investigating the broadened gap between the firm's market and book value (Othman, Ching, and Ghazali, 2012). Similarly, studies like (Lev and Radhakrishnan, 2003; Lev and Zarowin, 1999; Vijayalakshmi, 2014) mentioned that in reality traditional accounting measures and economic measures have failed in reflecting the company's true value due to lack of creating long term sustainability of business and their issue of distortion. One of the key obstacles for the shareholders is in identifying the key performance tools that can help them getting the company's accurate profit information. For managers, it has been a great challenge to increase their earnings keeping in view of the shareholder return as they both reflects historical performance (Bhunia, 2012). According to Kapoor (2011) shareholder wealth maximization is the sum of all strategic decisions in increasing earnings, dividend and market value, but no previous study has investigated it all together. The use of earnings that is explained by traditional measures, economic profits explained by economic measures like EVA and MVA and dividends that is crucial strategic management decision have not been investigated theoretically and empirically.

The key aspects discussed by Ab Razak, Ahmad, and Aliaahmed (2008) suggested that the reason of poor performance of Malaysian organization may be attributed to agency problem. Most of the public listed companies in Malaysia are still using traditional performance measures that consider accounting profits or ratios for measuring shareholder return. However, Nahar Abdullah (2004) argued that in Malaysia, ratios are widely used by the companies in order to measure firm value, may not be able to measure and capture firm's performance which is created over the period. Furthermore, Al Mamun, Entebang, and Mansor (2012) mentioned that after more than one decade of the crisis Malaysian firms still follows the
conventional performance measures which are criticized due to general accepted accounting principles. Malaysia is suffering from having a suitable performance measurement tool which can help the investors to assess value created on their investment (Ismail, 2011). Complementary to this, Vijayalakshmi (2014) mentioned that there are varieties of measures to show the value creation for shareholders, but none of the traditional measures are able to explain the variation in the shareholder wealth. In addition, the earnings per share that is known to be as profit based measure is criticized due to its absence in the balance sheet. EPS disregards the value of assets used to generate the balanced sheet. The central theme of this paper is to fill the gap in the literature and provide an important opportunity to advance the understanding on the firms' strategic decisions within the aspects of earnings, market value and dividend based measures as the benchmark in determining shareholder wealth.

**INDUSTRY OVERVIEW**

Construction industry is a major consumer of capital resources due to its magnitude, complexity and nature of the work it executes. However, the cost management strategies in the construction industry worldwide still remain a chronic challenge (Chigara, Moyo, and Mudzengerere, 2013). Prior to the 1997 Asian financial crisis, Malaysia had attained robust economic growth since the 1980s. However, following the 1998 crisis and its protracted negative impact, the economic growth has moderated. An economic decline in demand and a reduction in the real estate had greatly influenced the monetary policy of Malaysia. The Oxford Business Group (OBG, 2008) highlighted a range of issues that the Malaysian construction industry suffered from. The construction industry is considered to be those companies involved in the physical construction of house building, infrastructure, industrial construction, commercial construction and building materials (Chan, Tam, and Cheung, 2005). There is deep concern that the Malaysian construction industry as a whole is under achieving in the following areas as reported by (Alfan and Zakaria, 2013):

- It has a low and unreliable rate of profitability;
- The construction industry has remained a very fragmented industry where different activities in the entire value chain of the construction processes are being undertaken by different parties, often undertaken in isolation, thus resulting in inefficiencies;
- The segregation of design and construction activities which is widely practiced does not encourage consideration for factors like savings in labor utilization, ease of maintenance, construction safety and the practicality of construction methods;
- Due to the problem of escalating costs, construction companies are therefore striving to reduce and control their cost related activities.

**LITERATURE REVIEW**

The creation of shareholder value is one of the important goals in the organization. The importance of company valuation has been increasing eventually over the past decades. Stakeholders are the group of people who are affected by or can affect the organization's activities. Equally important, Sundaram and Inkpen (2004) stated that an organization that treats its stakeholders unethically will not be able to create long run business. Similarly, Freeman, Wicks, and Parmar (2004) suggested that managers must prioritize stakeholders' interests, but added further that such sentiments are not guided for decision making. It is still not clear, whether shareholder have enough knowledge to pick a company's new direction accurately. Thus it becomes the responsibility of the managers or company's decision makers to provide accurate information about company's future directions. Having made an investment in a business, shareholders are concerned with assessing the profitability of their investment. The decisions made by managers determine what they can expect both in terms of dividends, or profits, and capital growth, both of which are reflected through the share price.
Traditional Accounting Measures

Most accounting measures are generally expressed as values, ratios or percentages. The heart of the issue of using accounting measures is whether a company's financial statements actually measure the economic value of the firm (Carton, 2006). According to the Neo-classical economists profit maximization is considered as the legitimate objectives of all private organizations. For years, managers have been using the traditional methods like Return on assets (ROA), Return on Equity (ROE), Earnings per Share (EPS), net income, to measure the financial performance. In addition, Carton (2006) stated that, “To maximize shareholder wealth, management must generate, evaluate and select business strategies that will increase the value of the company”. Apart from the philosophical reasons, Chakravarthy (1986) concluded that traditional profitability measures are inadequate for evaluating a firm’s strategic importance. Despite of critics, Verweir (2006) claimed that traditional financial performance measures still continue to play an important role in corporate world. Subsequently, Ohlson and Juettner-Nauroth (2005) discussed the role of earning per share and its role in security valuation. Rarely, Collins, Pincus, and Xie (1999) discussed the effect of negative earning on equity valuation. Commonly, Dechow, Hutton, and Sloan (1999); Kasznik and McNichols (2002) stated that, “meeting the current earnings expectations reflects the market premium and rewards for the managers”.

Return on Assets (ROA) is calculated as operating profit divided by total assets (Maury and Pajuste, 2005). ROA is used by many studies for measuring firm performance (Andres, 2008; Isik and Soykan, 2013). However, when it comes to investigating relationship between ROA and shareholder wealth maximization there are mixed results among the academicians and researchers. ROA in long term is not able create value and wealth for shareholders due to great degree of manipulation of the historical aspects of performance by managers (Benston, 1982; Bergstresser, Desai, and Rauh, 2006; Coe, 1981; Watts and Zimmerman, 1990). In addition, Isik and Soykan (2013) found that large shareholders have a significant effect on the performance of the firm measured by ROA.

Return on Equity (ROE) is defined as the return obtained on the book value of a company's shares (Khan and Zuberi, 1999). It is a measure of the return that the company's management is able to earn on the money invested to it by its shareholders. In simple term, ROE measures the return generated by the management for each invested dollar. Returns in equity are less useful for the ongoing project as they are not successful in capturing the long term value of the company or value created for shareholders. ROE is considered as biased indicator of economic profitability and shareholder value creation in both finance and accounting studies (Athanasoglou, Brissimis, and Delis, 2008). For instance, Chen and Dhiensiri (2009) investigated three performance measures i.e. ROE, ROA and market to book ratio with a sample of 412 public listed Hong Kong firms for the period of 1995 to 1998. They concluded that family ownership has no significant effect on the performance measures. In addition, Magni (2010) determined ROE and its relations with NPV, and MVA employing well determined neutral depreciation system and showed that shareholder value creation is signaled by the comparison between ROE and the cost of equity. However, Kabajeh, AL-Nu'aimat, and Dahmash (2012) examined the relationship between ROA, ROE, and ROI ratios with share price of Jordanian insurance companies during the period of 2002 to 2007 and based on the empirical evidence showed a positive but low relationship between ROA and ROI ratio with firm share prices.

Return on capital employed (ROCE) functions uses two items i.e. profits and capital employed. ROCE is calculated as the ratio of operating profit with capital employed (Khan and Zuberi, 1999). By using other sources of finance, management is able to increase the capital they employ in the business. The effective use of this enlarged capital base can be measured by comparing profits before interest charges to total capital employed (Coles, 1997). ROCE as a traditional approach to the investment appraisal has different names and variety of computational methods. Basically, ROE is calculated as the ratio of the accounting profit generated by an investment projects.
Unlocking the Barrier of Implementing Product-Service System: Knowledge-Based Perspective

Dividend policy has been the most popular due to issues like information asymmetry between managers and shareholders, theories on dividend payment such as stakeholder's theory, pecking order theory, agency cost, signaling theory and stewardship theory. In real world, the financing decisions are affected by the dividend policy and despite of influencing liquidity, investor's expectations dividend policy is a very important aspect of corporate financial decision making (Kapil, 2013). However, the importance of dividend policy is not a modern discussions, as (Miller and Modigliani, 1961) mentioned that, “the effect of a firm's dividend policy on the current price of its shares is a matter of considerable importance”. In addition, Rehman and Takumi (2012) investigated determinants of dividend payout ratio defined as the ratio of yearly dividend paid and net income after tax paid. However, Amidu and Abor (2006) calculated dividend payout ratio as the percentage of profit paid as dividend and the result found negative association between dividend payout ratio and risk, market to book value and growth. Similarly, (Kapoor, 2011) investigating on the relationship between dividend policy and shareholder value found there is negative association between them. The argument made was as dividend is paid to the shareholders, it will eventually decrease the retained earnings followed by the excess cash drops.

Economic Value Based Measures
The primary aim of management is to increase the value of shareholders. Economic value added (EVA) is the economic value based measure that calculates the shareholder wealth and is widely used by management for making decisions and increasing productivity, new capital investment and guide for liquidating underperforming assets. Operationally, EVA is defined as the difference between the company's net operating profit after taxes and it costs capital (Stewart, 1991). According to Stewart (1991), “EVA is a performance measurement tool reflecting the absolute amount of shareholder value creation through an effective investment decision”. EVA is different from other traditional performance measures because it totally accounts for the firm’s overall capital costs (Hiang Liow and Ooi, 2004). The reason on emphasizing EVA as a value based measure increasing shareholder's wealth is that it works as the shareholders wants. In conventional accounting most of organizations incur profit, but are not able to create value for shareholders.

For the performance evaluation, it is important to encourage both managers and employees to work cooperatively together with the goal of increasing shareholder confidence. Furthermore, Tebogo (2011) mentioned that, “Shareholders tend to have more confidence in the company since they are more likely to believe that the management of the company is working towards improving the shareholder interest”. EVA calculation has been criticized due to its “numerous adjustments to profit and capital employed figures” (Shil, 2009). Nevertheless, Tong, Yao, and Xiong (2010) found that EVA is not very familiar to the market participants and shareholders. Similarly, Othman et al. (2012) mentioned that negative EVA plays a value destroyer for stock performance. The relationship between EVA and stock performance was very low. Whereas, Turvey, Lake, Van Duren, and Sparling (2000) who surveyed the relationship between EVA and stock market performance among 17 public traded companies of Canadian food processing sector including traditional measures like ROA and ROE found that there is very little support for EVA leading to the increased shareholder value. Thus it can be said that there is mixed result for the support of EVA towards the shareholder value creation by previous studies.

Market value added (MVA) is the difference between the capital contributed to the company by the shareholders and the market value of the product. Furthermore, Pruthy and Hara (2014) added that, “MVA is the difference between the current market value of a firm and the capital contributed by investors”. MVA deducts value of equity, loans and retained earnings from the market value of share capital and debt. However, Keown (2003) mentioned that, “MVA is calculated as the difference between total market value of the firm and invested capital”. It was also explained by Hillman and Keim (2001) that MVA improves the accounting measures of return in understanding the effect of stakeholder relationship and dimensions considering financial performance. MVA is similar in meaning with book to
market ratio and the difference is that MVA is an absolute measure whereas market to book ratio is a relative measure. From the MVA calculations the value added by the company to the shareholder investments can be achieved. MVA and share behavior examined the behavior of share price using the MVA approach and traditional measures found that share price is highly correlated with MVA. Furthermore de Wet (2005) mentioned that MVA is the best performance measure as it indicates market assessment. MVA is not a performance metric like EVA, but instead is a wealth metric; measuring the level of value a company has accumulated over time (Dierickx and Cool, 1989). According to Biddle, Bowen, and Wallace (1997) as the company performs well over time, it will retain earnings. MVA measures the operational capabilities of a company management and represents the value of the company as a whole on the open market. The MVA formula does not account for any cash payments that the company may have paid out to shareholders. It also does not measure the opportunity costs relative to any alternative investments. Therefore, it is important to investigate MVA as the performance metrics explaining shareholder value.

The following alternative hypotheses were formed based on extent review of theoretical and empirical studies and the overall research objective:

\[ \begin{align*}
\text{H1. Earnings per shares (EPS) is an important performance measure to explain shareholder’s wealth.} \\
\text{H2. Return on assets (ROA) is an important performance measure to explain shareholder’s wealth.} \\
\text{H3. Return on equity (ROE) is an important performance measure to explain shareholder’s wealth.} \\
\text{H4. Return on capital employed (ROCE) is an important performance measure to explain shareholder’s wealth.} \\
\text{H5. Dividend payout ratio (DPR) is an important performance measure to explain shareholder’s wealth.} \\
\text{H6. Economic value added (EVA) is an important performance measure to explain shareholder’s wealth.} \\
\text{H7. Market value added (MVA) is an important performance measure to explain shareholder’s wealth.}
\end{align*} \]

Apart from the above hypotheses further analysis was also conducted on descriptive statistics and several residual tests along with the validation of the data including stationarity tests.

**METHODODOLOGY**

The data source for our study is the 280 firm year observations extracted from company’s annual report and Thomson Reuters Financial Database for the Malaysian market, which includes ten annual observations, from 2003 to 2012. The main statistical technique used in the study is the residual diagnostics test that validates the data. The panel methodology was aided by EVIEWS 8.0 software.

The panel data regression model applicable to this the study is as follow:

\[ \text{CSV}_i = \beta_0 + \beta_1 \text{EPS} + \beta_2 \text{ROA} + \beta_3 \text{ROE} + \beta_4 \text{ROCE} + \beta_5 \text{DPR} + \beta_6 \text{EVA} + \beta_7 \text{MVA} + \alpha_i + \mu_{it} + \epsilon_{it} \]  

where, 
\( i \) and \( t \) denotes the company and time period, \( \beta \) is the intercept term, and \( \beta_1 \) to \( \beta_7 \) are the coefficients of independent variables. The variable \( \alpha_i \) presents the unobserved factors. \( \mu_{it} \) is a time varying error term that includes unobserved factors that change over time and affect shareholder value. \( \epsilon_{it} \) is the error term. F-test was also conducted for random effect and reported the p-value of the F-statistics.

The dependent variable in equation (1) is CSV for time period \( t \). CSV has been extensively used for studying the shareholder’s wealth and performance measures. The independent variables are as follows: Earnings per Share (EPS) is calculated as net income minus dividend paid to common stock outstanding, and is employed to measure shareholder's wealth (see: Gupta, 2011; Reddy, Rajesh, and Reddy, 2011; Taufik, Isnurhadi, and Widiyanti, 2008). The most widely accepted financial ratios for examining...
Unlocking the Barrier of Implementing Product-Service System: Knowledge-Based Perspective

financial performance of an organization are return on assets calculated as the proportion of net income to total assets, return on equity calculated as net income over total shareholder equity, and return on capital employed calculated as the addition of fixed assets, investment and current assets (Fernandez, 2002, 2013; Viswanadham and Luthra, 2005).

Dividend payout decisions are based on the net earnings of a firm and calculated as the ratio of dividend paid minus share buyback to net income generated, and has been confirmed by studies like (Abor and Fiador, 2013; Amidu and Abor, 2006; Chen, Chung, Ho, and Hsu, 2010) as an important determinant for shareholder value and corporate performance.

Economic value added (EVA) calculated as operating profit after tax deduction minus cost of capital has been acknowledged by many studies (Bontis, Wu, Chen, Cheng, and Hwang, 2005; Reddy et al., 2011; Stern, Shiely, and Ross, 2001; Van der Poll, Booyse, Pienaar, Büchner, and Foot, 2011) and has confirmed to be a true economic performance measure for determining shareholder wealth maximization. Market value added calculated as the multiplication of common shares outstanding to share price and proportion to equity book value helps investors identify a firm’s current and future financial outcomes (Rezvan and Hosseini, 2006; Wibowo and Berasategui, 2008).

**DATA RESULTS**

**Test for Heteroscedasticity**

Heteroscedasticity is used to know the variation in the accuracy of prediction across data groups in the value added literature (Herrmann, Walsh, Isenberg, and Resch, 2013). Under certain assumptions, the OLS estimators under heteroscedasticity have a normally distributed and centered data but due to maximum likelihood estimation, it is obvious to check the data for heteroscedasticity issues. If the estimation of shareholder value is desired, then the issue of omitted variable bias and unobserved heteroscedasticity are confronted. The OLS estimator is more reliable and consistent and the usual standard error is valid. Thus, in the presence of heteroscedasticity, the result must make the standard error robust (Wooldridge, 2003).

The diagnostic test identified five different potential sources, each suggesting group wise difference in error variance with a group defining the dependent variable CSV and other groups defined according to the independent variables. A white test is utilized to test the heteroscedasticity issue and is regressed upon the residuals to test if the regressors can explain the residuals.

From the line plot diagram in figure 1, it can be noticed that the data is not normally distributed as the actual and fitted residuals follow together, signaling residual error. From the residual graph provided in the figure, it is clear that the residuals follow the same path of the actual and fitted path. This signals residual error, leading to heteroscedasticity.

According to the guideline, if the p-value is less than 0.05, the null hypothesis is rejected. Here the p-value was found to be less than 0.05, and thus the null hypothesis is rejected. In order words, the residuals got heteroscedasticity and that is not desirable. The model used robust standard errors throughout for correcting heteroscedasticity issues as suggested by (White, 1980). Another essential point suggested by White (1980) that in order to deal with the removal of heteroscedasticity, the variables must be modified to logarithm, but this data consists of zero or negative values that limited the study to use this concept of removal. Thus, the robust standard error test was performed where the coefficient co-variance matrix was adjusted to white and the white cross terms were excluded in order to perform a residual diagnostic test. Thus based on the residual tests, it may be concluded that the heteroscedasticity issues can be found in cross-sectional or panel data and not only in the time series data.
Unlocking the Barrier of Implementing Product-Service System: Knowledge-Based Perspective

Figure 1: Actual, Fitted Residual Graph

Table 1: Heteroscedasticity Test – White

<table>
<thead>
<tr>
<th></th>
<th>F-statistic</th>
<th>Prob. F(8,271)</th>
<th>Obs*R-squared</th>
<th>Prob. Chi-Square(8)</th>
<th>Scaled explained SS</th>
<th>Prob. Chi-Square(8)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>33.15988</td>
<td>0.000</td>
<td>138.5065</td>
<td>0.000</td>
<td>1436.147</td>
<td>0.000</td>
</tr>
</tbody>
</table>

White heteroscedasticity-consistent standard errors and covariance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-5.48E+12</td>
<td>8.43E+12</td>
<td>-0.65025</td>
<td>0.516</td>
</tr>
<tr>
<td>EPS^2</td>
<td>2.88E+09</td>
<td>3.93E+09</td>
<td>0.73344</td>
<td>0.464</td>
</tr>
<tr>
<td>ROA^2</td>
<td>-7.14E+08</td>
<td>1.33E+09</td>
<td>-0.53823</td>
<td>0.591</td>
</tr>
<tr>
<td>ROE^2</td>
<td>-1.92E+08</td>
<td>2.04E+08</td>
<td>-0.94145</td>
<td>0.347</td>
</tr>
<tr>
<td>ROCE^2</td>
<td>8.87E+08</td>
<td>6.75E+08</td>
<td>1.31501</td>
<td>0.190</td>
</tr>
<tr>
<td>NOPAT^2</td>
<td>731.4203</td>
<td>869.4983</td>
<td>0.8412</td>
<td>0.401</td>
</tr>
<tr>
<td>EVA^2</td>
<td>-1304.32</td>
<td>4178.313</td>
<td>-0.31216</td>
<td>0.755</td>
</tr>
<tr>
<td>DPR^2</td>
<td>1.95E+09</td>
<td>8.55E+08</td>
<td>2.2752</td>
<td>0.024</td>
</tr>
<tr>
<td>MVA^2</td>
<td>0.000204</td>
<td>0.000112</td>
<td>1.82314</td>
<td>0.069</td>
</tr>
</tbody>
</table>

R-squared          | 0.494666    | Mean dependent var | 4.81E+13 |
Adjusted R-squared | 0.479748    | S.D. dependent var  | 2.27E+14 |
Unlocking the Barrier of Implementing Product-Service System: Knowledge-Based Perspective

S.E. of regression 1.64E+14 Akaike info criterion 68.32531
Sum squared resid 7.25E+30 Schwarz criterion 68.44215
Log likelihood -9556.544 Hannan-Quinn criter. 68.37218
F-statistic 33.15988 Durbin-Watson stat 1.81032
Prob(F-statistic) 0.000

Note: P<0.05 is significant

Unit Root Tests
The assumption of stationarity in the data is crucial in the cross sectional data. The significance of the stationarity of data in panel data analysis lies in the fact that conditions of constant covariance, variance and mean need to be satisfied to ensure the accuracy of the estimated models and parameters. Therefore, it is important to consider whether or not the data are stationary prior to estimating the relationship between the economic growth and its determinants. Equally important, Phillips and Perron (1988) showed that conducting regressions which employ non-stationary variables may lead to misleading results, showing apparently significant relationships, even where the variables are generated independently.

Table 2: Results of Panel Unit Root Test

<table>
<thead>
<tr>
<th>Variables</th>
<th>Augmented Dickey-Fuller</th>
<th>Philips-Perron Fisher</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ADF (0)</td>
<td>ADF (1)</td>
</tr>
<tr>
<td>CSV</td>
<td>-5.1531</td>
<td>-9.9899</td>
</tr>
<tr>
<td>EPS</td>
<td>-12.5125</td>
<td>-11.781</td>
</tr>
<tr>
<td>ROE</td>
<td>-17.339</td>
<td>-10.8024</td>
</tr>
<tr>
<td>EVA</td>
<td>-11.2923</td>
<td>-11.4068</td>
</tr>
<tr>
<td>DPR</td>
<td>-15.7944</td>
<td>-10.6576</td>
</tr>
<tr>
<td>MVA</td>
<td>-4.8325</td>
<td>-16.3232</td>
</tr>
</tbody>
</table>

Note: t-statistics threshold value is ± 1.96

Since the study employs panel data set analysis due to the non-parametric characteristics of the sample data, it is important to control the issue of spurious regressions. Thus, each of the variable series needs to be tested for stationary characteristics through the application of the Augmented Dickey Fuller (ADF) and Phillips Perron (PP) unit root tests. However, as discussed in Table 2, the results achieved in the sample are not placed on the limits and are not subject to this important criticism. The t statistics for both zero and first order difference were above the threshold value of ±1.96, confirming the null hypothesis which states that the data is stationary.

Since the appearance of the papers by Levin, Lin, and Chu (2002), the use of panel data unit root tests has become very popular among empirical researchers with access to a panel data set. It is by now a generally
accepted argument that the commonly used unit root tests like the Dickey-Fuller (DF), augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests lack power in distinguishing the unit root null from stationary alternatives, and that using panel data unit root tests is one way of increasing the power of unit root tests based on a single time series. See, for example, the arguments in (Choi, 2001; Frankel and Rose, 1996; Oh, 1996; Wu, 2000), who try to resurrect the purchasing power parity (PPP) theory using panel data unit root tests.

Error Correction Model
The concept of error correction is related to co-integration because this relationship describes the long-run equilibrium. If a set of variables has co-integrated, then there exists an Error Correction Model (ECM) to describe the short-run adjustment to equilibrium (Engle, and Granger, 1987). The incidence of mutual co-integration between variables indicates that the Granger must be causal in one direction, at least, but the rules of engagement do not refer to the direction of causality between the variables. Thus, to verify the rules of engagement, tests of causation are carried out in the context of ECM (Brooks, 2008). In addition, the t-statistics on the coefficients of the lagged error correction term $\text{ECT}_{t-1}$ should indicate the significance of long-run causality between the two variables. The statistical significance of the t-statistics in tests should be at most 5%.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-17671.02</td>
<td>382136.1</td>
<td>-0.046243</td>
<td>0.963</td>
</tr>
<tr>
<td>D(EPS)</td>
<td>138891.5</td>
<td>23050.23</td>
<td>6.025603</td>
<td>0.000</td>
</tr>
<tr>
<td>D(ROA)</td>
<td>15803.28</td>
<td>27867.44</td>
<td>0.567087</td>
<td>0.571</td>
</tr>
<tr>
<td>D(ROE)</td>
<td>-6522.125</td>
<td>10999.08</td>
<td>-0.59297</td>
<td>0.554</td>
</tr>
<tr>
<td>D(ROCE)</td>
<td>-9057.761</td>
<td>11103.24</td>
<td>-0.815777</td>
<td>0.415</td>
</tr>
<tr>
<td>D(NOPAT)</td>
<td>-40.05568</td>
<td>6.517373</td>
<td>-6.145986</td>
<td>0.000</td>
</tr>
<tr>
<td>D(EVA)</td>
<td>-2.024771</td>
<td>13.13631</td>
<td>-0.154135</td>
<td>0.878</td>
</tr>
<tr>
<td>D(DPR)</td>
<td>24876.28</td>
<td>6800.991</td>
<td>3.657743</td>
<td>0.000</td>
</tr>
<tr>
<td>D(MVA)</td>
<td>-0.033866</td>
<td>0.002756</td>
<td>-12.28782</td>
<td>0.000</td>
</tr>
<tr>
<td>U(-1)</td>
<td>-0.582629</td>
<td>0.060366</td>
<td>-9.651581</td>
<td>0.000</td>
</tr>
</tbody>
</table>

| R-squared | 0.744913 | Mean dependent var | -2899.6 |
| Adjusted R-squared | 0.736379 | S.D. dependent var | 1.2E+07 |
| S.E. of regression | 6382856 | Akaike info criterion | 34.2113 |
| Sum squared resid | 1.10E+16 | Schwarz criterion | 34.3415 |
| Log likelihood | -4762.478 | Hannan-Quinn crit. | 34.2635 |
| F-statistic | 87.28268 | Durbin-Watson stat | 1.86444 |
| Prob(F-statistic) | 0.000 | |

Note: P<0.05 is significant

The error correction estimation presented in Table 3 above revealed that this error correction term or speed of adjustment coefficient is correctly signed with negative Error Correction Term ($U (-1)$). This implies that any error generated in each period has a tendency to explode or wander further towards the equilibrium path over time following disequilibrium in each period. This implies that meaningful error
correction is taking place. This equation, however, accounts for the correction of only 58 per cent of the error generated in the last period and, from the value of the t-statistic, the error term's coefficient is statistically significant. The statistical significance of both the error-correction terms and the lag dynamics terms, as mentioned above, implies that the short-term changes found in the level of shareholder's wealth are somewhat tied to the future changes in performance measures. Therefore in each short-term period, shareholder's wealth is adjusted by taking into account the previous time period's difference between the indicators of performance measures.

**OLS Regression Model**

After conducting data validation using the unit root test and residual diagnostics analysis, and identifying the degree of validation and acceptance of data, the results of the value creation models from different perspectives is performed.

**Table 4: Cross-Section Random Effect OLS Model**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob. (P)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>3269493</td>
<td>559103.2</td>
<td>5.847745</td>
<td>0.000</td>
</tr>
<tr>
<td>EPS</td>
<td>133003.8</td>
<td>27057.54</td>
<td>4.915592</td>
<td>0.000</td>
</tr>
<tr>
<td>EVA</td>
<td>33.72617</td>
<td>16.76371</td>
<td>2.011856</td>
<td>0.045</td>
</tr>
<tr>
<td>DPR</td>
<td>27160.79</td>
<td>9583.069</td>
<td>2.834248</td>
<td>0.005</td>
</tr>
<tr>
<td>MVA</td>
<td>-0.030237</td>
<td>0.001908</td>
<td>-15.84601</td>
<td>0.000</td>
</tr>
<tr>
<td>ROA</td>
<td>20766.53</td>
<td>38744.02</td>
<td>0.535993</td>
<td>0.592</td>
</tr>
<tr>
<td>ROE</td>
<td>3228.937</td>
<td>16687.32</td>
<td>0.193496</td>
<td>0.847</td>
</tr>
<tr>
<td>ROCE</td>
<td>10112.31</td>
<td>15351.78</td>
<td>0.658706</td>
<td>0.511</td>
</tr>
<tr>
<td>NOPAT</td>
<td>-57.05581</td>
<td>6.331977</td>
<td>-9.010743</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**Weighted Statistics**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.835988</td>
<td>Mean dependent var</td>
<td>-4957563</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.831146</td>
<td>S.D. dependent var</td>
<td>17154915</td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>7049270</td>
<td>Sum squared resid</td>
<td>1.35E+16</td>
</tr>
<tr>
<td>F-statistic</td>
<td>172.6645</td>
<td>Durbin-Watson stat</td>
<td>1.187303</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: P<0.05 is significant

The OLS regression using panel data of created shareholder's value on the independent variables (EVA, MVA, DPS, EPS, ROA, ROE, ROCE and NOPAT) is addressed in Table 4. Additionally, Worthington and West (2004) used additional pooling models like fixed model and the random effect model. The model is estimated using common coefficients, and tested against the fixed and random effects.
specifications using an F-test. From the empirical results, the $R^2$ for the fixed effect models was higher as compared to the common effects. Furthermore, Mojtahedi and Boka (2013) using econometrics analysis of panel data, performed Hausman test to select the appropriate model (random or fixed) and found that random effects are heterogeneous and should use fixed effect method to estimate. Similarly, Sharma and Kumar (2012) and Panigrahi, Zainuddin, and Azizan (2014) comparing EVA and conventional performance measures using two tests (fixed and random) and found that the random effects for all the models are acceptable in the estimates.

From the random effect panel regression analysis, it was confirmed that EPS as a traditional measure, EVA as an economic value based measure and DPR have high impact on CSV. The combination of all these three components as a performance measurement tool is able to explain shareholder value. For shareholders, EPS is important because it reveals a lot about the financial health of a company. Increasing EPS is a very good sign for an organization (Chatfield and Dalbor, 2005). Many investors have fallen in the trap of judging share prices by analyzing and capitalizing reported earnings only, as operating and financing decisions are mixed and financial statements are aimed at the analytical interests of creditors far more than shareholders. In regard to this, it can be claimed that as the earnings per share gets bigger, the value of shareholders rises as well. Similarly, when the economic value of a stock is increased, the shareholder value also increases. Furthermore, firms paying dividends generate positive signals towards shareholder's future investment expectations. The analyses using different performance measures have found similar results. This result is congruent with the expectations of the stakeholder theory.

**CONCLUSIONS**

The findings of the panel regression analysis showed that the stakeholder theory hypothesis is valid for Malaysian public listed construction companies since economic value is created when the earnings of an organization is greater than the cost of operation and generating capital. In consequence, it can be said that increasing the economic value of shares and firm leads to increases in shareholder value. In conclusion, it was evidenced that there is strong positive relationships between EPS, EVA, and DPR as value-based measurement tools with shareholder's wealth creation. Conflicting with what other studies (Chen and Qiao, 2008; Phani and Bhattacharyya, 2000; Vijayalakshmi, 2014) confirmed, this study found that EVA acts as an economic value-based performance tool for shareholder's wealth. EVA serves as a new valuation paradigm that is based on reporting, analyzing and projecting underlying economic profit rather than bookkeeping profits (Brigham and Houston, 2011). EVA also avoids financial distortions by measuring the return generated on all capital against a strategic, long run, weighted average cost of capital on a targeted debt and equity (Shil, 2009). Thus, EVA findings in this study is obvious and justified on explaining and predicting stock prices which is enough for investors to pay attention. The final variable that was found to be positively significant was dividend payout ratio. According to Abdullah, Razazila, Ismail, Sadique, and Bi (2005) and Zakaria¹, Muhammad, and Zulkifli (2012) dividend payout matters for shareholders as well as companies in order to communicate financial well-being and sending a clear and powerful message about future prospects and performance. If dividend increases, share price will also increases, which leads to the creation of shareholder's wealth.

Future studies must include factors in relation to financial and non-financial metrics like customer loyalty, R & D, firm size, employee satisfaction, technology and productivity measures including strategic management, and operational management, rather than replicating the current study. It is also suggested that introducing EVA to performance measurement will reflect company’s real profit. We should be cautious while concerning EVA. Although EVA is closer to shareholders wealth compared to traditional measures, it cannot completely discard earnings manipulation of firms. Furthermore, it is important to understand that, accuracy of EVA calculation is vulnerable to many factors like accounting adjustment, market value of the firm and shareholder’s perception displaying firm performance.
REFERENCES


Unlocking the Barrier of Implementing Product-Service System: Knowledge-Based Perspective


Unlocking the Barrier of Implementing Product-Service System: Knowledge-Based Perspective

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Unlocking the Barrier of Implementing Product-Service System: Knowledge-Based Perspective

**Keywords:** Product-service System (PSS), Knowledge Management, Internal Barrier and External Barrier, Customer Knowledge, Firm Internal Knowledge, Conceptual Studies

**INTRODUCTION**

A Product Service System (PSS) creates new market opportunities, trends, and developments (Mont, 2002), as a result this approach attracts attention of manufacturing provider searching opportunities for competitive advantage (Barquet et al., 2013). Moreover, several authors claimed that the PSS emphasize more at sustainability than providing services by pursuing stability in economic, social and environmental concerns (Baines et al., 2007; Goedkoop et al., 1999; Mont, 2002; Shimomura et al., 2014). From the economic perspective PSS gain more profit (Husted & Allen, 2009; Dingzu Zhang & Wang, 2010) by adding more value either tangible or intangible value; reduce cost of capital / investment for each PSS; and improve the provider’s status in the value chain (Tukker, 2004). Furthermore, reducing resources usage enhance the durability of the PSS but maintaining the quality, enhance customers’ value (Kang & Snell, 2007) and environmental safety as compared to traditional product-oriented (Mont, 2002). The impact of PSS on environmental can be seen through the intensive use of capital goods (Tukker, 2004). Whereas, from the social standpoint, the deliverable of PSS provide benefits such as healthy and safety product and sustainable consumption (Allen et al., 2012).

Although the concept of PSS has been discussed in the literature for over a decade, its actual implementation is limited (Ceschin, 2013; Kuo et al., 2009; Pezzotta, Cavaliere, & Gaiardelli, 2012). There are many challenges that impede the success of adopting PSS as highlighted by previous authors. For instance internal and external actors barriers (Baines et al., 2007; Beuren et al., 2013; Kimita & Shimomura, 2014; Kuo et al., 2009; Vezzoli, Ceschin, Diehl, & Kohtala, 2015), internal process and capabilities (Kuo et al., 2009), service design (Baines et al., 2009), and maintenance and remanufacturing (Vezzoli et al., 2015). Other challenges highlighted are failure to linking the input, process and output of PSS through organizational strategy (Baines et al., 2009); adopting the right culture for PSS development (Ceschin, 2013; Kuo et al., 2009); and dealing with uncertainties due to unclear risks, costs and responsibilities of the PSS offering (Erkoyuncu et al., 2010).

In order to understand the factors that impede the implementation of PSS, this article has two objectives. First, analyze the barriers to PSS implementation; Second, mapped those barriers into a business model comprises of eight building blocks customer segments, value proposition, delivery channels, customer relationships, key resources, key activities, key partnership and cost structure. Third, to observe from a helicopter perspective of how these barriers are linked and what is the key solution to unlock most (if not all) of these challenges. The illustration of the PSS barrier using the input-process-output (IPO) framework (McGrath 1984) and the flow of knowledge required from one process to another. Towards the end of the article, we summarize the key barriers and proposed solution. The rest of the paper is structured as follows: (a) methodology of the research, (b) literature review of PSS barriers and knowledge role to facilitate PSS implementation, and (c) summary and conclusion of the study.
Unlocking the Barrier of Implementing
Product-Service System: Knowledge-Based Perspective

METHODOLOGY

The research is established on literature review involving publications on the PSS challenges and PSS knowledge-based topic. We focus on the barrier of PSS implementation and how knowledge-based offer assistance to resolve those barriers. The literature review was limited to the following scientific search engines: Science Direct, Ebscohost, Emerald, Springer and Google Scholar. The keyword used for searching PSS implementation barrier in PSS are: Product-Service Systems AND Barrier; Product-Service Systems AND Challenges; PSS Barrier; PSS Challenges; Product-Service Challenges; and Product-Service Barrier. At the same time, the literature review also search for PSS knowledge-based related articles using keyword of Product-Service Systems AND knowledge, and PSS knowledge.

LITERATURE REVIEW

Product service system
A Product Service system (PSS) is an integrated products, services and their interdependences and relations to designate customer’s need (Goedkoop et al., 1999). Many terminologies are associated with PSS in different disciplines. For instance, Information System, Business Management and Engineering design adopt different terms to describe PSS: service-dominant logic (Vargo & Lusch, 2004), functional product (Alonso-Rasgado et al., 2004; Park & Lee, 2009), product-service bundling (Becker et al, 2009; Spring & Araujo, 2009) and servitization (Baines et al., 2009; Finne et al., Brax, et al., 2013; Jiang et al., 2011; Jin et al., 2011). Despite the difference of terminologies used, the underlying concept is similar; they enhance the provision of services into the product offerings. A PSS is described as a system of products embraces a service oriented approach that lead to competitive advantage by differentiating firm offering from rivals and focusing on environmental sustainability (Baines et al., 2007; Barquet et al., 2013; Beuren et al., 2013). The PSS development is becoming important in contributing to social, economic and environmental issues, however, those PSS businesses may be efficient and competitive if the products are incorporated with several functions such as maintenance and upgrading (Isaksson et al.,2009).

PSS can be differentiated based on three criteria: alterations to the actual product (the physical artifact); the context in which the product is used (defining the service); and the system (how both product and service is connected). There are three types of widely accepted of PSS in relation to customer and provider relationship: product-oriented, use-oriented, and result-oriented service (Tukker, 2004). The service provides a higher level of intangibility and customer ownership towards the physical product is reduced from product-oriented to result-oriented. PSS offers benefit to customers in terms of high level product-service customization, variety and flexibility of product offered and enhance environment through higher responsibility of provider towards environmental safe and reduction of product volumes by different pattern of use (Minguez et al., 2012). The provider may gain potential of product differentiation offered against competitors, build up new markets and business divisions, additional value attached to product-service offering and potential for advance strategy in established markets (Minguez et al., 2012), enhance revenue and gain competitive advantage (Lockett, Johnson, Evans, & Bastl, 2011).

Barriers for PSS implementation
There are many studies focus on the barriers for PSS adoption highlighted by previous research. In this paper they are grouped according to PSS development process: Input, Process, Output (IPO). These three IPOs are connected through organizational factors such as organizational strategy and culture for PSS development. First, among barriers related to input or key resources for PSS development process are lacking of employee understanding (Barquet et al., 2013), employee training (Kuo et al., 2009), technical expertise (Kimita & Shimomura, 2014; Kuo et al., 2009; Vezzoli et al., 2015), employee satisfaction and motivation (Kimita & Shimomura, 2014), and MIS system (Kuo et al., 2009). The input barriers are
basically deal with human resources and how their knowledge are captured for re-use in future new product development. Second, barriers during PSS development are internal processes and capabilities (Martinez et al., 2010), remanufacturing / environmental impact (Gehin et al., 2008; Kuo et al., 2009), and service design (Baines et al., 2009; Isaksson et al., 2009; Vezzoli et al., 2015). Third, value proposition of product and service must be jointly developed (Martinez et al., 2010) however the integration coordination become one of the challenges to the manufacturing industry (Kuo et al., 2009). Fourth, PSS requires organizational culture (Ceschin, 2013; Martinez et al., 2010) and strategy (Baines et al., 2007, 2009; Barquet et al., 2013; Becker et al., 2009; Erkoyuncu et al., 2010; Isaksson et al., 2009; Kimita & Shimomura, 2014; Kuo et al., 2009; Martinez et al., 2010; Vezzoli et al., 2015) to be aligned with PSS requirements to successfully implement PSS. In addition, failure to take advantage of the long term pricing strategy for PSS is the most crucial issues highlighted by previous researcher (Baines et al., 2007; Barquet et al., 2013; Erkoyuncu et al., 2010; Kimita & Shimomura, 2014; Vezzoli et al., 2015). Fifth, PSS implementers also face challenges due to external barriers such as governmental regulation (Baines et al., 2007; Barquet et al., 2013; Ceschin, 2013; Kuo et al., 2009; Vezzoli et al., 2015), suppliers or partners (Isaksson et al., 2009; Martinez et al., 2010; Vezzoli et al., 2015), and customer culture (Ceschin, 2013; Isaksson et al., 2009; Kimita & Shimomura, 2014; Kuo et al., 2009; Vezzoli et al., 2015). The barriers highlighted are simplified in Table 1.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Development process</th>
<th>Organizational factor</th>
<th>External factor</th>
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<tbody>
<tr>
<td>(Barquet et al., 2013)</td>
<td>Input: Employee understanding</td>
<td>Strategy: Pricing strategies</td>
<td>Laws and regulation</td>
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<td>(Martinez et al., 2010)</td>
<td>Process: Internal process and capabilities Output: Value proposition</td>
<td>Culture: Embedded PSS culture Strategy: Strategic planning</td>
<td>Supplier relationship</td>
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<tr>
<td>(Baines et al., 2007)</td>
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<td>Strategy: Pricing strategies Skills to restructuring for PSS</td>
<td>Political, social and technological change Customer culture</td>
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<td>(Baines et al., 2009)</td>
<td>Process: Service design</td>
<td>Strategy:</td>
<td>Collaboration with</td>
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Table 1: The Barrier for PSS Implementation
Unlocking barriers for PSS implementation from knowledge-based support

We enhance guideline to implement PSS using the business model concept as suggested by (Barquet et al., 2013) by analyzing and mapping the barrier for PSS adoption into the business model, to overview the overall limitation factor of PSS. The business model comprises of eight building blocks and divides into three dimensions: input, process and output. The input resources and output or outcomes are associated with material, energy or information. The process dimension explains the main activity of transforming resources to final product. The eight building blocks are divided into two groups, internal and external barrier. The PSS development process and organizational factor are considered as internal barrier to PSS implementation, whereas customers, partnerships (suppliers) and government are part of external barrier. The following section discusses the barrier exist in each building block and how related knowledge play their role to reduce the hurdle in implementing PSS. Figure 1 represents the summary of the study.

Key resources

Different business type requires different resources. According to Osterwalder & Pigneur (2010) there are several categories of key resources such as intellectual, human, physical and financial resources. However, these resources could be the internal barrier for PSS implementation. First, intellectual or knowledge resources owned by the organization such as patents and copyright, trademarks, customer knowledge and partnership databases (Osterwalder & Pigneur, 2010). Although creating knowledge resources are difficult, they are the most potential for competitiveness (Barney, 1991; Schoemaker, 1993; Grant, 1997) as there are many uncertainties with knowledge resources. Customers transfer these uncertainties knowledge to provider and it is provider responsibility to transform them into promising offering although it is risky and complicated. PSS could help satisfy customers in long term, in turn firm may stay competitive but PSS normally deals with high degree of newness and complexity thus leads to barriers to their adoption. To solve this barrier Rese et al. (2010), propose information strategies that create an information model that gather and deliver knowledge from and to external sources. At the same time, knowledge resources are stored in the firm database to be accessible by employees when needed. Second, activities in the product development phase require new resources including employee training and education for technical employees and support (Kuo et al., 2009; Vezzoli et al., 2015). Although the cost of human resource is costly in PSS (Vezzoli et al., 2015), it is one way to unlock the barrier for PSS implementation (G. Copani et al., 2010). Employee training will enrich knowledge transfer among employees without any limitation of boundaries, time and level of hierarchy and more knowledge is transferred in trusted firm (Awang et al., 2013). Furthermore, knowledge interchange occurs regularly within or outside department to enhance communication among employees. Training will assist employees to realize the potential value of PSS, enhance its revenue, and use knowledge supply by customers effectively (Barquet et al., 2013). Third, physical infrastructure (for instance, investment on IT advancement) require high investment in order to acquire new capabilities and processes configuration for new product design; and utilization of new measurement or metrics (Martinez et al., 2010). However, according to (Zheng et al., 2010), adequate resources does not guarantee for PSS success. Solving the key resources in terms of employee training, investment on IT advancement and knowledge should be linked
and integrated to smoothly channel information for redesign existing process and lead to firm performance improvement (Lin, 2007). IT advancement act as enabler for collaboration, allows communication in digital formed and can be accessed globally. Fourth, financial resource is an avenue to generate profit through some credit, cash, and stock. In addition, services seem to provide higher potential revenue and higher profit margin as compared to traditional product (G. Copani et al., 2010). However, this will benefit only large firm, as SME normally have limited financial resources, which hinder the implementation of PSS business model (Kimita & Shimomura, 2014). High investment for acquiring new capabilities and infrastructure may assist the organization to experience long-term benefits and opportunities for new market, improve business process or developed new products. However, these resources may not fully utilize if firm lacks of new strategy for instance, restructure the firm in order to create new knowledge from the organization structure. Thus, the incapable to restructure organization inhibit generating knowledge assets, as knowledge resources are output from organization structure in relation with organizational culture and norms embedded in organizational relationships (Baines et al., 2007).

**Partnership**
Organization create strategic alliances either between competitors or non-competitors, joint venture with other businesses and enhance supplier and customer relationship (Osterwalder & Pigneur, 2010). Cooperation with suppliers remain unchanged, although if the agreement in that relationship has changed (Martinez et al., 2010). PSS requires communication among team members and collaborative process with partners, and suppliers; managing the information flow to avoid irrelevant and redundant knowledge which will create more tasks to complete (C. Durugbo, A. Tiwari, 2010). Cooperation between providers and its partner network is a challenge in PSS. Suppliers may feel they are parts of the new product sold if it involves with integrated offering (Martinez et al., 2010), and reduce influence on decision making (Vezzoli et al., 2015). Robust collaboration or close networking among PSS actors, might turn to the potential barrier due to fear of sensitive knowledge may leak to supplier or partners, thus provider might lost new capabilities to them (Armalyte et al, 2015). Thus organization tend to be over-protective when utilizing these approaches, tight rules relating to what can and cannot be spread or shared with partners or suppliers (Bertoni et al., 2012). According to Durugbo & Riedel, (2013), there has been little study on the readiness of provider to collaborate with partners in delivering PSS (Durugbo & Riedel, 2013). They proposed a conceptual model to evaluate the provider readiness in collaborating with partners and suppliers. However, Reim et al. (2014) suggested PSS providers must not only be ready to work with unfamiliar potential partners but also willing to build different type of collaboration depending on type of services offered. Three important criteria related to collaboration such as types of partners, types of relationship and activities related to sharing and coordinating knowledge can be considered as one of tactic to implement PSS (Lockett et al., 2011; Reim et al., 2014). Besides qualitative knowledge owned by PSS provider and its suppliers (Guidat et al., 2014), an alignment of incentives between both parties is another contributing factor to achieve successful and fair partnership (Lockett et al., 2011).

**Customer segments**
PSS is suitable for customers who do not necessarily want to own the artifact of the product except the function. PSS acceptance are varies in terms of cultural and regional, customer behaviors and values, and customer habits (Barquet et al., 2013; Ceschin, 2013; Manzini & Vezzoli, 2003; Mcaloone & Andreasen, 2004). These are due to lack of knowledge about ownerless based product-service (Ceschin, 2013) which lead to lack of customer acceptance (Baines et al., 2007; Ceschin, 2013). Since PSS is considered as radical innovation, the challenge of setting the target groups is the uncertainties of risks, costs, and responsibilities affected by dynamic market, and customer demand changes (Blocker & Flint, 2007). It is also noted, the imbalance between the offering and the customer demand, due to service quality (Erkoyuncu et al., 2010), environmental turbulence, the inflexibility of the technologies, and human culture (Blocker & Flint, 2007) are also pose threats to PSS.
Erkoyuncu et al. (2010) proposed service uncertainties to be categorized based on services demand such as maintenance, repair or training and services sources, which include request timing, volume and demand variation; the service delivery model; and network to link all actors involve in the service delivery. Other suggested solutions to reduce the risk of demand changes include customer involvements during the design of PSS. This allows new ideas created by designers tested by customer in several stages of the development process. In terms of sustainability, customer knowledge is another potential criterion that may affect product-service performance by reducing or replacing material that can contribute to environmental safety. As a result, less number of production, cause a reduction in waste generated; increase in dematerialization product such as re-use, recycling and take back (Maxwell & van der Vorst, 2003). Similarly, production can be reduced through services delivery which enhance the efficiency of the product being sold (Morschett, 2006).

**Key activities**

During PSS development, several key activities such as define and design new product concept, production, delivery of product and services, after sales services and disposal activities to solve current problems. New solutions such as new approach or techniques, new design, or utilization of advance technology may fulfill customer needs. The key activities of problem solving are crucial in almost all businesses and require a platform or network to manage the interface between firm, suppliers, partners and customers. The first barrier of PSS implementation is during early product design, which affect the final result and if necessary changes in later phase will lead to higher costs (Isaksson et al., 2009). The challenge lies in the key characteristics of PSS, the integration of products and services (Kuo et al., 2009; Martinez et al., 2010). As it is observed many services offered mainly focusing on the supported product which the service department is not very well informed with the design of the product due to lack of information flow between the designer and the service department (Markeset & Kumar, 2005). As such redesign product-services might reveal the potential of a service previously hidden behind the product. Service design should be integrated with the initial product design phase (Baines et al., 2009) to cater service offering. Secondly, maintenance is the key factors of product-service, however, there are several factors hindering from providing maintenance when there is more task to perform, leads to difficulties to handle parts (Kuo et al., 2009). Finally, PSS is associated with sustainability through the capability to remanufacture, or reuse existing materials or less consumption of materials. However, there are barriers such as remanufacturing in terms of various recycling time, quantity and quality of the product, difficulty monitoring and handling materials and absence of reverse logistics (Kuo et al., 2009).

In order to solve the first and the second barrier, reuse knowledge is one way to improve the PSS design (Ahmed-Kristensen & Vianello, 2015; Baxter et al., 2009; Roy et al., 2014; Dongmin et al., 2012). Reuse of knowledge is sharing the best practices for common issues which includes changes, problems and enhancements (Ahmed-Kristensen & Vianello, 2015). For example, current performance of a service system can be evaluated using service knowledge during maintenance phase (Roy et al., 2014) or through communication between the service departments consistently (Ahmed-Kristensen & Vianello, 2015). The study of (Dongmin et al., 2012) reconfigured PSS system in crane industry throughout its life cycle using service knowledge to retrieve previous knowledge using various of query methods and maintain relationship between other sources of knowledge, especially during design phase. Reuse of service knowledge may support the preventive or schedule maintenance, which reduce machine failure and prolong the product life time and increase its reliability (Zhu et al., 2012). Although knowledge from service is found to have potential to enhance the service design process, a dedicated KM containing existing documentation should be available to be retrieved by engineering designers. From Leary (2001) investigation, it is found that there is a need to develop a consulting system as a one-off database and allow knowledge to be reused for different purposes to solve problems. Masood et al. (2014) suggested integration between product and service through life engineering service knowledge feedback to product design and manufacturing activities known as causal loop model. Whereas, Akasaka et al. (2012) recommended knowledge-based design support system to design service engineering in the embodiment
phase. This means designers are provided with relevant service knowledge from multiple cases (function) in the form of catalogue. Selected function from catalogue is combined with a service function model to generate new PSS solutions.

**Value proposition**

Value for customers is the value proposed to them as the exchange of a transaction. It is created through distinguished PSS development that may offer a reduction of cost, and high quality performance of products. The most challenge is to change customer culture; customer may not buy the concept of ownerless product as it is difficult to understand with regards to life cycle costs unless the advantages are overwhelmed (Kimita & Shimomura, 2014). Thus, customer value proposition can be improved through customer awareness about provider’s products or services (Osterwalder & Pigneur, 2010). For example, value proposition should comprises of knowledge on (a) product ownership policies, (b) supportability and serviceability (Tan et al., 2010), (c) remanufacturing/disposable (Gehin et al., 2008) and (d) functional guarantee (Van Ostaeyen et al., 2013). First solution, in term of product ownership policies, the risk level for product ownership encounter in product-oriented business model can be reduced by requiring customers to follow instructions for use, or otherwise the provider is released from responsibility towards the product. In user-oriented business model, the level of risk depends on the reverse behavior, which is more challenging, as the ownership of product is remained with the provider. In result-oriented model, risk is created when service is delivered to customers. Thus, all related charges and responsibilities must be spelled out to avoid misunderstanding with customers. This can be done through e-commerce environment, such as Web-enabled information systems, can effectively provide and manage product knowledge for customers and customize the purchase process (Grenci & Watts, 2007).

Second, providing sales support and after sales service are the key factors of product-service. As suggested by Tan et al. (2010) product-oriented service proposition to customers must include: design for supportability during delivery of a service such as installation; upgrade and disposable; supplies and auxiliary input; and, design for serviceability such as maintenance, repair, spare part and warranty. However, there are several factors hindering from providing after sales services when it creates more task to perform, leads to difficulties to handle parts, and uncertainties of the duration to provide the service. For after sales services value proposition, product and service offering must be jointly developed during the product design and development, however the integration coordination becomes one of the challenges to the manufacturing industry. This is due to several reasons. (i) Gap differences between function of product offering and customer value; (ii) Unconnected process between product design and service activity design due to different expertise and skills required for different processes that requires different personnel to perform task (Hara et al., 2009) and (iii) the driving factor such as uncertainties are not properly modeled (Vasantha et al., 2012). Many providers fail to explore these gaps and embed the solutions in the product (Cavaliere & Pezzotta, 2012; Panarotto & Larsson, 2012). These uncertainties can be solved from a supply network perspective, as proposed by Lockett et al. (2011): first, customer centricity which focus on customer oriented rather than product oriented and long term relationship; second, the supportability and serviceability which mainly depend on tacit know-how transferred through team members of the supply chain. Third, PSS is among the most suitable to facilitate remanufacturing activities (Guidat et al., 2014) such as take back, maintenance, and repair. Remanufacturing improves used products and converts them into a product as of similar functionality, quality, and warranty as opposed to a new one. The provider needs to gather knowledge from customers related to the performance of the products and how to improve them in terms of the design and service provided during the use-phase (Sundin & Bras, 2005) to ease planning and managing the remanufacturing processes (Sundin & Bras, 2005). Thus, PSS awareness completely enable provider to optimize the design of remanufacturing activities (Sakao & Mizuyama, 2014). In line with the previous statement, Guidat et al. (2014) proposed a guideline using the canvas business model for successful implementation of remanufacturing PSS. In addition, PSS is also associated with sustainability through the capability to remanufacture, or reuse existing materials or less consumption of materials. Fourth, value proposition include functionality guarantee (Van Ostaeyen et al., 2013) by offering additional services through after-
Unlocking the Barrier of Implementing Product-Service System: Knowledge-Based Perspective

As Durugbo & Riedel (2013) suggested, functionality should include a) solutions; b) compatibility of designed parts and subsystems; c) flexibility of product families; d) value-in-use for customers; e) usability of customer solution; and f) manufacturability. These can be done through innovative knowledge flow throughout product-service life cycle: from customer to provider (service unit), internal knowledge flow from service to design unit, and knowledge flow (the requirement of resources) to suppliers. As constraints lack of knowledge or incomplete knowledge face by designers and service engineers will affect the product performance (Sandberg, 2005).

Customer relationship
PSS has great influences on the customer, by offering product and service integration hence provide adequate information to customer and exploring customer knowledge, during the use-phase through customer participation. PSS alter the relationship between customer and provider to a continuous relationship by providing maintenance throughout the PSS life cycle, either to corporate customer, a business to business context or to end-user customer (Lockett et al., 2011). Wind & Rangaswamy (2001) suggested co-creation capabilities between provider and customer through dialogue, accessibility to customer perception, the risk-benefit created and transparency between provider and customer, which affect the business operational capabilities. Exploring customer feedbacks (service knowledge) from the used-phase of PSS development may enhance future value proposed to customers. However, many firms fail to create customer interaction thus affect the customer attitude towards the provider and jeopardize customer relationship in the long run (Nambisan & Baron, 2007). Current industrial practice clearly shows communication with the design functions mostly via face-to-face communications, communities of practice, emails, and social media. These forms of communication although are very good medium of communication and knowledge transfer but they are not well-structured, hence knowledge is difficult to search or retrieve (Masood et al., 2014; Tan et al., 2010). It is provider challenge to use effective approach to capture, develop representation of service knowledge and reuse service knowledge for PSS (Masood et al., 2014). Therefore, several strategies related to IT based are suggested to assist this problem by previous researchers. For example, Akasaka et al. (2012) developed a knowledge-based system to support PSS design and actors involved. IT system such as CRM which capture, store and examine customer knowledge is a strategy to manage customer knowledge (Khodakarami & Chan, 2014; Liu et al., 2013; Tinoco, 2007). Whereas, Kuo (2012) highlighted the information obtained from customers are uncertain, which lead to difficulties in decision making, hence firm require personalized software strategies to suit firm’s need. This personalized software can be developed using Quality Functional Deployment (QFD) to produce a customized product through customer knowledge attributes gathered from surveys, interviews, complaints, focus groups and expert.

Laws and regulation
Since PSS dealing with end-of-life of the product for sustainability, support from government is crucial, however it does not seem that way (Barquet et al., 2013; Vezzoli et al., 2015). If PSS is implemented, government can actively promote social rules and moral regulations, such as recycling or environmental related issues (Mcaloone & Andreasen, 2004). However, such policy to facilitate innovation such as PSS is lacking (Vezzoli et al., 2015). Although, PSS contribute to reduction of materials usage and lead to reduce in environmental pressure, government regulation regarding PSS is still lacking (Baines et al., 2007) and difficult to be implemented (Ceschin, 2013). In fact, in certain countries government policy enforced is opposed with PSS concept. For example, in Brazil, the support by the government to acquire new machinery has given negative response from companies towards the PSS concept such as leasing (Barquet et al., 2013). Due to the incentive of low interest rate on loan for buying new machinery, the provider favor to purchase new machinery than purchasing the services or leasing. Thus, the concept of providing services instead of tangible product is less favorable in Brazilian companies (Barquet et al., 2013).
Ayuso et al. (2011) argued engagement with external stakeholders such as government would positively affect sustainable innovation (such as PSS). Government should support PSS implementers who take the risk of transforming new knowledge into innovative products, as these providers who normally success as compared to non-innovative one (Block et al., 2012). When supported by government, PSS will include general concept, social rules in terms of behaviors and life styles, improve public morality towards environment, acceptance of ownerless product and sustainability concept (Kuo et al., 2009). For example, government intervention in terms of environmental laws to reduce costs for disposal of waste and costs for handling the waste could facilitate PSS providers. However, to successfully implement PSS, during the remanufacturing or disposal phase, the involvement of publics is also needed to improve environmental conditions (Bai et al., 2010). This means, provider should share information with local authorities or society regarding the impact of their innovative products towards market flexibility, society and surrounding environment.

**Cost structure**

Cost structure can be set up once the key resources, key activities and key partnership are defined either based on cost-driven or value-driven (Osterwalder & Pigneur, 2010). Cost-driven emphasizes low cost structure, whereas value-driven focus on high value proposition than cost (Osterwalder & Pigneur, 2010). However, cost structure for PSS differs from the traditional product due to several reasons. First, profit earn will be shared with all partners involve in the value chain; Second, the profit gain is not realized instantly after the product-service is delivered to customer, this cause firm to have good financial status to support PSS, and provider bear the after sales costs since the provider retain the ownership of the machines (Barquet et al., 2013). As such, the main issues of PSS implementation is related to cost estimation for providing products and services to customers throughout the product life-time without customer owning it (Barquet et al., 2013). This new pricing policies involve with setting up the initial investment cost depending on the service period. Nonetheless, a provider may face problems calculating the uncertainties of service period cost of the PSS and may estimate them wrongly (Lockett et al., 2011). Thus, the quality of information flow between customers and providers determine the cost predictions (Adeogun et al., 2010). This is due to lack of provider capacity to evaluate the actual cost, paybacks and risks of PSS which lead to underestimate the actual earnings (Lockett et al., 2011; Vezzoli et al., 2015). It is also difficult for a customer to appreciate the benefit of ownerless based solutions (Ceschin, 2013). In other words, when function is sold rather than ownership, it seems less attractive in terms of economic for both parties, furthermore PSS cost is also a contributing factor for provider not to implement PSS and hinder customer from buying ownerless product. Hence, proper evaluation of PSS offering is required by including product and uncertainties of service offering. Gathering information from external sources such as customers, partners, suppliers and competitors; and internal organization information related to key resources and key activities. As such, government intervention is crucial to implement policy of captivating the external cost in the product-service to inspire sustainable innovation (Vezzoli et al., 2015).

Figure 1 omitted but would have been here

**SUMMARY AND CONCLUSION**

The barrier of PSS implementation is analyzed using a generic business model building block: key resources (1), partnership (2), customer value proposition and customer relationship (3), key activities (4), cost structure (5) and governmental rules (6). Knowledge resources (1) such as patents and copyright, trademarks, customer knowledge owned by the provider are valuable assets because of their capabilities, competitiveness and prerequisite for innovation. Employee training enriches knowledge transfer among employees without any limitation of boundaries. Through IT advancement, knowledge are linked and integrated for redesign existing process. However, these resources may not fully utilize if provider lacks of new strategy, thus inhibits generating new knowledge. PSS requires communication among all value
networks (2); managing the information flow to avoid irrelevant knowledge and loss capabilities to supplier. Important criteria related to collaboration such as types of partners, relationship and activities related to sharing and coordinating knowledge can be considered as a strategy to implement PSS. An alignment of incentives among provider, supplier and partners can contribute to achieve successful and fair partnership.

Customer value proposition (3) may comprise of knowledge on product ownership policies, supportability and serviceability, remanufacturing and functional guarantee. However, imbalance between the offering and the customer demand, diminish value proposed to customer. Hence, customer involvements during the design of PSS reduce risk of demand changes, service uncertainties, reduce or replace material usage, cause a reduction in waste. Another challenge in PSS is to integrate products and services knowledge into a final offering (4). This is due to lack of information flow between the designer and the service department. One way to improve the PSS design is by adopting reuse knowledge strategy, the best practices for common issues, which includes changes, problems and enhancements. A dedicated KM containing existing documentation should be available to be retrieved by engineering designers.

Another challenge of PSS is determining uncertainty of the service period cost (5) which due to inadequate of provider capacity to evaluate the actual cost, paybacks and risks of PSS which lead to underestimate the actual earnings. Nevertheless, government intervention is crucial to implement policy of captivating the external cost in the PSS to inspire sustainable innovation. In addition, government regulation (6) regarding PSS is still lacking; PSS is difficult to implement and in certain countries, government policy is contradicted to PSS concept. Therefore, in future sharing provider new innovation project with governments and society, may perhaps attract the government attention to enforce environmental laws to reduce related costs for disposal of waste, and as such many firms willing to transform from traditional product-based to PSS.

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Unlocking the Barrier of Implementing
Product-Service System: Knowledge-Based Perspective


Unlocking the Barrier of Implementing Product-Service System: Knowledge-Based Perspective


Unlocking the Barrier of Implementing Product-Service System: Knowledge-Based Perspective


All of the figures cited in this paper are omitted due to space considerations. Interested parties are invited to contact the author for a complete copy of the paper.
Acquisition of Experts’ Opinions to Explore the Drivers of Business Success in the Construction Industry

Keywords: Construction Business Success, Entrepreneurship, DEMATEL Technique, Causal Relationship

INTRODUCTION

Achieving success is a highly critical issue for any company to survive in a today’s competitive business environment (Gadekar and Pimplikar, 2013; Gudienė et al., 2013). However, in the context of the construction industry, the diversity and complexity of the industry itself has made more difficult to achieve or maintain a scientific strategy to measure current success (Abraham, 2004). Traditionally, the fundamental elements of construction business are dependent on the ability to plan and manage the technical components of the executed project such as the tasks and resources. In this focus, construction enterprises have emphasized on the ability to develop the optimum plan, allocate resources efficiently, and utilize control functions to ensure that the project stays on schedule, within budget, and scope. The ability to deliver the project based on these fundamental elements is critical to business success since the outcomes of the capital projects may have strategic implications on the success and profitability of the construction business (Farinde and Sillars, 2012; Jari and Bhangale, 2013).

For that reasons, the perception of business success in the construction industry is justified by the achievement of these fundamental elements as demonstrated by many previous studies. In this sense, a construction enterprise may consider as a success if the executed project meets its completion date or budget or if the end results conform to the original scope. An emphasis on this evaluation concept has resulted in an intense focus on project management techniques to improve the efficiency and success of individual projects. However, despite advances in project management processes, tools, and systems, project success has not significantly improved (Mir and Pinnington, 2014). The worst case was that business failure in the construction industry has tremendously increased (Kangari, 1988; Raiz, 2014). Although it is difficult to separate project success from company success since individual project often represents a significant proportion of an organization’s total revenue, however, these criteria only address the short-term goals of a construction enterprise (Farinde and Sillars, 2012). These traditional criteria are seen insufficient to judge the overall success of construction business. They do not provide the necessary view of success from the perspective of the organization and its stakeholders. In light of the above, Chinowsky et al. (2010) viewed that the use of these traditional approach to judging the success of construction business has reached the point of diminishing results. Indeed, the high number of project failures implies that the existence underlying success factors by previous research have not been identified effectively (Garbharran et al., 2012).

It comes to the conclusion that too much research effort done to the grandiose theory on a project related success factors, but not enough research conducted on corporate issues to determine the long-term success of construction business. Yet, those studies had evaluated success factors at the project level that is the short-term approach. However, the results are still highly unsatisfactory. Thus, the dynamics leading to construction business success remain largely undisclosed.
It is clear that the successful of construction business is beyond the notation of traditional fundamental elements where schedule, budget, and scope are the vital elements of success. Therefore, a successful landscape of construction business could not be built without the efficiency of the organization as a whole. It is necessary to adopt the best business practices that are conducive and combine with the effectively used the available resources (Aniekwu and Igboanugo, 2012). The new approach to business behaviour, which successfully adopted in most business sectors outside construction sector, is entrepreneurship. Within this approach, it is argued that construction enterprise must adopt an entrepreneurial mindset as a vital requirement of successful business. The needs for construction enterprise to adopt an entrepreneurship when formulating their strategies have become recognized. Many researchers have highlighted the important of entrepreneurial attitudes and behaviours for firms of all sizes to prosper and grow (Dess and Lumpkin, 2005; Hitt, 2005; Kraus, 2013). Indeed, many businesses outside construction industry attempting to foster entrepreneurship to explore and exploit business opportunities (Kraus, 2013; Vecchiarini and Mussolino, 2013).

The nature of construction business represents the activities of corporate entrepreneurship must take place within the company. An empirical survey of Zain and Hassan (2007), for example, revealed that the influence of corporate entrepreneurship on company growth in construction enterprises was highly significant and that corporate entrepreneurship existed at more than one level within a business organization. Corporate entrepreneurship is a concept that focused on organizations, organizational culture, and processes rather than individuals (Cornwall and Perlman, 1990). It has been considered as a holistic view of an organization that infuses creative strategic processes throughout the organization (Morris et al. 1994). The strategy literature identifies three types of corporate entrepreneurship (Stopford and Baden-Fuller, 1994). It includes the creation of new businesses within an existing organization, the transformation or renewal of existing organizations, and the changes of the ‘rules of competition’ for its industry. Previous studies have also provided empirical evidence that justifies in supporting this view.

Moreover, it is evidence that construction industry and entrepreneurship are significance to the economic growth of every nation. It has come to the conclusions that both of them are regarded as fuel to economic growth, creating employment, and prosperity (Hillebrandt, 2000; Tijhuis and Fellows, 2011; Kuratko, 2009; Islam et al., 2011; Kraus, 2013; Filser and Eggers, 2014). For that reason, construction industry and entrepreneurship constitute a vital part of any nation’s economic growth. In addition, entrepreneurship is seen as an important driving factor of business success. However, very few studies, if any, have explored the entrepreneurship theory in searching the predictors of success in the construction business. In most regards, the construction engineering management, and entrepreneurship literature have evolved separately, with little cross-fertilization.

CONSTRUCTION ENTREPRENEURIAL BUSINESS SUCCESS

In entrepreneurship literature, amongst the vital elements of business success that have been studied by many researchers are: (i) entrepreneurial orientation (see, for examples: Lumpkin and Dess, 1996; Wiklund, 1999; Zain and Hassan, 2007; Rauch et al., 2009; Kraus, 2013; Putniņš and Sauka, 2013), (ii) entrepreneurial organization (see for examples: Ogbonna and Harris, 2000; Ooshak Sarai et al., 2011; Shahu et al., 2012; Harinarian et al., 2013; Mokua and Ngugi, 2013; Turró et al., 2014), (iii) entrepreneurial competencies (see, for examples: Bruno et al., 1987; Man et al., 2002; Shigang, 2011; Sánchez, 2012; Mitchelmore and Rowley, 2013; Othman and Jaafar, 2013), and (iv) entrepreneurial environment (see, for examples: Taormina and Lao, 2006; Fereidouni et al., 2010; Voiculet et al., 2010; Bakar et al., 2012; Mao et al., 2013; Jabeen and Mahmood, 2014). Drawing upon the existence theories on the link between entrepreneurship and performance, we developed our theory by identifying four knowledge areas that could contribute to the construction business success and survival. The four
knowledge areas are entrepreneurial orientation, entrepreneurial organization, entrepreneurial competencies, and entrepreneurial environment. To clearly differentiate between corporate entrepreneurship within construction business compared to non-construction businesses, the terms constructionpreneurial orientation, constructionpreneurial organization, constructionpreneurial competencies, and constructionpreneurial environment are used. It respectively substitutes the terms entrepreneurial orientation, entrepreneurial organization, entrepreneurial competencies, and entrepreneurial environment. The important of these knowledge areas to the construction business can be viewed from the following perspectives.

First, the nature of construction businesses with compounded with highly competition and uncertainties demanded that construction enterprise to focus on constructionpreneurial orientation. In this focus, construction enterprise will be guided to the operational basis of entrepreneurial decisions and actions. Furthermore, it refers to the entrepreneurial strategy-making processes that construction enterprise must have to achieve a competitive advantage (Vecchiarini and Mussolino, 2013). Second, success cannot be gained without appropriate constructionpreneurial organization. Organizational provides the fundamental for strategic direction to achieve a common goal or set of goals (Robbins and Mathew, 2009). In this sense, construction enterprise must adapt appropriate organizational structure and culture because the effective of any strategy can only achieve if it fit with these elements. The assumption is that, if the structure and culture are appropriate then all processes and relationships within the organization will occur effectively. Third, constructionpreneurial competencies are another aspect that construction enterprise must consider. It is about the capability of construction organization to acquiring, using, and developing successful resources for their business purposes (Capaldo et al., 2014). For example, project management competencies are very important in the execution phase of project’s life-cycle. Finally, the constructionpreneurial environment is another aspect that needs to be considered. In this regard, construction enterprise must aggressively scan their external environment to detect, and exploit the opportunity in the marketplace (Kao et al., 2006; Kuratko, 2009). Environmental turbulence is seen to be strongly influence business activities, include processes, systems, and strategies. Although external environmental beyond the influence and control of the organization, they actually provide the opportunities (Nikolina, 2008). Thus, construction enterprise must suit their strategies accordingly to the external environment.

Given the importance of these elements to construction business performance, we argued that a construction enterprise must adopt entrepreneurial mindset if they desire to success and survival in their business. In this sense, they should focus on constructionpreneurial orientation, enabled by the appropriate constructionpreneurial organization, driven by the constructionpreneurial competencies, and foundation by the capability to absorb the constructionpreneurial environment. Furthermore, construction business involves high-risk undertakings, and uncertainties business environment, therefore, in order for construction enterprise to be succeed, short-term project element (project management) and long-term managerial elements (entrepreneurial orientation, entrepreneurial organizational, entrepreneurial competencies, and entrepreneurial environmental) must be balance and managed effectively to stay competitively and profitable in the market. It can be said that the business success of construction enterprise is the integration of the said theories. More importantly, all of these factors have been explored in many previous studies and may have some validity in their effect on organizational performance. Therefore, it is assumed to have some validity.

**RESEARCH METHODOLOGY**

The process of assessing the indicators for successful construction business from the perspectives of entrepreneurship theory is difficult, and requiring advanced knowledge and experience. Furthermore, the issues highlighted in this research study were a new aspect in the construction engineering management (CEM) literature, thus, may result in more complicated processes. Moreover, the success indicators must
be considered as a multidimensional construct. In addition, the success indicators may result from the interrelationship of each factor. A proper and effective evaluation requires the practitioners to consider, assume, and analyze many factors. This process is considered as a multi-criteria decision making problems with many quantitative and qualitative attributes. The Decision Making Trial and Evaluation Laboratory (DEMATEL) technique, therefore, is viewed as an appropriate strategy of inquiries for the current study. It involves in the developing new ideas of success indicators for the construction business, that is, from the perspective of entrepreneurship theory. It provides a stronger methodology for a rigorous query of experts and stakeholders, especially in CEM fields as proven by many previous studies.

**DEMATEL TECHNIQUE OVERVIEW**

The Decision Making Trial and Evaluation Laboratory (DEMATEL) technique was developed by A. Duval, E. Fontela, and A. Gabus in 1974 at the Battelle Memorial Institute in the Geneva Research Center. It was initially created for the world problem structure or ‘world problematique’ by analyzing scientific, political, and economic problems that influenced by a complex system of different factors and involve many stakeholders (Fontela and Gabus, 1976). The main purpose of the DEMATEL method is to analyse different factors affecting a system. It uses expert knowledge to better understanding the correlation between the factors, in terms of relationships and influences between the different factors. It enables decision makers to convert the complex criteria of a system (or subsystem) into cause and effect groups to simplify the process of decision making. It also enables them to recognize the direct and indirect influences of complex factors. Furthermore, this technique has widely accepted and considered as one of the best tools to solve the cause and effect relationship among the evaluation criteria (Chiu et al., 2006; Tzeng et al., 2007; Wu and Lee, 2007; Lin and Tzeng, 2009). Based on the work of Wu and Lee (2007), Shieh et al. (2010), Liu et al. (2012), Wang et al. (2012), and Tsai et al. (2013), the following Figure 1 diagrammed the procedure of the DEMATEL technique.

Figure 1 omitted but would have been here

**Step 1: Generating the Initial Direct-relation Matrix Z**

A group of experts are asked to indicate the level to which they believe that any of the factors influence each other. In the current study, the integer score of 0 (no influence), 1 (weak direct influence), 2 (moderate direct influence), and 3 (strong direct influence), were used for measuring the relationship between different factors. Let consider a group of \(m\) experts and \(n\) factors. Each expert is asked to view the degree of direct influence between two factors based on the pair-wise comparison. The degree to which the expert perceived factor \(i\) affects on factor \(j\) is denoted as \(x_{ij}\). For each expert, an \(n \times n\) non-negative matrix is constructed as \(X^k = [x^k_{ij}]\), where \(k\) is the expert number of participating in the evaluation process with \(1 \leq k \leq m\). The mathematical notation can be formulated as below:

\[
X = \begin{bmatrix}
0 & x_{12} & \cdots & x_{1n} \\
x_{21} & 0 & \cdots & x_{2n} \\
\vdots & \vdots & \ddots & \vdots \\
x_{n1} & x_{n2} & \cdots & 0
\end{bmatrix}
\]

Thus, we have \(X^1, X^2, X^3, \ldots, X^m\) matrices from \(m\) experts, and each element of \(X^k\) is an integer in the range of the influence scale, representing the degree of factor \(i\) influencing factor \(j\), and denoted by \(x_{ij}\). The main diagonal elements of each answer matrix \(x^k\) are set to zero because DEMATEL does not evaluate the self-influence of the factors. To aggregate all judgements from \(m\) experts, an average matrix \(Z = [z_{ij}]\) is constructed by calculating the average influence quantification as below:
Acquisition of Experts’ Opinions to Explore the Drivers of Business Success in the Construction Industry

\[ z_{ij} = \frac{1}{m} \sum_{i=1}^{m} x_{ij} \]  

(1)

This matrix \( Z \) is also called the initial direct relation matrix. It shows the initial direct effects that a factor exerts on and receives from other factors. This direct relation matrix can also depicted in an influence map.

**Step 2: Normalizing the Initial Direct-relation Matrix \( D \)**

The normalized direct relation matrix \( D \) from the average matrix \( Z \) is calculated by dividing each element by the largest row sum of the average matrix, as in the original DEMATEL method. Some recent applications of the method also used the largest row or column sum as the standard for normalization. Factor \( \max_{1 \leq i \leq n} \sum_{j=1}^{n} z_{ij} \) represents the total direct influence on the influence scale of the factor with the most direct influence on the other factors. This normalization step is for the preparation for the following steps of DEMATEL where indirect influences are calculated and provides an aligned scale for all factors for these calculations. The normalized initial direct-relation matrix \( D = [d_{ij}] \), where value of each element in matrix \( D \) is ranged between [0,1]. The calculation is shown below:

\[ D = \frac{Z}{s} \]  

(2)

\[ s = \max_{1 \leq i \leq n} \sum_{j=1}^{n} z_{ij} \]  

where

(3)

**Step 3: Obtaining the Total-relation Matrix \( T \)**

The direct/indirect or total-relation matrix is calculated. It assumed that the indirect effects of the influence factors (factor \( a \) influences factor \( b \) and factor \( b \) influences factor \( c \), thus factor \( a \) also indirectly influences factor \( c \)) is lower than the direct effects. The increasing indirections the indirect influence matrix converges to the null matrix as shown below:

\[ \lim_{k \to \infty} D^k = 0 \]

Where 0 is the null matrix, and with \( I \) is an \( n \times n \) identity matrix, the following hold true:

\[ \lim_{k \to \infty} \left( I + D + D^2 + \ldots + D^k \right) = (I - D)^{-1} \]

The total relation matrix \( T \) is, therefore, defined as:

\[ T = D(I - D)^{-1} \]  

(4)

**Step 4: Computing the sums of rows and columns of matrix \( T \)**

In the total-influence matrix \( T \), the sum of rows and the sum of columns are represented by vector \( R \) and \( D \), respectively. Let \( R \) and \( D \) be \( n \times 1 \) and \( 1 \times n \) vectors representing the sum of rows and the sum of columns in the total-relation matrix \( T \). Now, if \( D_i \) is the sum of the \( i \)th row of the matrix \( T \), then:
Acquisition of Experts’ Opinions to Explore the Drivers of Business Success in the Construction Industry

\[
(D_1 \cdots D_n) \quad \text{with} \quad D_j = \sum_{i=1}^{n} t_{ij} \quad \text{where} \quad (j = 1, 2, \ldots, n)
\]  

(5)

It summarizes both the direct and indirect effects that factor i exerts on the other factors. Similarly, if \( R_j \) is the sum of the jth column in the matrix \( T \), then:

\[
\begin{bmatrix}
D_1 \\
\vdots \\
D_n
\end{bmatrix}
\quad \text{with} \quad D_i = \sum_{j=1}^{n} t_{ij} \quad \text{where} \quad (i = 1, 2, \ldots, n)
\]  

(6)

It summarizes the direct and indirect effects that factor j receive from the other factors. When \( i = j \), the sum \((D_i + R_i)\) shows the total effects given and received by factor \( i \), thus:

\[
(D_i + R_i) = \sum_{j=1}^{n} t_{ij} + \sum_{k=1}^{n} t_{ik}
\]  

(7)

It represents the degree of importance of factor \( i \) in the entire system. The difference indicates the net effects that factor \( i \) contributes to the system and is shown below:

\[
(D_i - R_i) = \sum_{j=1}^{n} t_{ij} - \sum_{k=1}^{n} t_{ik}
\]  

(8)

Specifically, if \((D_i - R_i)\) is positive, the influence factor \( i \) is a net cause, while if \((D_i - R_i)\) is negative, factor \( i \) is a net receiver.

**Step 5: Setting the Threshold Value, \( \alpha \)**

The threshold value, \( \alpha \) was computed by the average of the elements in matrix \( T \). This calculation aimed to eliminate some minor effects elements in matrix \( T \) and is shown below:

\[
\alpha = \frac{\sum_{i=1}^{n} \sum_{j=1}^{n} t_{ij}}{N} \quad \text{where} \quad N \text{ is the total number of elements in matrix } T
\]  

(9)

**Building the Cause and Effect Relationship Diagram**

The cause and effect diagram is constructed by mapping all coordinate sets of \((D_i + R_i, D_i - R_i)\) to visualize the complex interrelationship. It provides information to judge which the most important factors are and how influence affected factors (Shieh et al., 2010). The factors that \( t_{ij} \) is greater than \( \alpha \) are selected and shown in cause and effect diagram (Yang et al., 2008).

**DEMATEL Questionnaire**

The DEMATEL questionnaire consisted of eighteen success indicators, grouped in four different perspectives of entrepreneurship theory. These indicators had reached the degree of consensus in the previous Delphi study. The following Table 1 indicated the variables used and numbered in the DEMATEL questionnaire.
Table 1 omitted but would have been here

The questionnaires were sent electronically to thirty six (36) respondents, based on purposive sampling on the basis of ‘closeness’ to the topic under study (Donohoe and Needham, 2009). Respondents were asked to indicate the level to which they believe that any of the indicators influence each other using the scale represented in Table 2. Based on the influence scale, a higher score represents stronger direct influence. A brief description of each indicator was also provided in the format of the table at the end of the questionnaires.

Table 2 omitted but would have been here

**Experts’ Panel Composition**
A heterogeneous group of four independent panels of eight to fifteen members each were formed. The panel size is congruent with established methodological norms, and to allow for potential drop-out (Briedenhann and Butts, 2006). The four independent panels were: (i) Contractors/Developers, (ii) Professional consultants (architects, engineers, and quantity surveyors), (iii) Government technical officers, and (iv) Academicians.

**Panel Qualification**
The fundamental objective of this study was to identify the interrelationships among the success indicators. It focuses on the perspective of entrepreneurship theory, all of which gleaned from the experiences of construction industry practitioners. According to Meskell *et al.* (2014), the panelists are experts, assumed to have some special insights that allow them to predict the future better than lay people. In addition, the findings of Vick (2002) and Simonton (2014) on the development of engineering expertise, indicated that engineering experts reach the height of their expertise between career ages of 10 and 33. It corresponds to chronological ages of thirty five and fifty three. Therefore, the experts must have a minimum of 10 years experienced in the construction industry.

**Pilot Study**
To test the quality of the questionnaire, and to overcome the potential shortcomings of the survey instrument, a pilot study of eight (8) experts who involved in construction industry was conducted in advance of recruiting to the full DEMATEL technique. All the comments and feedback received from the pilot participants were considered, and improvements were made for the actual study. It is important to note that all the participants in the pilot study did not involve in the actual survey.

**Instrument Reliability**
Reliability was evaluated using Cronbach’s alpha coefficient that measures the internal consistency of the indicators in the index. The variables were tested using the reliability analysis function of the SPSS 20.0 from the data of the pilot study. The acceptable value of alpha coefficient should be at least 0.6 for the data to be reliable (Nunnaly and Bernstein, 1994). Upon analysis, the Cronbach’s alpha for the instrument was found as 0.768 or 76.83% that represented higher acceptable reliability. The results of item-total statistics revealed that only a small change in the Cronbach’s alpha if any of the variables was deleted. Due to these small changes in Cronbach’s alpha, we decided to continue using the identified variables without any of the items asked being deleted.

**RESULTS**

Of thirty six (36) respondents, twenty (20) have been responded representing 55.6% response rate. The experts who did not respond provided no reasons for doing so. According to Teng (2002) and Skulmosti *et al.* (2007), within 5 to 15 experts are sufficient for a group decision-making to be appropriate. Hence,
the data generated from this study were considered of sound quality that would enable to draw a valid and
generalized conclusion. Data analysis was aided with the use of Microsoft Excel 2007. All judgements
from the twenty (20) experts were aggregated. An initial direct-relation matrix \( Z \) was constructed by
calculating the arithmetic mean of the same elements in the collected matrices of the respondents
according to Equation (1). It showed the initial direct effects that an indicator exerts on and receives from
other indicators as shown in Table 3.

Table 3 omitted but would have been here

The initial direct-relation matrix \( Z \) was then normalized to create the normalized initial direct-relation
matrix \( X \), and was calculated according to Equation (2) and used for the computation according to
Equation (3). The normalization indicator \( s \) was determined as the largest value of row sum or column
sum. As shown in Table 3, the normalization indicator \( s \) was the largest column sum, stems from
column 7 (Indicator C1), and has a value of 43.35. The normalization was done by dividing each element
of the initial direct-relation matrix \( Z \) with 43.35. The resultant matrix \( X \) is shown in Table 4.

Table 4 omitted but would have been here

To examine the direct effects of the indicators between each other, the total relation matrix \( T \) was created
based on the normalized initial direct-relation matrix \( D \) and was calculated according to Equation (4).
First, the identity matrix \( I \) was constructed of which the main diagonal elements are equal to 1, and the
remaining elements are 0. Then, the \((I - X)\) matrix was constructed by subtracting each element of the
matrix \( X \) from the corresponding element of the matrix \( I \) before constructing the inverse matrix \((I - X)^{-1}\).
Further, the resulting matrix \( T \) was constructed by multiplying the normalized initial direct-relation matrix
\( X \) with the inverse matrix \((I - X)^{-1}\) as shown in Table 5. Finally, the sum of rows and the sum of columns
in the total-relation matrix \( T \) was calculated according to Equation (5) and Equation (6). The sum of rows
and the sum of columns were presented by \( D \) and \( R \), respectively.

Table 5 omitted but would have been here

The total effects given and received by each indicator were also calculated according to Equation (7) and
Equation (8). The determinants of the sum of row \( (D) \) and the sum of column \( (R) \) were added together to
obtain the centrality \((D + R)\). The higher the centrality \((D + R)\), the higher was the importance of the
indicator. The determinants of the sum of row were subtracted from the sum of column to obtain the
degree of cause and effect \((D - R)\). The higher the positive degree of cause and effect \((D - R)\), the easier
item directly influencing the other indicators, whereas the higher the negative degree of cause and effect,
the easier was the indicator to be influenced by other indicators. The following Table 6 summarized the
total effects given and received by each indicator.

Table 6 omitted but would have been here

The threshold value \((\alpha)\) was computed by the average of the elements in the total relation matrix \( T \) in
order to eliminate some minor effects elements. It was calculated according to Equation (9) and revealed
that the threshold value \((\alpha)\) was 0.438. The boldfaced elements in the total relation matrix \( T \), shown in
Table 5, represent values greater than the threshold value \((\alpha)\). The cause and effect diagram was
constructed by mapping all coordinate sets of \((D + R, D - R)\) to visualize the complex interrelationship. It
provides information to judge which the most important indicators are and how influence affected
indicators. Only the interrelationships with the influence levels higher than that of the threshold value in
the total relation matrix \( T \) were selected and shown in cause and effect diagram as illustrated in the
following Figure 2.
In addition, an effort has been made to determine the significant indicators under each perspective by using the same procedures as described above. Table 7 summarized the total effects given and received by the indicators from each perspective.

Table 7 omitted but would have been here

RESULTS

In referring to the indicators in column D of Table 6, ‘Business and Management Competencies’ (C3, $D = 8.490$), ‘Marketing Competencies’ (C1, $D = 8.489$), ‘Financial Resources’ (D1, $D = 8.464$), ‘Technical Competencies’ (C2, $D = 8.409$), ‘Technological Competencies’ (C5, $D = 8.154$), and ‘Innovativeness’ (A2, $D = 8.152$) were respectively the most effective indicators and consequently have the highest level of influences on the other indicators. Similarly, for indicators in column R, ‘Marketing Competencies’ (C1, $R = 8.868$), ‘Financial Resources’ (D1, $R = 8.491$), ‘Business and Management Competencies’ (C3, $R = 8.391$), ‘Proactiveness’ (A1, $R = 8.350$), ‘Technical Competencies’ (C2, $R = 8.329$), ‘Innovativeness’ (A2, $R = 8.236$), ‘Founder’s Personal Competencies’ (C4, $R = 8.096$), and ‘Competitive Aggressiveness’ (A4, $R = 8.089$) were respectively receive the highest degree of effects from other indicators.

The importance of the evaluation indicator was determined by $(D + R)$ values. Based on Table 6, it obviously shown that ‘Marketing Competencies’ (C1) was the most important indicator with the largest $(D + R)$ value of 17.357. Whereas ‘National Political Stability’ (D2) was the least important indicator with the smallest $(D + R)$ value of 13.178.

Based on $(D - R)$ values, the indicators were classified into two groups such as cause group and effect group. If the value of $(D - R)$ was positive or net cause, such indicators were classified in the cause group, and directly affected the others. In addition, the indicators which have highest value of $(D - R)$ had the greatest direct impact on the others. In contradictory, if the value of $(D - R)$ was negative or net receive, such indicators were classified in the effect group, and largely influenced by the others.

From column $(D - R)$ in Table 6, it was found that ‘Government Programs’ (D7), ‘National Economic Growth’ (D3), ‘Commercial and Professional Infrastructure’ (D6), ‘National Political Stability’ (D2), ‘Technological Competencies’ (C5), ‘Business and Management Competencies’ (C3), and ‘Technical Competencies’ (C2) which have positive $(D - R)$ values of 0.702, 0.418, 0.264, 0.146, 0.101, 0.099, and 0.080, respectively, were classified in the cause group. It also indicated that ‘Government Programs’ (D7) which have the highest $(D - R)$ value of 0.702 was the most critical impact indicator on the others.

The other indicators, namely ‘Financial Resources’ (D1), ‘Government Policies’ (D4), ‘Organizational Culture’ (B1), ‘Innovativeness’ (A2), ‘Entrepreneurial Education and Training’ (D5), ‘Founder’s Personal Competencies’ (C4), ‘Risk-taking’ (A3), ‘Competitive Aggressiveness’ (A4), ‘Organizational Structure’ (B2), ‘Marketing Competencies’ (C1), and ‘Proactiveness’ (A1), which have negative $(D - R)$ values of -0.027, -0.031, -0.081, -0.083, -0.091, -0.103, -0.161, -0.191, -0.249, -0.378, -0.414, respectively, were classified in the effect group.

From the cause and effect diagram as illustrated in Figure 2, it is clearly seen that 174 out of 324 causal interrelationships were established among eighteen indicators undertaken in the current study have values greater than the threshold value, $\alpha$ of 0.438. The most critical indicator was ‘National Economic Growth’ (D3) because it directly influenced on seven other indicators, namely ‘Proactiveness’ (A1), ‘Innovativeness’ (A2), ‘Risk-taking’ (A3), ‘Competitive Aggressiveness’ (A4), ‘Technical Competencies’ (C2), ‘Founder’s Personal Competencies’ (C4), and ‘Entrepreneurial Education and Training’ (D5). It
also has a mutual interaction on ‘Marketing Competencies’ (C1), ‘Business and Management Competencies’ (C3), ‘Technological Competencies’ (C5), and ‘Financial Resources’ (D1).

The second most critical indicators were ‘Commercial and Professional Infrastructure’ (D6), and ‘Technological Competencies’ (C5) as both of them have directly influenced four other indicators. ‘Commercial and Professional Infrastructure’ (D6) have directly influenced ‘Proactiveness’ (A1), ‘Innovativeness’ (A2), ‘Competitive Aggressiveness’ (A4), and ‘Entrepreneurial Education and Training’ (D5). Whereas, ‘Technological Competencies’ (C5) have directly influenced ‘Organizational Culture’ (B1), ‘Organizational Structure’ (B2), ‘Founder’s Personal Competencies’ (C4), and ‘Government Policies’ (D4). ‘Entrepreneurial Education and Training’ (D5) has a mutual interaction on ‘Marketing Competencies’ (C1), ‘Technical Competencies’ (C2), ‘Business and Management Competencies’ (C3), ‘Founder’s Personal Competencies’ (C4), and ‘Technological Competencies’ (C5), and ‘Financial Resources’ (D1). On the other hand, ‘Technological Competencies’ (C5) has a mutual interaction on ‘Proactiveness’ (A1), ‘Organizational Culture’ (B1), ‘Organizational Structure’ (B2), ‘Founder’s Personal Competencies’ (C4), and ‘Government Policies’ (D4). ‘Entrepreneurial Education and Training’ (D5) has a mutual interaction on ‘Marketing Competencies’ (C1), ‘Technical Competencies’ (C2), ‘Business and Management Competencies’ (C3), and ‘Financial Resources’ (D1). ‘National Economic Growth’ (D3), ‘Entrepreneurial Education and Training’ (D5), and ‘Commercial and Professional Infrastructure’ (D6).

The third most critical indicator was ‘Government Programs’ (D7) as it directly influenced three other indicators, namely ‘Marketing Competencies’ (C1), ‘Business and Management Competencies’ (C3), and ‘Financial Resources’ (D1). It is surprising that ‘National Political Stability’ (D2) stands on its own, neither affecting nor effected by other indicators.

In context of the four leading perspectives of entrepreneurship theory as indicated in Table 7, under the constructionpreneurial orientation perspective, it was found that ‘Proactiveness’ (A1) and ‘Risk-taking’ (A3) were the two most important indicators based on first and second highest \((D + R)\) values of 52.040 and 51.548, respectively. It also found that both ‘Risk-taking’ (A3) and ‘Competitive Aggressiveness’ (A4) were classified in the cause group because of their positive \((D - R)\) values of 1.322 and 0.158, respectively. ‘Proactiveness’ (A1) and ‘Innovativeness’ (A2) were grouped in the effect group, given the negative \((D - R)\) values of -0.528 and -0.951, respectively.

For the indicators of constructionpreneurial organization perspective, it was found that both ‘Organizational Culture’ (B1) and ‘Organizational Structure’ (B2) showed the same importance level of the \((D + R)\) value of 101.00. However, based on the positive \((D - R)\) value of 1.000, ‘Organizational Culture’ (B1) was a net cause and largely impacted ‘Organizational Structure’ (B2).

Under the constructionpreneurial competencies perspective, it was found that ‘Marketing Competencies’ (C1) and ‘Technical Competencies’ (C2) were the two most important indicators based on first and second highest \((D + R)\) values of 38.207 and 37.832, respectively. It also found that both ‘Business and Management Competencies’ (C3), ‘Founder’s Personal Competencies’ (C4), and ‘Technological Competencies’ (C5) were classified in the cause group because of their positive \((D - R)\) values of 0.426, 0.505, and 0.433, respectively. ‘Marketing Competencies’ (C1) and ‘Technical Competencies’ (C2) were classified in the effect group, given the negative \((D - R)\) values of -1.073 and -0.288, respectively.

Under the constructionpreneurial environment perspective, ‘National Economic Growth’ (D3) and ‘Government Programs’ (D7) were the two most important indicators based on first and second highest \((D + R)\) values of 22.444 and 22.353, respectively. It also found that ‘National Political Stability’ (D2), ‘National Economic Growth’ (D3), ‘Commercial and Professional Infrastructure’ (D6), and ‘Government Programs’ (D7) which have positive \((D - R)\) values of 0.089, 0.104, 0.035, and 0.569, respectively, were classified in the cause group. ‘Financial Resources’ (D1), ‘Government Policies’ (D4), and
‘Entrepreneurial Education and Training’ (D5) which have negative ($D - R$) values of -0.341, -0.050, and -0.405, respectively, were classified in the effect group.

**DISCUSSIONS**

The results of the DEMATEL study revealed that seven indicators were the most important indicators. These indicators are ‘Business and Management Competencies’, ‘Technical Competencies’, ‘Technological Competencies’, ‘Commercial and Professional Infrastructure’, ‘National Economic Growth’, ‘Government Programs’, and ‘National Political Stability’, respectively. It indicates that these indicators are of great importance to the successful of the construction business. These indicators are classified in the cause group. The cause group criteria imply the meaning of the influencing criteria and the effect group criteria denote the meaning of influenced criteria (Fontela and Gabus, 1976). Thus, all these indicators can directly influence the other indicators. The results suggested that the construction enterprise should give more attention to improve these indicators.

It also found that ‘Government Programs’ were the most critical impact factor on the others. It implies that the Governments must have the direct programs to assist construction enterprises at all level such as national, regional or municipal. Developing construction enterprise will improve the performance of construction industry, hence lead to excellence national economy growth. Furthermore, the Government must take necessary actions to include construction activities in their national development plans. In the context of the Malaysian construction industry, for example, the strong performance of construction activities was reported to have been driven by the Government macroeconomic stimulus packages, and the implementation of various construction projects by both public and private sectors (CIDB, 2014).

Although some of the indicators, namely ‘Government Programs’, ‘National Economic Growth’, ‘Commercial and Professional Infrastructure’, and ‘National Political Stability’ are beyond the controlled of construction enterprise, nevertheless, they must alert and closely monitored these indicators. Alertness is one of the abilities that entrepreneur must have (Thérin, 2007; Farmer et al., 2011). In this sense, alertness will provide them with the ability to detect and exploit early signs of change and then take necessary action to grab the opportunities. If the Government introduces new programs, for example the recognising of the use of Industrialized Building Systems in construction projects, construction enterprise must have to take advantage of this program by improving their ‘Technological Competencies’ and ‘Technical Competencies’ so that they have specializing in constructing such method. They also should improve their ‘Business and Management Competencies’ by setting out collaboration with the IBS manufacturers or suppliers, and then could offer their service as a specialized contractor in the IBS to the clients. The other eleven indicators, namely ‘Financial Resources’, ‘Government Policies’, ‘Organizational Culture’, ‘Innovativeness’, ‘Entrepreneurial Education and Training’, ‘Founder’s Personal Competencies’, ‘Risk-taking’, ‘Competitive Aggressiveness’, ‘Organizational Structure’, ‘Marketing Competencies’, and ‘Proactiveness’, were affected by the ones in the cause group.

Although if the construction enterprise desires to obtain high potential in business success in terms of the effect group criteria, it would be necessary to pay attention to the cause group criteria beforehand. However, the cause group criteria are difficult to change, while the effect group criteria easily changed. Therefore, an effective way for construction enterprise to gains success is by manage all these causal indicators, namely ‘Financial Resources’, ‘Government Policies’, ‘Organizational Culture’, ‘Innovativeness’, ‘Entrepreneurial Education and Training’, ‘Founder’s Personal Competencies’, ‘Risk-taking’, ‘Competitive Aggressiveness’, ‘Organizational Structure’, ‘Marketing Competencies’, and ‘Proactiveness’. These indicators can be regarded as the critical indicators for construction enterprise to consider in order achieving success. For example, it was found that ‘Government Programs’ were presented the most important cause indicator, and ‘Financial Resources’ were the most important effect indicator. In other words, ‘Financial Resources’ was the effect indicator attempted to increase cause
indicator of ‘Government Programs’ for construction business to achieve success. As noted by Hillebrandt (2000), governments must use the construction industry to help regulate the economy in striving for growth and reasonable stability as consistent with their macroeconomic management.

Constructionpreneurial Orientation

It found that ‘Proactiveness’ and ‘Risk-taking’ were the two most important indicators of constructionpreneurial orientation. The results suggest that constructionpreneur must have proactive and risk-taking behaviours to success in their business. Proactive behaviour is related to the opportunity-seeking, forward-looking perspective characterized by the introduction of new products and services ahead of the competition and acting in anticipation of future demand (Miller, 1983). Therefore, constructionpreneur must acts in advance of a future situation, rather than just reacting. In other words, constructionpreneur must able to control and making things happen rather than just adjusting to a situation or waiting something to happen.

Risk is synonym with the construction industry. According to Shahu et al. (2012), the unique nature of construction industry in which most of the process takes place in a turbulent and temporary environment that is vulnerable to environmental conditions, has result in occurring frequent changes during the whole construction process creating a risk for managing things like design, contracts, suppliers, resource, and so on. These need to address in a different approach, unlike other industries. These circumstances have demanded the constructionpreneur to be able to manage all the occurred risks if they want to achieve success.

It also found that ‘Risk-taking’ and ‘Competitive Aggressiveness’ categorized in the cause group, and ‘Proactiveness’ and ‘Innovativeness’ were of effect group. ‘Risk-taking’ was the most important cause indicator and ‘Competitive Aggressiveness’ was the most important effect indicator. In the context of constructionpreneurial orientation, constructionpreneur must have excellence ‘Risk-taking’ and ‘Competitive Aggressiveness’ behaviours because they affected other indicators such as ‘Proactiveness’ and ‘Innovativeness’.

Constructionpreneurial Organization

In the context of the constructionpreneurial organization, it was found that ‘Organizational Culture’ was the most critical indicators that affected ‘Organizational Structure’. It implies that constructionpreneur must give priority to improving both ‘Organizational Culture’ and ‘Organizational Structure’. The findings had supported the hypothesis developed by Janičijević (2013) that organizational structure and organizational culture impacted each other in sense that there is a causal relationship among them due to which the agreement of the two components of organization leads to better performance.

Constructionpreneurial Competencies

It found that ‘Marketing Competencies’ and ‘Technical Competencies’ were the two most important indicators of constructionpreneurial competencies. The results suggested that constructionpreneur must concentrate on the marketing and technical aspects of their business. The findings have been supported evidence provided by Shigang (2012) that marketing and technical (project management) were of the core competencies of a construction business that link to the superior performance.

It also found that the most critical indicators of constructionpreneurial competencies were ‘Founder’s Personal Competencies’, ‘Technological Competencies’, and ‘Business and Management Competencies’. Both of them had directly influenced by two (2) other indicators namely, ‘Marketing Competencies’ and ‘Technical Competencies’. In this respects, ‘Founder’s Personal Competencies’, ‘Technological
Acquisition of Experts’ Opinions to Explore the Drivers of Business Success in the Construction Industry

Competencies’, and ‘Business and Management Competencies’ in the construction industry could be regarded as the fundamental competencies needed for the construction business. These indicators represent the mandatory competencies needed in every business venture that would apply in the construction business.

The existence of ‘Founder’s Personal Competencies’ as the most critical indicators of constructionpreneurial competencies was consistent with the previous findings. Jaafar et al. (2004) revealed that founder’s competencies affected construction enterprises in term of business success. It also supported evidence offered by Maes et al. (2005) that founder’s competencies could affect construction enterprise in term of profitability both directly and indirectly. With respect to the ‘Technological Competencies’, the finding has consistence with the views forwarded by Swierczek and Ha (2007) that the lack of new technology and equipment could hindrances business development. With respect to the ‘Business and Management Competencies’, the finding had supported evidence offered by Hamid et al. (2010) that those business skills and knowledge of construction business were mandatory in order to achieve success. It also supported the findings forwarded by Assaf et al. (2015) that lack of business and management competencies were the causes of contractors’ failure.

Constructionpreneurial Environment

In the context of the constructionpreneurial environment, it found that ‘National Economic Growth’, and ‘Government Programs’ were the two most important indicators for construction business success. Economic growth is important if businesses are to grow and prosper. It relates to growth in the output of the economy as a whole that refers to an increase in the value of the national expenditure. Thus, money can be spent on physical development that would provide an opportunity for the construction business. It implies that constructionpreneur must have to consider economic growth while setting their objectives and strategy for the future. With respect to the ‘Government Programs’, the finding have been supported evidence offered by Alkali and Isa (2012) that those government support was found to be positively significant to business performance.

It also found that the most critical indicators of constructionpreneurial competencies were ‘National Economic Growth’, ‘Government Programs’, ‘National Political Stability’, and ‘Commercial and Professional Infrastructure’. Both of them had directly influenced three (3) other indicators namely, ‘Government Policies’, ‘Financial Resources’, and ‘Entrepreneurial Education and Training’. Although these indicators are beyond the controlled of constructionpreneur, nevertheless, it represents the alertness behaviour of constructionpreneur that must able to detect and then take necessary action to grab the opportunities provided by the business environment.

CONCLUSION

This paper applied the DEMATEL technique not only to analyse the indicators of success for construction business from the perspective of entrepreneurship theory but also to develop the cause and effect relationship among them. The results implied that the construction enterprise must focus on improving the seven indicators in the cause group, namely ‘Business and Management Competencies’, ‘Technical Competencies’, ‘Technological Competencies’, ‘Commercial and Professional Infrastructure’, ‘National Economic Growth’, ‘Government Programs’, and ‘National Political Stability’.

In context of each perspective of entrepreneurship theory, the findings suggested that ‘Risk-taking’ and ‘Competitive Aggressiveness’ were the most critical indicators of constructionpreneurial orientation. Under the constructionpreneurial organization, it was found that ‘Organizational Culture’ was the most critical indicators that affected ‘Organizational Structure’. The most critical indicators of constructionpreneurial competencies were ‘Founder’s Personal Competencies’, ‘Technological
Acquisition of Experts’ Opinions to Explore the Drivers of Business Success in the Construction Industry

Competencies’, and ‘Business and Management Competencies’. Under the constructionpreneurial environment, the findings suggested that the most critical indicators were ‘National Economic Growth’, ‘Government Programs’, ‘National Political Stability’, and ‘Commercial and Professional Infrastructure’.

It is suggested that entrepreneurially oriented construction enterprises can position themselves to take advantage of market opportunities. We argued that the success and survival of construction business could achieve through corporate entrepreneurship. Rather than viewing construction business success from the projects executed outcomes, we hypothesized that predictors for success and survival of entrepreneurs in the construction industry can be derived from entrepreneurial activities implemented within the organization. This paper is the first to used entrepreneurship theory in searching success factors for the construction business. This study also is the first to introduce the term of ‘constructionpreneurship’ to distinguish the differences between corporate entrepreneurs that operate in the construction industry and those in other industries. To best of our knowledge, this effort has not been forwarded in earlier studies.

In synthesis, results of this study have been suggested that entrepreneurship was universally applicable to all industries in several and significant ways. The perspectives of entrepreneurship theory could be used in predicting success factors for business ventures. However, it needed to be tailored to suit the industry’s fundamental differences as to warrant successful application. Construction enterprises should consider and adopted the concept of entrepreneurship as a tool for running a business. Furthermore, construction enterprises should focus and give priority to the most critical indicators if they want to success in their business. Moreover, construction industry policy makers’ should also consider the indicators while developing the industry’s policies.

REFERENCES


Acquisition of Experts’ Opinions to Explore the Drivers of Business Success in the Construction Industry


The rest of the references and all of the figures and tables cited in this paper are omitted due to space considerations. Interested parties are invited to contact the author for a complete copy of the paper.
The Effect of Knowledge Management Capabilities on the Performance of Malaysian Large-Scale Organizations: An Empirical Study

Keywords: Knowledge Management Capabilities, Trust, Organizational Performance, Knowledge Sharing, Knowledge Acquisition, Organizational Culture

INTRODUCTION

Knowledge is the ultimate source of competitive advantage and organizational performance (Grant, 1996). Many contributions could be associated with effective Knowledge management (KM) including better innovation and coordination, improve decision making, speed the response to market change, and reduce redundancy of knowledge and information (Fan et al. 2009; Bustamam et al., 2012). Similarly, the Knowledge management capabilities (KMC) have been contributing to the organizational performance in the form of innovation, new product development, and competitiveness (Cepeda & Vera, 2007; Abidin-Mohamed et al., 2009; Chang & Chuang, 2011; Chen & Fong, 2012; Nieves & Haller, 2014; Villar et al., 2014). This is due to the fact that achieving improved performance is not only dependent on the successful deployment of tangible assets and natural resources but also on the effective management of knowledge (Lee & Sukoco, 2007). KMC was defined as an organization’s ability to accumulate critical knowledge resources and manage their assimilation and exploitation (Miranda et al., 2011) or as the ability to mobilize and deploy KM-based resources in combination with other resources and capabilities (Chang & Chuang, 2011).

Early research in KMC can be traced back to 2001 with the work of Gold et al. (2011) who divided KMC into processes and infrastructure capabilities. The first includes knowledge acquisition, conversion, application and protection while the latter includes technology infrastructure, structure, and culture (Alavi & Leidner, 2001; Gold et al., 2001; Liu et al., 2004; Tseng, 2014). Gold et al. (2001) argued that taken together these capabilities determine the KMC of an organization, which in turn has been linked to various measures of organizational performance such as competitive advantage, competitiveness, and innovation (Gold et al., 2001; Lee & Sukoco, 2007; Zack et al., 2009). Nevertheless, previous studies associated the outcome of KMC to either processes capabilities (Ju, Li, & Lee, 2006; Sambasivan, Loke & Abidin-Mohamed, 2009; Liu & Deng, 2015; Wu & Chen, 2014) or infrastructure capabilities (Cepeda & Vera, 2007; Chuang, 2004). Few have attributed the organizational performance to both (Gold et al. 2001; Fan et al. 2009). However, a combination of both capabilities could provide a coherent and systematic knowledge support to daily organizational activities and could determine the organizational KMC (Gold et al. 2001; Mills & Smith, 2011; Lee & Sukoco; Sandhawalia & Dalcher, 2011). In addition, both capabilities were used in previous studies as mediators or moderators (Cepeda & Vera, 2007; Ju et al., 2006; Tseng & Lee, 2014; Chen & Fong, 2012; Wu & Chen, 2014) while few studies have tested the direct effect of the constructs on organizational performance (Liu, Chen & Tsai, 2004; Cold et al. 2001).

Activities of KM require a culture of trust between the organizational members. Researchers urge organizations to establish a trust culture (Sandhawalia & Dalcher, 2011; Abidin-Mohamed et al., 2014).
This is because; lack of trust is the major reason for not sharing knowledge among organizational members (Currie & Kerrin, 2003; Gharakhani & Mousakhani, 2012). Nevertheless, our search reveals that trust and its mediating role have been slightly investigated by researchers in the area of KMC. Empirical evidence showed that trust could play a mediating role in the relationship between industrial cluster involvement and knowledge obtaining (Niu, 2010).

From other perspective, it was found that the previous studies focused on countries such as European countries and United States (U.S). In the emerging economies, Taiwan received much attention compared with other countries (Ju et al., 2006; Wu & Chen, 2014). The Malaysian government has adopted the transformation to knowledge based economy during the 1990s to fulfill the vision of 2020 (high income nation). However, despite the support and encouragement of knowledge based economy, many Malaysian organizations are not effectively managing and utilizing knowledge (Moshari, 2013; Ramin et al., 2013).

This paper aims to contribute to the literature by examining the effect of KMC on the organizational performance. In this study, KMC consists of two constructs namely knowledge process capabilities with three components: knowledge acquisitions, knowledge sharing, and knowledge utilization. The second constructs of this study is knowledge infrastructure capabilities with three components: organizational culture, organizational structure, and technology infrastructure. In addition, the study tests trust as a mediator between knowledge management capabilities and organizational performance. Both financial and non-financial indicators are considered as the components of organizational performance. The paper consists of six sections. First section discuses the background of the study along with the issues and objectives. Literature review is given in second section. Third section discusses the development of the conceptual model and the hypothesizes of the study. The findings are presented in fourth section. Discussion of the findings is given in fifth section. Theoretical and practical implication along with the conclusion and direction for future work are given in sixth and seventh sections respectively.

**LITERATURE REVIEW**

**Knowledge Process Capabilities**

Previous studies defined knowledge process capabilities as the abilities of an organization using knowledge assets in a series of coordinated knowledge processes for the purpose of creating valuable knowledge (Alavi & Leidner, 2001; Gold et al., 2001). In this study, it is defined as systematic processes that enable organizations to acquire, share and utilize effectively the organizational knowledge. Processes were varied in the literature based on the perception of researchers and the nature of their studies. For example, processes include acquisition, conversion, application and protection (Gold et al., 2001; Liu & Deng, 2015; Fan et al., 2009); acquisition, conversion and application (Ju et al., 2006); obtaining, refining, storing, and sharing (Liu et al., 2004); creation, transfer, integration, application (Wu & Chen, 2014); acquisition, generation, combination (Zheng & Zhang, 2011); transfer, conversion, protection (Tseng & Lee, 2014; Tseng, 2014); acquisition, sharing, application (Gharakhani & Mousakhani, 2012); acquisition, dissemination, utilization (Chen & Fong, 2012).

Overall, knowledge processes capabilities are considered as systematic processes that start with acquiring the knowledge from internal and external sources. Next, the knowledge is shared among organizational members to create new knowledge or to avoid reinventing the wheel. Lastly, the shared knowledge is utilized by the organization and its members. Thus, in this study, the knowledge processes capabilities consists of three components namely acquisition, sharing, and utilization.

**Knowledge Infrastructure Capabilities**

Knowledge infrastructure capabilities are defined as the facilitating conditions that are provided by organizations to ease the processes of knowledge. Previous studies argued that it is important for organizations to have supportive knowledge infrastructure capabilities to assist the KM initiative in the
The Effect of Knowledge Management Capabilities on the Performance of Malaysian Large-Scale Organizations: An Empirical Study

The three components of knowledge infrastructure capabilities of Gold et al. (2001) were used by the majority of researchers (e.g. Chuang, 2004; Chang & Chuang, 2011; Mills & Smith, 2011; Pandey & Dutta, 2013). Therefore, this study follows the approach of previous studies and adopts the three components approach provided by Gold et al. (2001). Namely, the study uses technology infrastructure, organizational culture, and organizational structures as components of knowledge infrastructure capabilities.

Trust
Trust is defined as the “positive expectations individuals have about the intent and behaviors of multiple organizational members based on organizational roles, relationships, experiences, and interdependencies” (Shockley-Zalabak et al., 2000). In many cases, the existence of trust between members of an organization may provide the basis for a competitive advantage or a distinctive organizational competence (Zanini & Migueles, 2013). A study has revealed that trust is important for performance and the well-being of the members of an organization in time of crisis (Mishra, 1996). Golin (2004) proved a series of positive aspects for the organizations that are trusted. The existence of trust could promote knowledge sharing culture and knowledge transfer (Sandhawalia & Dalcher, 2011; Ko, 2010). On the other hand, lack of trust was cited as an important reason for employees to not share their knowledge and experience with other organizational members (Currie & Kerrin, 2003; Gharakhani & Mousakhani, 2012; Holste & Fields, 2010).

Open and honest culture facilitates the collaboration between organizational members and leads to tacit knowledge sharing and creation of new knowledge (Miles, 2007). Evidence from the literature showed that trust could play a mediating role in sharing, obtaining, and transferring knowledge (Levin & Cross, 2004; Niu, 2010). Therefore, this study extends the existing literatures and attempts to examine the mediating role of trust between knowledge process capabilities and knowledge infrastructure capabilities, and organizational performance.

Organizational Performance
Organizational performance has been one of the highly researched dependent variables in the literature (Abdullah et al., 2009; Abidin-Mohamed et al., 2009; Sambasivan et al., 2011). According to Richard et al. (2009) organizational performance is the ultimate dependent variable of interest for researchers concerned with just about any area of management. This broad construct is essential in allowing researchers and managers to evaluate organizations over time and compare them to rivals. Lebans and Euske (2007) defined organizational performance as “a set of financial and non-financial indicators which offer information on the degree of achievement of objectives and results”.

Cotora (2007) provided a comprehensive aspect of organizational performance. The author described the difficulty of measuring performance without including the external relationship and intangible values such as knowledge, competencies, and partnerships. Maltz et al. (2003) proposed measurements that include financial and non-financial. The author highlighted that there are five performance indexes should be incorporated to evaluate performance. These are financial performance, market/customer, process, people development, and future. Gyula (2013) pointed out that using financial indicators as proxies for performance has in its turn strong limitations. Therefore, relying on the assumption that shareholders are the sole beneficiary of organizations’ rents reduces the dimensionality of organizational performance. Then, as financial literature points out, market valuation reflects does not present performance but expectations about future performance (Gyula, 2013).

Based on above, using only financial indictors might not measure the real performance of organizations and likewise in case of using only non-financial ones. Therefore, this study is measuring performance using financial and non-financial indicators. These measurements have been used by many researchers (e.g. Evan & Davis, 2005; Holsapple & Wu, 2011; Maltz et al., 2003; Tseng, 2014).
CONCEPTUAL MODEL AND HYPOTHESES DEVELOPMENT

The conceptual model of this study presented in Figure 1. It was developed based on the literature review of the study. It consists of four constructs. The independent constructs are knowledge process capabilities and knowledge infrastructure capabilities. Organizational performance is the dependent construct of this study and trust is expected to play a mediating role between the independent constructs and the dependent construct.

**Knowledge Process Capabilities**
Knowledge process capabilities were found in many studies to have strong influence on organizational performance (Gold et al. 2001; Liu et al. 2004). It consists of three components that are knowledge acquisition, sharing, and utilizations. Chang and Chung (2011) found the knowledge process capabilities have significant influence on organizational performance. Similarly, Fan et al. (2009) argued that knowledge process capabilities could contribute to the organizational performance. Thus, in this study, it is expected that:

H1: Knowledge process capabilities affect positively the organizational performance.

**Knowledge Acquisition.** Mills and Smith (2011) view knowledge acquisition as the degree to which the organization develops or creates knowledge resources across functional boundaries. It is enabled by the processes and activities of interaction, feedback, innovation, brainstorming, and benchmarking. Researchers suggested strong and positive links between knowledge acquisition and performance measures. For example, Zahra and George, (2002) in their review study argued that acquisition is important component of KMC. Gold et al. (2001) found a significant impact of knowledge acquisition on organizational performance. Similarly, Liu and Deng (2015) found a relationship between acquisition and business process outsourcing. Chen and Fong (2012) found that knowledge acquisition is linked positively to KMC and organizational performance. Thus, in this study, it is expected that:

H1a: Knowledge acquisition has a significant effect on organizational performance.
Knowledge Sharing. Knowledge sharing is defined as a social interaction culture, involving the exchange of employee knowledge, experiences, and skills through the whole department or organization (Gharakhani & Mousakhani, 2012). Liu et al. (2004) linked the knowledge sharing to the competitiveness of organizations. Supar et al. (2005) pointed out that knowledge sharing affects significantly the performance of higher educational institution. Other researchers derived similar findings. For example, Kuzu and Ozilhan, (2014) found that knowledge sharing significantly influences the employees’ performance. Chang and Chung (2011) found significant influence of knowledge sharing on the business strategy. Chen and Fong (2012) found that the knowledge sharing strongly influence the organizational performance. In this study, it is expected that:

H1b: Knowledge sharing has positive effect on organizational performance.

Knowledge Utilization. Knowledge utilization is defined as routines apply and exploit the newly transformed knowledge to modify and create operating routines that improve performance outcomes (Lee, Hung, & Chau, 2011). Previous studies found that in order for knowledge to influence the organizational performance, it has to be deployed to support the organizational processes. Hence, it is through utilization that acquired knowledge can be transformed from being one of the potential into a realized and dynamic capability that impacts the organizational performance (Seleim & Khalil, 2007; Zahra & George, 2002). Empirical findings of Chen and Fong (2012; 2015) showed that utilization has strong effect on business performance. Thus, it is expected that:

H1c: Knowledge utilization affects significantly the organizational performance.

Knowledge Infrastructure Capabilities
Knowledge infrastructure capabilities are the second construct of this study and it consists of three components: technology infrastructure, organizational culture, and organizational structure. Studies that have investigated the direct effect of knowledge infrastructure capabilities found that the construct has significant effect on organizational performance (Fan et al. 2009; Chang & Chuang, 2011; Sandhawalia & Dalcher, 2011). Thus, in this study, it is expected that:

H2: Knowledge infrastructure capabilities have significant effect on organizational performance.

Technology Infrastructure. Technology Infrastructure is defined as the technical systems within an organization, which determine how knowledge travels and accessed (Chang & Chuang, 2011). Miranda et al (2011) provided examples of infrastructure technology such as database interfaces, data entry screens, and reports provide knowledge about how business transactions are to be conducted. Chang and Chuang (2011) empirically found significant association between technology infrastructure and KM process. Pandey and Dutta, (2013) derived similar findings. Gold et al. (2001) linked the technology infrastructure to the organizational performance. Thus, it is expected that:

H2a: Technology infrastructure has a positive effect on organizational performance.

Organizational Culture. Culture is defined as the degree to which organizational culture provides support for viewing knowledge as valuable assets and resources (Chang & Chuang, 2011). In the context of KM, culture is considered as a complex collection of values, beliefs, behaviors, and symbols that influences KM in organizations (Ho, 2009). Chang and Chung (2011) and Gold et al. (2001) incorporated organizational culture and found significant relationship with organizational performance. Similar findings were derived by Mills and Smith (2011), and Pandey and Dutta, (2013). Thus, in this study, it is expected that:
H2b: Organizational culture has significant effect on organizational performance.

Organizational Structure. Organizational structure is defined as the extent of an organization’s structural disposition toward encouraging knowledge-related activities (Chang & Chuang, 2011). It comprises the organizational hierarchy, rules and regulations, and reporting relationships (Herath, 2007). Pandey and Dutta, (2013) pointed out that organizational structure plays a facilitating and steering role in developing the culture of knowledge. The findings of previous studies showed that organizational structure can affect competitive advantage (Chuang, 2004); organizational performance (Chang & Chung, 2011); KM initiation (Fan et al., 2009); and KM effectiveness (Aujirapongpan et al., 2010). Thus, in this study, it is expected that:

H2c: Organizational culture has significant effect on organizational performance.

Trust as a Mediator
The existence of trust is important to promote organizational knowledge sharing (Sandhawalia & Dalcher, 2011). Trust facilitates the processes of KM such as sharing, transferring and obtaining (Ko, 2010; Holste & Fields, 2010). The absence of trust affects the willingness of employees to share their tacit and explicit knowledge (Currie & Kerrin, 2003; Gharakhani & Mousakhani, 2012; Holste & Fields, 2010). It was found that trust could facilitate the organization ability to enhance relationships, collect information related to market and technology development, and establish beneficial knowledge sharing internally and externally (Romijn & Alabaladejo, 2002; Abidin-Mohamed et al., 2014). Collaboration, interaction, and exchange of knowledge are all enabled once the organization creates a culture of trust (Miles, 2007).

Levin and Cross, (2004) found that trust could play a mediating role for knowledge transfer. It is also found to mediate partially the relationship between industrial cluster involvement and knowledge obtaining (Niu, 2010). In online business environment, trust has been employed as a mediator of relationships between behavioral intentions and individual characteristics, online environments and information technology (Gefen & Straub, 2004; Kim & Park, 2013; Ba & Pavlou, 2002; Hajli, 2013). Thus, in this study, trust is expected to play a mediating role. Therefore, it can be hypothesized that:

H3: Trust mediates the relationship between knowledge process capabilities and organizational performance.
H4: Trust mediates the relationship between knowledge infrastructure capabilities and organizational performance.

RESEARCH METHODOLOGY

Sampling
This study employed a convenience sampling technique. This is because this sampling method is easy for data collection (Fraenkel, Wallen & Hyun, 1993). The sample of this study is MBA graduate students and top management level employees who are currently employed in large-scale organizations in Malaysia. Gold et al. (2001) and Mills and Smith (2011) argued that highly educated respondents, who are working in management level, are suitable for KMC studies because they are aware of the KM activities in the organization.

Instrument
This study employed an online questionnaire as the instrument of data collection. Measurement of knowledge acquisition was adapted from Yang et al. (2014), knowledge sharing from Liebowitz and Yan (2004), knowledge utilization from Chen and Fong (2012). Measurement of technology infrastructure, organizational culture, and organizational structure were adapted from Van Den Hooft and Huysman (2009). Organizational performance measurement was adapted from Tseng (2014). The content validity
of the questionnaire was examined by a professor in strategic management and required changes were made accordingly. Next, a pilot study was conducted on 31 PhD students. The results indicated that the measurements are reliable (Cronbach’s Alpha >.7). The questionnaire consists of five parts. First part presents the cover letter to the respondents. The demographic information is given in second part. Third part is related to the KMC variables. Trust is presented in fourth part. Lastly, the organizational performance variables are presented in fifth part. Ten point Likret scale was used to assess the questions. The scale ranges from (1) strongly disagree and (10) strongly agree.

**Data Collection**

For field study, a total of 419 questionnaires were mailed to respondents using social media website such as Facebook, LinkedIn, and network of friends’ referral who distributed the questionnaire to those who met the criteria of this study. Data collection took place between July and September 2015. A total of 176 usable questionnaires were returned and the response rate was 42%. The sample size is considered medium. However, it meets the criteria that are set by researchers in Structural Equation Modeling (SEM) (Hair et al., 2010). Researchers who studied KMC using SEM employed similar sample size such as Chen and Fong (2012) collected 143 responses and Villar, Alegre and Pla-Barber (2014) collected 157 responses.

**DATA ANALYSIS**

**Demographics and Descriptive Statistics**

Table 1 presents the demographic information of the respondents. The sample of this study included 138 males (78.4%) and 38 females (21.6%). The majority of 151 (85.8%) is in the age range between 31 and 50 years old. More than 125 (71.6%) had master or PhD degree.

<table>
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<tr>
<th>Variable</th>
<th>Count (%)</th>
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<tr>
<td>Age</td>
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<tr>
<td>Less than 30 years old</td>
<td>14 (8%)</td>
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<tr>
<td>31-40 years old</td>
<td>125 (71%)</td>
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<tr>
<td>41-50 years old</td>
<td>26 (14.8%)</td>
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<td>over 50 years old</td>
<td>11 (6.3%)</td>
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<td>Gender</td>
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<tr>
<td>Male</td>
<td>138 (78.4%)</td>
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<tr>
<td>Female</td>
<td>38 (21.6%)</td>
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<td>Education</td>
<td></td>
</tr>
<tr>
<td>Bachelor degree</td>
<td>50 (28.4%)</td>
</tr>
<tr>
<td>Master degree</td>
<td>102 (58.3%)</td>
</tr>
<tr>
<td>PhD degree</td>
<td>24 (13.6%)</td>
</tr>
</tbody>
</table>

**Measurement Model**

CFA was used in this study to estimate the subscales of the knowledge process capabilities, knowledge infrastructure capabilities, and organizational performance. AMOS version 21.0 was deployed to perform CFA. Maximum likelihood estimation was used as estimation methods for the analysis. This is because it is favored method for most model fit indices when the sample size is relatively small (Shah & Goldstein, 2006). There are many indices in CFA. However, the majority of the CFA experts suggested examining some key indices (Hair et al., 2010). In this study, RMSEA, GFI, CFI, IFI, and Chisq are used to assess the model fit.

The pooled CFA was conducted for knowledge process capabilities with its three components. The results of CFA showed that all the factor loading of items >0.6 and the model fit indices were achieved (RMSEA=.075, IFI=.96, CFI=.96, GFI=.91, and Chisq= 1.98). Similarly, the pooled CFA was conducted to the second construct; knowledge infrastructure capabilities. The model fit indices showed that all the
indices were achieved (RMSEA=.076, IFI=97, CFI= .97, GFI=.92, and Chisq= 2.00). Lastly, the CFA of organizational performance was conducted. The fit indices were achieved (RMSEA=.069, IFI=97, CFI= .97, GFI=.92, and Chisq= 1.82).

The result of measurement model showed that all the factor loadings were >.60. All indices were achieved (RMSEA=.056, IFI=.94, CFI= .94, GFI=.90, and Chisq= 1.55). Overall, some items were deleted to improve the fit indices. Factor loading of all items were >.60 and all indices were achieved. Factor loading of items for first order and second order is given in Table 2.

Validity and Reliability
The convergent validity of the model is assessed using the output of the measurement model and it is achieved when the composite reliability > 0.70 (Hair et al. 2010) and the average variance extracted (AVE) >0.50. In addition, the Cronbach’s Alpha (CA) is >0.7 (Hair et al. 2010). Based on these criteria, all the indexes are acceptable. Table 2 shows that the convergent and constructs validity were achieved.

Table 2: Validity and Reliability

<table>
<thead>
<tr>
<th>Variable</th>
<th>CR (&gt;0.7)</th>
<th>AVE (&gt;0.5)</th>
<th>No. Items</th>
<th>Factor loading (&gt;0.60)</th>
<th>CA (&gt;0.7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Performance</td>
<td>0.918</td>
<td>0.736</td>
<td>4</td>
<td>0.84-0.89</td>
<td>.92</td>
</tr>
<tr>
<td>Organizational Culture</td>
<td>0.920</td>
<td>0.698</td>
<td>5</td>
<td>0.74-0.88</td>
<td>.91</td>
</tr>
<tr>
<td>Technology Infrastructure</td>
<td>0.939</td>
<td>0.720</td>
<td>6</td>
<td>0.74-0.94</td>
<td>.93</td>
</tr>
<tr>
<td>Organizational Structure</td>
<td>0.935</td>
<td>0.783</td>
<td>4</td>
<td>0.82-0.95</td>
<td>.93</td>
</tr>
<tr>
<td>Knowledge Acquisition</td>
<td>0.893</td>
<td>0.675</td>
<td>4</td>
<td>0.81-0.84</td>
<td>.89</td>
</tr>
<tr>
<td>Knowledge Sharing</td>
<td>0.890</td>
<td>0.674</td>
<td>4</td>
<td>0.64-0.91</td>
<td>.87</td>
</tr>
<tr>
<td>Knowledge Utilization</td>
<td>0.825</td>
<td>0.541</td>
<td>4</td>
<td>0.70-0.79</td>
<td>.82</td>
</tr>
<tr>
<td>Non-Financial Performance</td>
<td>0.920</td>
<td>0.659</td>
<td>6</td>
<td>0.76-0.91</td>
<td>.91</td>
</tr>
<tr>
<td>Trust</td>
<td>0.943</td>
<td>0.806</td>
<td>4</td>
<td>0.89-0.91</td>
<td>.94</td>
</tr>
<tr>
<td>Knowledge Processes Capabilities</td>
<td>0.837</td>
<td>0.634</td>
<td>3</td>
<td>0.70-0.86</td>
<td>N/A</td>
</tr>
<tr>
<td>Knowledge Infrastructure</td>
<td>0.926</td>
<td>0.806</td>
<td>3</td>
<td>0.83-0.94</td>
<td>N/A</td>
</tr>
<tr>
<td>Organizational Performance</td>
<td>0.907</td>
<td>0.831</td>
<td>2</td>
<td>0.82-0.99</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Discriminant Validity
Awang (2014) pointed out that the discriminant validity achieved when a diagonal value (presented in bold in Table 3) is higher than the value of its row and column. The table shows that this criterion was met.

Table 3: Discriminant Validity

<table>
<thead>
<tr>
<th>FP</th>
<th>OC</th>
<th>IT</th>
<th>OS</th>
<th>KA</th>
<th>KS</th>
<th>KU</th>
<th>NFP</th>
<th>TR</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.57</td>
<td>0.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.53</td>
<td>0.77</td>
<td>0.85</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.54</td>
<td>0.73</td>
<td>0.75</td>
<td>0.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.55</td>
<td>0.48</td>
<td>0.49</td>
<td>0.47</td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.54</td>
<td>0.50</td>
<td>0.52</td>
<td>0.47</td>
<td>0.49</td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.60</td>
<td>0.52</td>
<td>0.56</td>
<td>0.53</td>
<td>0.68</td>
<td>0.54</td>
<td>0.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.81</td>
<td>0.70</td>
<td>0.66</td>
<td>0.67</td>
<td>0.65</td>
<td>0.68</td>
<td>0.70</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>0.47</td>
<td>0.44</td>
<td>0.39</td>
<td>0.45</td>
<td>0.25</td>
<td>0.39</td>
<td>0.25</td>
<td>0.68</td>
<td>0.90</td>
</tr>
</tbody>
</table>
The Effect of Knowledge Management Capabilities on the Performance of Malaysian Large-Scale Organizations: An Empirical Study


Hypotheses Testing

Direct Effect. The hypotheses testing of this study was conducted after finalizing the structural model. Direct and indirect hypotheses were tested. The result of hypotheses testing is given in Table 4.

<table>
<thead>
<tr>
<th>H</th>
<th>Label</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Organizational Performance &lt;&lt;&lt;--- Processes Capabilities</td>
<td>.72</td>
<td>.12</td>
<td>5.89</td>
<td>.00</td>
<td>Significant</td>
</tr>
<tr>
<td>H1a</td>
<td>Organizational Performance &lt;&lt;&lt;--- Knowledge Acquisition</td>
<td>.19</td>
<td>.05</td>
<td>3.49</td>
<td>.00</td>
<td>Significant</td>
</tr>
<tr>
<td>H1b</td>
<td>Organizational performance &lt;&lt;&lt;--- Knowledge Sharing</td>
<td>.46</td>
<td>.09</td>
<td>4.81</td>
<td>.00</td>
<td>Significant</td>
</tr>
<tr>
<td>H1c</td>
<td>Organizational performance &lt;&lt;&lt;--- Knowledge Utilization</td>
<td>.20</td>
<td>.05</td>
<td>3.94</td>
<td>.00</td>
<td>Significant</td>
</tr>
<tr>
<td>H2</td>
<td>Organizational Performance &lt;&lt;&lt;--- Infrastructure Capabilities</td>
<td>.25</td>
<td>.07</td>
<td>3.39</td>
<td>.00</td>
<td>Significant</td>
</tr>
<tr>
<td>H2a</td>
<td>Organizational Performance &lt;&lt;&lt;--- Technology Infrastructure</td>
<td>.08</td>
<td>.04</td>
<td>2.15</td>
<td>.03</td>
<td>Significant</td>
</tr>
<tr>
<td>H2b</td>
<td>Organizational Performance &lt;&lt;&lt;--- Organizational Culture</td>
<td>.16</td>
<td>.04</td>
<td>3.71</td>
<td>.00</td>
<td>Significant</td>
</tr>
<tr>
<td>H2c</td>
<td>Organizational performance &lt;&lt;&lt;--- Organizational structure</td>
<td>.11</td>
<td>.04</td>
<td>2.77</td>
<td>.01</td>
<td>Significant</td>
</tr>
</tbody>
</table>

R² .793

The first hypotheses predicted that the effect of knowledge process capabilities is significant and our empirical result supported this hypothesis. As predicted, knowledge process capabilities has strong effect on organizational performance (β= 0.72, P=0.00). Thus, H1 is supported. Similarly, we predict that knowledge acquisition has significant effect on organizational performance. Our findings showed that knowledge acquisition has significant effect on organizational performance (β= 0.19, P=0.00). Thus, H1a is supported. Other sub-hypotheses related to knowledge sharing (β= 0.46, P=0.00), and knowledge utilization (β= 0.20, P=0.00) were also found as we predicted significant. Thus, H1b and H1c are supported.

The second main hypothesis expected the effect of knowledge infrastructure capabilities to be significant. As expected, the effect is significant (β= 0.25, P=0.00). Similarly, we predicted that the effect of the components of knowledge infrastructure capabilities to have significant effects on organizational performance. Our predictions were true. Technology infrastructure has positive and significant effect on organizational performance (β= 0.08, P=0.03). The organizational culture (β= 0.16, P=0.00) as well as the organizational structure (β= 0.11, P=0.01) affect significantly the organizational performance. Overall, it can be concluded that H2, H2a, H2b, and H2c are supported. Lastly, the findings of structural model indicated that the construct model (second order) could explain 79% of the variation (R²) in the organizational performance (see Table 4).

Mediating Effect. Trust was proposed to mediate the relationship between knowledge process capabilities and organizational performance. Table 5 shows the result of hypotheses testing for the related paths.
Table 5: Hypotheses Testing of Mediating Effect

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust &lt;- Processes capabilities</td>
<td>.509</td>
<td>.187</td>
<td>4.62</td>
<td>.00</td>
<td>Sig</td>
</tr>
<tr>
<td>Trust &lt;- Infrastructure capabilities</td>
<td>.550</td>
<td>.146</td>
<td>3.78</td>
<td>.00</td>
<td>Sig</td>
</tr>
<tr>
<td>Organizational Performance &lt;- Infrastructure capabilities</td>
<td>.117</td>
<td>.063</td>
<td>1.85</td>
<td>.06</td>
<td>Not Sig</td>
</tr>
<tr>
<td>Organizational Performance &lt;- Processes capabilities</td>
<td>.658</td>
<td>.104</td>
<td>6.32</td>
<td>.00</td>
<td>Sig</td>
</tr>
<tr>
<td>Organizational performance &lt;- Trust</td>
<td>.262</td>
<td>.038</td>
<td>6.84</td>
<td>.00</td>
<td>Sig</td>
</tr>
</tbody>
</table>

Note: Sig: Significant

It shows that once trust entered the relationship between knowledge process capabilities and organizational performance, the direct effect of knowledge process capabilities decreased to (β= 0.51) from (β= 0.72 in Table 4). This drop indicates that there is mediating role of trust in this relationship. However, the mediation is partial because the direct effect is still significant (β= 0.51, P=0.00). Thus, H3 is supported and trust has a partial mediating role between knowledge process capabilities and organizational performance.

Trust was also proposed to mediate the relationship between knowledge infrastructure capabilities and organizational performance. The findings shows that the direct effect reduced (β= 012, P=0.06) and it is not significant. While before trust entering the relationship, the direct effect was significant (β= 0.25, P=0.00). Thus, the mediation occurred and it is full mediation because the direct effect is not significant anymore. Therefore, H4 is supported and trust fully mediates the relationship between knowledge infrastructure capabilities and organizational performance.

DISCUSSION

Previous studies agree that the KMC is very important for many organizational measures such as competitive advantage, innovativeness, business process and strategy. Yet, it did not indicate clearly which of the capabilities are more important and whether components of knowledge process capabilities is more important or those of knowledge infrastructure capabilities. We tested directly the influence of the constructs and their components. We found that knowledge process capabilities are more important than infrastructure capabilities. This finding is similar to the findings of Gold et al. (2001) and Mills and Smith (2011) who found knowledge process capabilities are more important than knowledge infrastructure capabilities.

Our findings showed that the components of knowledge process capabilities are strong predictor of organizational performance compared with the components of knowledge infrastructure capabilities. Knowledge sharing was the most significant predictors of organizational performance followed by knowledge utilization, acquisition, organizational culture, structure, and the least yet important component is technology infrastructure. Previous studies have derived similar empirical findings. Gold et al. (2001) found these components to have essential effects on the organizational effectiveness.

Surprisingly, trust was found to mediate partially the relationship between knowledge process capabilities and organizational performance, while fully mediating the relationship between knowledge infrastructure capabilities and organizational performance. The trust mediating effect revealed the importance of trust in the organizational life. In the absence of trust, organizational members will be unwilling to share their
knowledge or to ask other colleagues for information related to daily routine work (acquisition). These findings are in agreement with the previous studies that found trust to mediate partially the knowledge obtaining and industrial cluster involvement (Niu, 2010).

The full mediating role of trust could be due to the fact that creating trusted organizational culture could lead to smoother knowledge acquisition, sharing, and exchange of knowledge using technology infrastructure. Flat structure speeds the decision making as well as the exchange of information. In the presence of trust with well-equipped infrastructure such as intranet and internet, this could facilitate the knowledge sharing and acquisition along with the knowledge utilization. Previous studies in online environments found trust to play mediating role. Kim and Park (2012) found trust a mediator between antecedents of social commerce and positive word of mouth. Similar findings were derived by Haili (2013), and Gefen and Straub (2004).

The leadership of the Malaysian organizations is recommended to implant trust culture because it could help the organizations to effectively engaged its employees and drive them to contribute more to the organizational objectives. Trust was found to enhance the knowledge exchange, decision making, and knowledge about market development. Organizations implement technology such as electronic commerce (E-commerce) because it is the fashion of today (Hashim, 2009). It is recommended that knowledge to be a paradigm shift for the Malaysians organization and to start implementing practically knowledge based organization. The findings of this study could be utilized by the decision makers as it could explain 79% of the variation of organizational performance.

**CONCLUSION AND DIRECTION FOR FUTURE RESEARCH**

The importance of knowledge for organizations and countries cannot be overstated. Knowledge capabilities are integration of processes and infrastructure. There are important and more important components. However, they should be paid attention all together. Malaysia on the move toward the vision of 2020 with knowledge based approach. Large scale organizations are still in their early stage of utilizing KM practices. In addition, trust as a new emerging variable in the literature of KMC has received less attention. This study addresses the gaps by investigating empirically the effect of knowledge management capabilities such as knowledge process and knowledge infrastructure capabilities and their components on the organizational performance. The study also bridges the gaps by investigating the mediating role of trust. The findings of the study indicated that knowledge process capabilities must be number one priority for organizations followed by knowledge infrastructure capabilities. Knowledge sharing is the strongest predictor of organizational performance and other components were also significant but less important. The mediating role of trust was confirmed.

This study was conduct using AMOS. The sample size of this study was considered small to medium. It was difficult and time consuming to collect the data from management level employees due to their busy schedules. Thus, the sample size was considered sufficient for the purpose of the study. It is recommended for future study to expand the sample size to include more responses. In addition, future researcher could be conducted by choosing different sample such as choosing the employees in operational level.

It was found from the literature that most of the studies related to KMC were conducted in emerging economies such as Taiwan. It is recommended for future research to be conducted in other emerging economies such as Malaysia, Brazil, Turkey, and Indonesia among others for the purpose of comparisons. It was found also that the components of knowledge process capabilities has been used in the literature under different terms from wording perspective but it carries the similar functions such as obtaining and acquisition, sharing and dissemination, and application and utilization. Therefore, it is recommended for
future research to conduct systematic literature review to integrate and compare the findings of previous studies. As a way forward, we will conduct a comprehensive literature review study.

Lastly, it was found from the literature survey that the majority of the previous studies adopted a quantitative approach to investigate knowledge management capabilities. Since this field is still new comparatively with other fields. There is need for qualitative studies to discover the components of knowledge management capabilities and their effect on organizational performance or other measures such as competitive advantage or innovation. This could be conducted using focus group or interview approach.

REFERENCES


A Study on Effect of Communication on Project Performance

Keywords: Management, Communication, Effective Communication

INTRODUCTION

Communication plays an important role in personal as well as professional life. Study by different authors (Magan, S. 2012, Cockrell, G. 2011) indicate how communication is vital in business organization. Communication is an art and it brings changes, sense of urgency, drive to work and desire to win in different spheres of life. In this context, the communication role has a significant place both for the practitioners as well as for the academicians. The evaluation of the project feasibility, strategic planning, execution, controlling and finalizing the project; all the stages effective communication is always expected to achieve the deliverable for the project. The alliances, treaties, agreements and better long term relationship with the stakeholders and over & above the business success are determined by effective communication. In this article, the importance of communication and the effect of communication on project are studied.

OBJECTIVES OF THE STUDY

The study has two objectives as follows;

i. To analyze the importance of different forms of communication in projects.

ii. To explore the effect of communication on different phases of projects.

RESEARCH METHODOLOGY

This is a descriptive analytical study. The relevant data are collected from one hundred respondents following simple random sampling method. Categorically fifty project leaders and fifty other employees working in the project team are the responding participants in this study. And more particularly equal number of respondents has been taken from project leaders and team members by the researchers. An instrument consisting of twenty eight items on different forms of communication have been developed. It is based on studies on communication and project management. The reliability and validity have been tested. Its result has shown the suitability of the questionnaire for this study. The response is collected on a five point Likert scale. The relevant data are collected, collated and tabulated followed by analysis. In the analysis, effectiveness of the communication has been explored.

DATA ANALYSIS AND INTERPRETATION

The study is based on the response of project leaders and other team members associated with different projects. Totally eight type projects are covered in the study. The nature, particular about the projects and level of work Village, State or National level are given in the table below. The contents are self-
explanatory. The respondents associated across different projects in India have been contacted and appropriate data are collected. The responses of the mailed questionnaire are analyzed.

**Table 1: Type of Projects**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Nature of Project</th>
<th>Specification of Project</th>
<th>Level of Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Construction</td>
<td>Road (6), Building Construction (10), Railway (6)</td>
<td>State, Village, National</td>
</tr>
<tr>
<td>2</td>
<td>Healthcare</td>
<td>Specialized Hospitals (6), Mobile Health Centers (10)</td>
<td>Village, Corporation</td>
</tr>
<tr>
<td>3</td>
<td>Event Management</td>
<td>Sports (6), Cultural Shows (8),</td>
<td>Rural, Corporation</td>
</tr>
<tr>
<td>4</td>
<td>Resettlement and Rehabilitation</td>
<td>Steel Plant (6)</td>
<td>State</td>
</tr>
<tr>
<td>5</td>
<td>Software development</td>
<td>Information Technology (6)</td>
<td>State</td>
</tr>
<tr>
<td>6</td>
<td>Agriculture</td>
<td>Plantation (6), Farm house (10)</td>
<td>State, Village</td>
</tr>
<tr>
<td>7</td>
<td>Research &amp; Development</td>
<td>Child Labour (6)</td>
<td>State</td>
</tr>
<tr>
<td>8</td>
<td>Social Welfare</td>
<td>Community Development (10)</td>
<td>State, Village</td>
</tr>
<tr>
<td>9</td>
<td>Tourism</td>
<td>Tourism Development (2)</td>
<td>State</td>
</tr>
<tr>
<td>10</td>
<td>Education</td>
<td>Rural Education (2)</td>
<td>National</td>
</tr>
</tbody>
</table>

**Source:** Collected and collated from Primary Source, the numbers in the bracket show the respondents covered in the study.

The age-wise, qualification-wise and experience-wise responding participants in the study have been categorized and given in the table (Refer Table 2 to 7). The contents are self-explanatory.

**Table 2: Age-wise Distribution of Respondents**

<table>
<thead>
<tr>
<th>Category of Respondents</th>
<th>Age</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Leader</td>
<td>35 – 40</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>40 – 45</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>45 -50</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>50 and Above</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Compiled from Primary Source

**Table 3: Qualification-wise Distribution of Respondents**

<table>
<thead>
<tr>
<th>Category of Respondents</th>
<th>Qualification</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Leader</td>
<td>Graduation</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Post-Graduation</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Doctoral</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Other Qualification</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Compiled from Primary Source
Table 4: Experience-wise Distribution of Respondents

<table>
<thead>
<tr>
<th>Category of Respondents</th>
<th>Experience in Years</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Leader</td>
<td>0 – 5</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>5 – 10</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>10 – 15</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>15 and Above</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>

Source: Compiled from Primary Source

Table 5: Age-wise Distribution of Respondents

<table>
<thead>
<tr>
<th>Category of Respondents</th>
<th>Age</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team Member*</td>
<td>35 – 40</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>40 – 45</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>45 -50</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>50 and Above</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>

Source: Compiled from Primary Source
*Does not include Project Managers

Table 6: Qualification-wise Distribution of Respondents

<table>
<thead>
<tr>
<th>Category of Respondents</th>
<th>Qualification</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team Member*</td>
<td>Graduation</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Post-Graduation</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Doctoral</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Other Qualification</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>

Source: Compiled from Primary Source
* Does not include Project Managers

Table 7: Experience-wise Distribution of Respondents

<table>
<thead>
<tr>
<th>Category of Respondents</th>
<th>Experience in Years</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team Member*</td>
<td>0 – 5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>5 – 10</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>10 – 15</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>15 and Above</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>

Source: Compiled from Primary Source
* Does not include Project Manager

In the aforesaid tables, the respondents viz; project leaders (50) and employees (50) who have been referred as team members have been distributed. The different age group, experience and qualification have been considered to explore different response from the participants.
Table 8: Response on Listening as Communication Skill

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Parameters of Listening as Communication Skill</th>
<th>Less Effective</th>
<th>Moderately Effective</th>
<th>Highly Effective</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Maintaining eye contact</td>
<td>34</td>
<td>43</td>
<td>23</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Evaluating speaker’s ideas</td>
<td>59</td>
<td>28</td>
<td>13</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>Listening factual content</td>
<td>21</td>
<td>26</td>
<td>53</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>Withholding statement until speaker finishes talk</td>
<td>19</td>
<td>57</td>
<td>24</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>Judging logic and consistency of message</td>
<td>41</td>
<td>44</td>
<td>15</td>
<td>100</td>
</tr>
<tr>
<td>6</td>
<td>Querying for clarification</td>
<td>49</td>
<td>39</td>
<td>12</td>
<td>100</td>
</tr>
<tr>
<td>7</td>
<td>Relating facts for drawing big picture</td>
<td>42</td>
<td>45</td>
<td>13</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: collected from Primary Source

The data in Table-8 show the importance of listening as communication skill in project management. Out of seven parameters of listening as communication skill, listening factual content, little above half of the respondents have viewed as highly effective. In querying for clarification indicator, around half of the respondents have shown listening as less effective. It is observed that again half of the respondents indicated communication is effective so far as listening factual content is concerned. In four aspects as evaluating speaker’s ideas, judging logic and consistency of message, querying for clarification, relating facts for drawing big picture; around one-tenth of the participants indicated communication as highly effective. The respondents have also mentioned that different forms of communication are essential for the projects.

Table 9: Response on Speaking as Communication Skill

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Parameters of Speaking</th>
<th>Less Effective</th>
<th>Moderately Effective</th>
<th>Highly Effective</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Body language</td>
<td>33</td>
<td>46</td>
<td>21</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Voice</td>
<td>39</td>
<td>47</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>Energy</td>
<td>28</td>
<td>53</td>
<td>19</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>Structure</td>
<td>31</td>
<td>52</td>
<td>17</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>Visual aids</td>
<td>29</td>
<td>44</td>
<td>27</td>
<td>100</td>
</tr>
<tr>
<td>6</td>
<td>Rehearsal</td>
<td>48</td>
<td>42</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>7</td>
<td>Arrangements</td>
<td>19</td>
<td>33</td>
<td>47</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: collected from Primary Source

In the above table (Table 9) it is revealed that speaking as communication skill is also essential in different phases of the project. Around one fifth of the participants indicated that body language is highly effective as part of the speaking communication skill. Little less than half of the respondents indicated in arrangement, they are highly effective. However, in case of voice, structure, rehearsal parameters; around one tenth marked as highly effective.

Table 10: Response on Reading as Communication Skill

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Parameters of Speaking</th>
<th>Less Effective</th>
<th>Moderately Effective</th>
<th>Highly Effective</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reading job related files</td>
<td>36</td>
<td>18</td>
<td>46</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Taking note as required</td>
<td>38</td>
<td>21</td>
<td>41</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>Organizing facts</td>
<td>43</td>
<td>20</td>
<td>37</td>
<td>100</td>
</tr>
</tbody>
</table>
The data reveal that reading as communication skill is also required in different phases of the project. Different nature of the project requires different forms of communication skills. The table 10 indicates that in reading job related files, taking note as required, memorizing facts and figures and in understanding the content; around two-fifth of them are highly effective. It is also to be mentioned that the project leaders are ahead than the team members in reading as part of the communication skill. However, there is need of managing time for reading for the development of the project as well as professional development of the team members. In case of organizing facts, little less than half of the respondents indicated that they are less effective which need to be addressed by proper sensitized followed by proper training. All these measures shall have an impact on all the members associated with different projects.

Table 11: Response on Writing as Communication Skill

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Parameters of Speaking</th>
<th>Less Effective</th>
<th>Moderately Effective</th>
<th>Highly Effective</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Enjoying in writing</td>
<td>57</td>
<td>26</td>
<td>17</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Generating ideas</td>
<td>48</td>
<td>29</td>
<td>23</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>Revising the writings</td>
<td>43</td>
<td>38</td>
<td>19</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>Maintaining logical flow</td>
<td>38</td>
<td>36</td>
<td>26</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>Sharing the writings</td>
<td>27</td>
<td>49</td>
<td>24</td>
<td>100</td>
</tr>
<tr>
<td>6</td>
<td>Collaborating for writing</td>
<td>35</td>
<td>47</td>
<td>18</td>
<td>100</td>
</tr>
<tr>
<td>7</td>
<td>Incorporating changes</td>
<td>42</td>
<td>37</td>
<td>21</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: collected from Primary Source

It is to be mentioned that the writing skill need to be improved. The tabular data (Table 11) show that in all the parameters at least one quarter participants indicated writing communication skill as less effective. In enjoying writing, generating ideas, revising writings, incorporating changes in writing more than two-fifth of the respondents are less effective. The researchers have suggested for appropriate measures for the development in future.

Table 13: Importance of Communication Skills in different phases of project

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Phases of the Project</th>
<th>Listening</th>
<th>Speaking</th>
<th>Reading</th>
<th>Writing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Initial</td>
<td>12</td>
<td>23</td>
<td>41</td>
<td>24</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Planning</td>
<td>18</td>
<td>21</td>
<td>39</td>
<td>22</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>Executing</td>
<td>33</td>
<td>47</td>
<td>12</td>
<td>9</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>Finalizing</td>
<td>11</td>
<td>31</td>
<td>13</td>
<td>45</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: collected from Primary Source

The importance of communication skills is indicated by the responding participants. The above table13 show that in the initial phase of the project, reading followed by writing, speaking and listening skills are required. In this phase, two-fifth of respondents shown that reading is vital as most of the activities are
involved with reading the materials and documents relating to the projects. More follow-up actions should be taken especially for improving communication skills of the project team members including the project leaders. It will increase the effectiveness of the project. In the planning phase little less than two-fifth participants indicated that reading is important. It is followed by writing, speaking and listening. In the execution phase, more emphasis is given on the speaking component followed by listening component of the communication skills. Least importance is given on writing aspect. In the finalization phase, writing and speaking together constitute little above three fifth of the response. It indicates in this phase, project status, completion documents, preparing the materials, files and for presenting to the respective stakeholders; writing and speaking skills play key role.

DISCUSSION

Different projects require resources. The nature of the resources like human resource, financial investment, technical expertise, technology to be used, media to be involved depends upon the type of the project. The successful completion of the project is mostly attributed to effective communication. The role of negotiation with the stakeholders, availability of the resources and coordination among the team members in the project, team spirit, conflict resolving strategy adopted by the project leaders bring success for the project. It has been found that all the four forms of communication are playing crucial role in projects. The project managers have better writing, speaking and reading skills. The employees which have been considered as the team members have high effective listening skills. However, they also need to improve their all the forms of communication skills. It is the role of the project leader to consider this as a vital issue which needs to be addressed by proper intervention following appropriate mechanism. Most of the respondents revealed that communication has effect on project performance. Each phase of the project has some specific goals and objectives, activities, tasks and approaches. All the phases are equally important. The project outcome should be completion of the project successfully with optimum utilization of the resources and customer satisfaction. The study reveals that project outcome is definitely depending on the effectiveness of communication involved in different phases of the project.

CONCLUSION

The study indicates that communication has vital role to play in projects. The more the effectiveness of communication among the members of the project, leaders and team members, stakeholders in different form of the communication skills like speaking, reading, writing and listening; it would be better for the greater benefit for the project. It is not only for gaining financially but also to have a long-term relationship with different organizations. Future research can explore more insights on the effect of communication on the project performance.

REFERENCES

Campbell, Michael (2009), Communication Skills for Project Managers. New York, NY: AMACOM.
Bank Merger Announcements and Stock Returns – An Indian Perspective

**Keywords:** Bank Merger, Consolidation, Event Study, Merger Announcement, Stock Return

**INTRODUCTION**

Mergers determined by or responsive to market forces, termed as market-driven mergers, are common in developed economies. Studies on bank mergers by Hughes et al (2002), Toyne and Tripp (1998), Staff and McDonald’s (1986) and Neely (1987), in USA provide important evidence about its effect on shareholder wealth. However, these may not be entirely useful to understand the state of affairs in an emerging economy like India, where such market-driven mergers are relatively new phenomena. Moreover, differences in nature of the economy and institutional conditions make it difficult to generalize these implications. As a result there is an increasing interest in examining the benefits of such mergers in developing countries.

India is relatively new to the era of liberalization and reforms. The current merger scenario offers a vital research opportunity to assess efficiency gains and shareholder benefits. So far, only limited research appears to have been done regarding bank merger efficiency gains in the Indian context, such as the studies carried out by Gourlay, Ravishankar and Weyman-Jones (2006), Kumar and Rajib (2007), and Singh (2009). And, even fewer studies such as the ones carried out by Anand and Singh (2008), Selvam, Vanitha and Raja (2006), and Mann and Kohli (2009) focused on the shareholder returns.

**PREMISE FOR BANK Mergers AND ACQUISITIONS IN INDIA**

Leeladhar (2008) observed that the report of the Committee on Banking Sector Reforms (the Second Narasimham Committee – 1998) suggested, *inter alia,* mergers among strong banks, both in the public and private sectors and even with financial institutions and Non-Banking Financial Companies (NBFC). It was also noted that prior to 1999, the amalgamations of banks were primarily triggered by the weak financials of the bank being merged, whereas during the post-1999 period, there had also been mergers between healthy banks driven by business and commercial considerations. These mergers, in other words, were market-driven mergers.

It was further asserted that, RBI as the regulator and supervisor of the banking system would play a supportive role in the task of banking consolidation based on commercial considerations, with a view to further strengthen the Indian Financial Sector and support growth while securing the stability of the system. This indicates RBI’s motive to support mergers in the Indian banking sector.

Shirai (2002) too had observed that many years had passed since the reforms were initiated and public sector banks had been exposed to the new regulatory environment for quite some time. It was suggested that the Indian government must promote mergers and also close the unviable banks. Bhattacharya and Menon (2007) also urged that global experiences were a pointer to the fact that public sector banks in India should go ahead with consolidation to reap the benefits.
LITERATURE REVIEW

Murthy (2007) identified many motives that were behind bank mergers in India such as, rapid growth, avoidance of risks associated with greenfield growth, risk diversification etc., and perceived reasons, such as the need for a large customer base, launch of new products and services, large capital base to augment lending activities etc.

Sharma (2002) who analyzed the possibilities for mergers in Indian banking sector cited the five major motives that were behind mergers: (1) enhancement of revenue through provision of one-stop shopping for customers, (2) ability to rationalize branches to cut down costs, (3) belief that banks in markets where the market share was concentrated among few banks were more profitable, (4) Route for cross border expansion and (5) exit route for troubled banks.

Mehta and Kakani (2006) too analyzed the motives behind bank mergers in India and noted that that banking sector in India was slowly but surely moving from a regime of ‘large number of small banks’ to ‘small number of large banks’. They cited three reasons for mergers: (1) fragmented nature of the Indian banking sector and resulting poor global competitive presence, and position, (2) large intermediation costs and consequent probability in increasing its risk profile, and (3) to meet the new stringent international regulatory norms.

Further, they argued that it was imperative for the State to create a few large sized banks even at the cost of hurting the other stakeholders like customers. They asserted that the banks in India needed to change in form and structure to adapt to meet the changing scenarios and provide total financial services. They argued that a preferred route for this was consolidation.

Even though all the above studies have provided some clues about the factors that motivate bank mergers, these studies are mostly conceptual in nature. They have not probed into the effect of bank mergers on stock returns or efficiency. In spite of the numerous factors that drive the bank mergers not all the mergers result in gains to all stakeholders. For instance, top management may support a merger owing to huge potential gains and stockholders may feel that the merger is detrimental to the bank. This would affect the stock price of both the banks involved in the merger.

Taking cue from the seminal proposition of Miller and Modigliani (1961) it may be stated that the value of target bank would be the sum of discounted earnings and growth opportunities. On this basis Anand and Singh (2008) argued that when the expected rate of return on growth opportunities was less than the cost of capital, the merged entity would reduce the shareholder value and proposed merger should not happen.

Duffy (1991) asserted that the positive trend in shareholder returns was one of the reasons for the bank Merger and Acquisition wave in the USA. Agrawal and Jaffe (1996) too studied the acquisitions that happened in USA between 1930 and 1987 and observed that changes in corporate control generated value increases for stockholders. Jensen and Ruback (1983) too suggested that since targets gained and bidders did not appear to lose, the evidence suggested that takeovers created value.

But, Pilloff and Santomero (1997) questioned the alleged positive effect of consolidation on shareholder value. They argued that if consolidations had led to value gain, then shareholder wealth should have increased and their review was otherwise.

The reviews point out the mixed effect of bank mergers on shareholder returns in USA. This difference possibly arises out of the irrational behaviour of stockholders who fail to objectively evaluate the pros and
cons of a merger proposal. In India the impact of bank mergers on stockholder returns is yet to be explored extensively and therefore, an attempt has been made to evaluate the effect of select merger announcement on stockholder returns.

**RESEARCH DESIGN**

Event study methodology was used to analyse the following four bank mergers that were announced during 2000 to 2008: (1) ICICI Bank and Bank of Madura (09 Dec 2000), (2) Oriental Bank of Commerce and Global Trust Bank (26 Jul 2004), (3) Centurion Bank and Bank of Punjab (20 Jun 2005) and (4) HDFC Bank and Centurion Bank of Punjab (23 May 2008).

The model used to study the market reaction to merger announcements was proposed by Fama and MacBeth (1973). Cumulative average abnormal returns (CAR) were calculated for 1-day, 2-days, 5-days, 10-days, 20-days and 30-days window periods. The analysis is based on the semi-strong form of the efficient market hypothesis which states that all publicly available information would be reflected in the stock prices immediately.

This methodology has been used widely to assess the impact of merger announcements on the firms’ stock prices. For example, Gupta and Misra (2007), Mann and Kohli (2009), Ismail, Davidson and Frank (2009), Sufian and Majid (2007) and Ahmad, Ariff and Skully (2007) have used event study methodology to analyse the gains made by shareholders during bank mergers.

Anand and Singh (2008) analyzed five mergers in the Indian banking sector using this methodology to estimate the returns to shareholders of bidder and target banks. They reported that the merger announcements in the Indian banking industry had positive and significant shareholder wealth effect both for bidder and target banks.

Using the same methodology, Mann and Kohli (2009) evaluated stock market reaction to the merger announcement of HDFC Bank and Centurion Bank of Punjab (CBoP). They reported that the stock market response was positive for both the banks. Selvam, Vanitha and Raja (2006) also studied the merger of Bank of Madura with ICICI Bank using event study methodology. They noted that the share price behavior of ICICI Bank was not affected by the merger announcement.

**EVENT DEFINITION AND WINDOW PERIOD**

The first date of media announcement about the merger was considered as the event date (day zero). The media announcement dates were obtained from news clippings and the websites of the respective banks. The event window was taken 30 days prior to and 30 days after the announcement. The clean period data was taken as 120 days before and after the 30 days window period. Daily abnormal returns were obtained by subtracting the actual return on day \( t \) from the expected return on that day.

The expected return for day \( t \) was computed as follows:

\[
R_{jt} = \alpha + \beta R_{mt} + \epsilon_{jt} \quad (1)
\]

where

- \( R_{jt} \) = Expected return for bank stock
- \( \alpha \) = Ordinary Least Squares (OLS) estimate of the intercept of the market model regression
- \( \beta \) = OLS estimate of the coefficient in the market model regression
- \( R_{mt} \) = Return of market index BSE-500 on the day \( t \)
- \( \epsilon_{jt} \) = Error term / unsystematic component of firm j’s return

The abnormal return was calculated as follows:
\[ R = r_{jt} - R_{jt} \quad (2) \]

where,
\[ r_{jt} = \text{Actual return for bank stock} \]

The average excess return was calculated as follows:
\[ \text{AR} = \frac{\Sigma R}{n} \quad (3) \]

where,
\[ n = \text{Number of securities of the banks in the sample set} \]

The cumulative average abnormal return (CAR) in the 30-day window period was calculated as follows:
\[ \text{CAR} = \sum_{t=1}^{30} AR_t \quad (4) \]

Significance of cumulative average returns = \[ \text{CAR} / \delta_{AR} \quad (5) \]

where,
\[ \delta_{ARt} = \sqrt{\frac{\sum (AR_t - \overline{AR}_t)^2}{n - 1}} \]
\[ \overline{AR}_t = \frac{\sum AR_t}{120} \]
\[ n = \text{Number of days of estimation period (120 days)} \]

The share price data and market index data, BSE-500 were obtained from the Capitaline online database and BSE website.

**NULL HYPOTHESIS**

There are no abnormal returns associated with the merger announcement either for the acquiring bank or for the acquired bank.

**ANALYSIS AND INTERPRETATION**

The null hypothesis is to be tested with the Student’s \( t \)-statistic. If the estimated value of \( t \)-statistic is greater than 1.96 and less than 2.58, it is significant at 5 percent level. If its value exceeds 2.58, it is significant at 1 percent level. If the \( t \)-statistic is significant it indicates that the bank merger announcements generate abnormal returns.

Summary statistics given in Table 1 and 2 provide details about regression results for acquiring banks and acquired banks respectively. In case of HDFC Bank and Centurion Bank of Punjab merger announcement the \( \beta \) value is significant at 1% level. The \( \beta \) values for other merger announcements are not statistically significant. The estimates of cumulative abnormal returns (CAR) of acquiring and acquired banks in different time windows are provided in Table 3 and Table 4. The CAR values are not statistically significant.

**Table 1: Summary Statistics – Acquiring Banks**

<table>
<thead>
<tr>
<th>Bank</th>
<th>Coefficient</th>
<th>( t )</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICICI Bank</td>
<td>( \alpha )</td>
<td>-0.00098</td>
<td>0.552</td>
</tr>
<tr>
<td></td>
<td>( \beta )</td>
<td>0.066137</td>
<td>1.803</td>
</tr>
<tr>
<td>Oriental Bank of Commerce</td>
<td>( \alpha )</td>
<td>-0.00097</td>
<td>0.453</td>
</tr>
<tr>
<td></td>
<td>( \beta )</td>
<td>0.107669</td>
<td>2.467</td>
</tr>
<tr>
<td>Centurion Bank</td>
<td>( \alpha )</td>
<td>0.000561</td>
<td>0.580</td>
</tr>
</tbody>
</table>
### Table 2: Summary Statistics – Acquired Banks

<table>
<thead>
<tr>
<th>Bank of Madura</th>
<th>Coefficient</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>-0.00105</td>
<td>0.579</td>
<td>0.564</td>
</tr>
<tr>
<td>B</td>
<td>-0.02202</td>
<td>0.676</td>
<td>0.500</td>
</tr>
<tr>
<td>Global Trust Bank</td>
<td>Coefficient</td>
<td>t</td>
<td>Sig.</td>
</tr>
<tr>
<td>A</td>
<td>-0.00071</td>
<td>-0.325</td>
<td>0.746</td>
</tr>
<tr>
<td>B</td>
<td>0.084605</td>
<td>1.825</td>
<td>0.071</td>
</tr>
<tr>
<td>Bank of Punjab</td>
<td>Coefficient</td>
<td>t</td>
<td>Sig.</td>
</tr>
<tr>
<td>A</td>
<td>0.000537</td>
<td>0.563</td>
<td>0.574</td>
</tr>
<tr>
<td>B</td>
<td>0.037415</td>
<td>1.734</td>
<td>0.086</td>
</tr>
<tr>
<td>Centurion Bank of Punjab</td>
<td>Coefficient</td>
<td>t</td>
<td>Sig.</td>
</tr>
<tr>
<td>A</td>
<td>-0.0016</td>
<td>-0.871</td>
<td>0.386</td>
</tr>
<tr>
<td>B</td>
<td>0.338283</td>
<td>8.365*</td>
<td>0.000</td>
</tr>
</tbody>
</table>

| Std. Deviation | 0.0550 | 0.471 | 0.0442 | 0.0457 |
| Variance       | 0.0031 | 0.0022 | 0.0019 | 0.0021 |
| R-Square       | 0.004 | 0.028 | 0.025 | 0.374 |
| Durbin Watson  | 1.890 | 1.815 | 1.499 | 1.706 |

* Significant at 1% level

### Table 3: CAR of Acquiring Banks

<table>
<thead>
<tr>
<th>Event window</th>
<th>ICICI Bank</th>
<th>Oriental Bank of Commerce</th>
<th>Centurion Bank</th>
<th>HDFC Bank</th>
<th>Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>-30</td>
<td>0.446357</td>
<td>0.210562</td>
<td>0.041775</td>
<td>0.040837</td>
<td>0.739533</td>
</tr>
<tr>
<td>-20</td>
<td>0.355476</td>
<td>0.125149</td>
<td>-0.035055</td>
<td>-0.055330</td>
<td>0.390239</td>
</tr>
<tr>
<td>-10</td>
<td>0.176488</td>
<td>0.152162</td>
<td>-0.017153</td>
<td>-0.087464</td>
<td>0.224033</td>
</tr>
<tr>
<td>-5</td>
<td>0.200910</td>
<td>0.055499</td>
<td>-0.026178</td>
<td>-0.056446</td>
<td>0.173785</td>
</tr>
<tr>
<td>-2</td>
<td>0.130298</td>
<td>0.007142</td>
<td>-0.005798</td>
<td>-0.048433</td>
<td>0.083207</td>
</tr>
<tr>
<td>-1</td>
<td>0.121940</td>
<td>-0.0097825</td>
<td>-0.024106</td>
<td>-0.012637</td>
<td>0.077371</td>
</tr>
<tr>
<td>+1</td>
<td>-0.027204</td>
<td>-0.070476</td>
<td>0.044956</td>
<td>-0.013275</td>
<td>-0.066000</td>
</tr>
<tr>
<td>+2</td>
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<td>-0.087261</td>
<td>0.005066</td>
<td>-0.020088</td>
<td>-0.162392</td>
</tr>
<tr>
<td>+5</td>
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<td>-0.021272</td>
<td>0.001508</td>
<td>-0.198249</td>
</tr>
<tr>
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<td>-0.071995</td>
<td>-0.095674</td>
<td>-0.052396</td>
<td>-0.051621</td>
<td>-0.271687</td>
</tr>
<tr>
<td>+20</td>
<td>-0.033923</td>
<td>-0.160788</td>
<td>0.097571</td>
<td>-0.120316</td>
<td>-0.217454</td>
</tr>
<tr>
<td>+30</td>
<td>-0.058481</td>
<td>-0.099898</td>
<td>0.094642</td>
<td>-0.144881</td>
<td>-0.208618</td>
</tr>
</tbody>
</table>

### Event day / window | Bank of Madura | Global Trust Bank | Bank of Punjab | Centurion Bank of Punjab | Combined |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>-30</td>
<td>0.292189</td>
<td>-0.25229</td>
<td>0.01768</td>
<td>0.107829</td>
<td>0.165406</td>
</tr>
<tr>
<td>-20</td>
<td>0.289683</td>
<td>0.099786</td>
<td>0.026487</td>
<td>0.004316</td>
<td>0.420272</td>
</tr>
<tr>
<td>-10</td>
<td>0.144424</td>
<td>0.148408</td>
<td>0.050325</td>
<td>-0.06232</td>
<td>0.280841</td>
</tr>
</tbody>
</table>

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**Table 4: CAR of Acquired Banks**

**Table 3: CAR of Acquiring Banks**

**Table 4: CAR of Acquired Banks**

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1049
In case of acquiring banks the average CAR is positive before the announcement. However, it reduced from 18.48% (-30 days) to 1.93% (-1 day). This could have happened due to information leakage ahead of the actual date of media announcement. The average CAR is negative after the announcement and increased from -1.65% (+1 day) to -5.21% (+30 days). This suggests that in general the market has reacted negatively for the acquiring banks and the negative returns also increased over time.

In case of acquired banks too the average CAR declined to – 1.95% (-1 day) from 4.13% (-30 days). This also could be attributed to information leakage. The average CAR is negative after the media announcement and the loss increased from -18.16% (+1 day) to -27.93% (+2 days). It turned positive and reached 1.90% in the 30-days window period after the event.

However, this can be attributed to the positive returns of Bank of Punjab, as the returns of other banks could not be calculated due to unavailability of data. No trading was done on these shares after the 20-day run up period. Hence, it may be concluded that in general the market has reacted negatively for acquired banks too and the negative returns appear to increase over time as indicated in Table 4.

The CAR before the day of merger announcement is 12.19% in the case of ICICI Bank. However, the CAR value declined from 44.63% (-30 days) to 12.19% (-1 day). The CAR value is negative before the day of merger announcement in all the other cases. The CAR turned negative for Bank of Madura after the merger announcement during the 30-day window period. This suggests that markets have reacted negatively for both acquiring and acquired bank.

In case of Oriental Bank the CAR is positive two days prior to the merger announcement. It is also positive in the 5-days, 10-days, 20-days and 30-days window periods before the event. After the event CAR is negative and increased from -0.7% (+1 day) to -16.07% (+20 days). The CAR turned negative for Global Trust Bank after the merger announcement during the 20-day window period. This also suggests that merger announcement has negatively impacted the stock price of both the banks.

The CAR trended from -4.17% (-30 days) to -2.41% (-1 day) for Centurion Bank. It turned positive during the first and second day after the announcement and touched 4.49% and 0.50% respectively. Later on the CAR values turned negative during the 5-days and 10-days window period. The CAR values turned positive during the 20-days window and period and reached 9.46% during the 30-days window period. The CAR shows mixed trend in case of Bank of Punjab too. On the first and second day before and after merger the CAR is negative. In the 5-days window period it reached 0.5% and became -7.96% in the 10-days window period. The trend appears to be mixed for both the banks.

The trend in case of HDFC Bank and Centurion Bank of Punjab merger announcement is fairly clear and negative, except an aberration during 5-day window period for HDFC Bank when the CAR is 0.15%. Otherwise, the CAR before and after the merger announcement is negative and substantially increased.
over time for HDFC Bank from -0.13% (+1 day) to -14.48% (+30 days). In case of Centurion Bank of Punjab too the negative returns increased from -1.95 (+1 day) to -6.5% (+10 days). The market appears to have reacted negatively for the merger announcement.

CONCLUSION

The event study methodology used to analyze the effects of merger announcements on stockholder returns in case of select Indian bank mergers indicates that in general the markets have reacted negatively for both acquiring and acquired banks. The negative returns appear to increase over time for both banks indicating the adverse reaction of stock markets. The mergers involved in this study were market driven mergers where bank managements took a conscious decision to merge two banks based on the merit of potential gains. However, it appears that the expectation of stockholders was different and hence they have reacted adversely to the merger announcements. Considering the importance of shareholder wealth maximization concept, this serves as a warning bell to the bank managements which might pursue the merger route in future.

REFERENCES

The Negotiating CEO: Examining the Role of Social Power in International Business Negotiations

**Keywords:** International Negotiation, Power, Integrative Outcomes, Cooperative Processes, United Kingdom

**INTRODUCTION AND LITERATURE REVIEW**

International business negotiation is often a key element in marketing success. Negotiators frequently interact with potential business partners from markedly different cultural or social backgrounds. To be successful, they have to acquire a complex skill set that has to be acquired ‘on the job’ – a skill set that is useful in preventing undesired perceptions, filtering out communication ‘noise’ and that promotes successful negotiation outcomes. To quote Shi and Wright (2001:186); “In a global business environment, the business executive’s work has an increasingly international orientation and international business negotiation becomes an important competency”. Understanding the role and use of social power (French and Raven, 1959) therefore becomes an important element in formulating these competencies.

The growth of new emerging markets and of the global economy has seen an increasing demand for negotiation training for marketing executives. Training consultants generally teach negotiation skills by drawing on communication theory and socio-psychological perspectives. They mostly emphasize “interest-based negotiation” (Fisher, Ury and Patton, 1991), where negotiators work to identify underlying interests on both sides, explore creative options for mutual gain, and use legitimate standards to determine the best possible solutions (Senger, 2002). Scholars have offered both comparative and prescriptive studies (Ghauri 1996; Francis 1991; Zartman and Berman 1982) since “International negotiators require additional skills and competencies on top of those required in domestic business negotiations” (Reynolds, Simintiras and Vlachou (2003:236).

The process of business negotiation is generally described as either taking an integrative or a distributive frame (also known as cooperative versus competitive frame, associated with win-lose and win-win outcomes e.g. Fisher and Ury 1981; Ghauri 1996; McCall and Warrington 1984). Ghauri (1996) notes that the ‘atmosphere’ of the negotiation can have varying degrees of either cooperative (associated with an integrative frame), or competitive (associated with a distributive frame) aspects.

The final outcome and processes therefore in international business negotiations can take the following forms:

- Competitive Vs cooperative
- Win-win Vs win-lose
- Integrative Vs distributive

Competitive behavior relates to conflict ‘atmosphere’ and can be defined as efforts to gain unilateral concessions from the other party i.e. distributive agreements. Competitive strategies manifest themselves through behaviors of the negotiators, hence having competitive behavior in the negotiation process will result in parties perceiving the negotiation as a game in which there can only be one winner. With IBNs there may exist conflicts of interest, hence conflicting atmosphere in the negotiation process. This can be due to differences in cultural opinions. The environment in which the negotiation is based can also affect the cooperation/conflict balance. Foreign exchange instability for example could cause the power balance...
to shift, and have affects on the level of cooperation each part expresses. As stated two key approaches to IBNs are widely observed - cooperation and competition. These two strategies in turn correspond to two negotiation behaviors, namely cooperative and competitive behaviors during the negotiation process altering the power dynamics within the negotiations. The competition approach is also referred to as distributive bargaining, and is utilized by the negotiator to pursue personal goals, by convincing the opposite party to concede to demands.

The study of international negotiator characteristics (including power dynamics) and varying negotiating methods has led, however, to prescriptive literature on the ‘ideal’ ways to communicate and behave, often with reference to different cultures (e.g. Brett 2000; Al-Ghamdi 1999; Brett et al. 1998; Gilsdorf 1997; Graham et al. 1994; Herbig and Kramer 1991; Kjaerbeck 1998; Martin et al. 1999; Mintu-Wimsatt and Gassenheimer 2000; Oikawa and Tanner 1992; Uljin and Verweij 2000; Woo and Prud’homme 1999; Acuff 1997; Rubin and Sander 1991; Marrotti 1998; Tracy 1998; Ferraro 1996; Nair and Stafford 1998; Lewis 1996; Ghauri 1996; Khakhar and Rammal 2013; Khakhar and Leigh 2015). Other research has focused on negotiation styles, problem-solving, skills, tactics and conflict resolution from social psychological and behavioral theory perspectives (Sli and Wright, 2001). The success of negotiations in international settings relies on the ability of managers to effectively communicate their message in different cultural settings (Schoop, Kohne, & Ostertag, 2010). Managers must be aware of the contextual factors influencing the negotiation process, and should have the ability to alter their style and strategies to suit their needs (Saee, 2008).

Various theoretical models have been proposed (Phatak and Habib 1996; Calantone et al. 1998). These generally rely on deductions from literature reviews and qualitative research (Dupont 1991; Ghauri 1996). Quantitative tests have been done using student respondents and have been cross-cultural in nature (Graham et al. 1994). However, perceptions of international negotiator power dynamics have not been examined empirically amongst business executives, despite researchers’ speculation about their effects on negotiation behavior, process and outcomes (Tung 1988; Wall and Blum 1991).

Because of the general absence of empirical testing among actual business negotiators, these models have not been popular with practitioners (Weiss, 2006). This paper contributes to filling this gap. In the methodologies of existing research on international business negotiations, the choice of research respondents and participants has been criticized (Weiss 2006; Agndal 2007). Much of the research in negotiations is experimental in nature, relying primarily on students as research subjects. Ramsay (2004) notes that the academic literature on negotiation is dominated by studies of American undergraduate psychology students. The rationale for using students is related to ease of access. There is some discussion whether negotiation behavior of students accurately reflects negotiation behavior of ‘real’ negotiators, whilst the negotiating behavior of students has been shown to differ significantly from that of professionals (Zarkada-Fraser and Fraser, 2001). In this vein, this study has approached the subject in a non-simulation and non-experimental manner, with a non-student sample. This will provide a more relevant view of the negotiation process in order to provide a full essence of international business negotiations.

WORKING DEFINITIONS

Power

Negotiators have power when they have ‘the ability to bring outcomes they desire’ or ‘the ability to get things done the way (they want) them to be done’ (Salancik and Pfeffer, 1977). It can be assumed that a party with power can induce another party to do what the latter otherwise would not do, thereby affecting the negotiation process (Dahl 1957; Kotter 1979). The sources or elements of power are considered as centrally important to international business negotiations, and so the question of what constitutes power in negotiations is of importance. Power has also been studied by social psychologists (Pruitt 1981; 1993;
Rubin and Brown 1975; Putnam 1990) and applied to business. These concepts and perceptions of power can also be found in political science, sociology and social psychology offering a variety of distinctions among different types of social power (Asherman and Asherman, 1990). Power in relation to international business negotiations is defined as having different sources (information, expert, legitimate and referent) each resulting in different perceptions at the negotiation level of analysis to both parties involved.

**Negotiation process**

The author has assumed that a negotiation process will constitute the path during a face-to-face negotiation experience. The final process frames in international business negotiation are described as taking the following forms as per literature (McCall and Warrington 1984; Ghauri 1983; 1996; Phatak and Habib 1996; Pruitt 1981; Hall 1993; Putnam 1990; Walton and McKersie 1965; Fisher and Ury 1981; Rubin and Brown 1975-seminally; Thompson and Herbec 1996; Atkin and Rhinehart 2006):

1. Integrative Vs distributive (also known as competitive frame and cooperative frame that constitute the general atmosphere of the negotiation as suggested by Ghauri (2003))
2. Win-win Vs win-lose corresponding to two negotiation behaviors, namely cooperative and competitive behaviors during the negotiation process. The competition approach is also referred to as distributive bargaining, and is utilized by the negotiator to pursue personal goals, by convincing the opposite party to concede to demands. These two approaches are not however absolute *per se*, i.e. the degree of integration or distribution of the international negotiation process. This has become common and established terminology within the study of international business negotiations.

**RESEARCH QUESTION AND VARIABLES**

Our main research question for the focus of our study is stated below, followed by a discussion of the dependent and independent variables of the study:

**How do the bases of social power (Expert, referent, legitimate and information power) affect the negotiation process in terms of being either a cooperative or competitive atmosphere?**

**Dependent Variable**

Given the vast literature explained above, the researcher has identified the main dependent variable of this research as the ‘negotiation process’, which in-turn constitute constructs of integrative Vs distributive (corresponding to competitive frame Vs cooperative frames and win-win Vs win-lose flow).

Hence the dependent variable of this study is the negotiation process, which varies between the integrative and distributive balance. Agndal (2007) identified that most of the articles on negotiations published between 1996 and 2005 rightly considered the integrative vs. distributive continuum, balance or frame as the dependent variable, and is hence considered by the researcher of this study as a dependent variable for this study given the vast and valid agreement within literature.

**Independent Variables: Power in Negotiations**

The majority of international business negotiation models consider the concepts and elements of power as an important factor within the negotiation process (e.g. Ghauri 1996; Ghauri and Usunier 2003). It has also been studied extensively by social psychologists in relation to negotiations (e.g. Rubin and Brown 1975; Putnam 1990; Pfeffer 1992). Literature on the development of the bases of social power and application to business are detailed in Table 1.

Cavusgil and Ghauri (2002), Kotter (1979) and Pfeffer (1992) point out that a power relation is a basic characteristic of all international negotiation processes, and state that the ability to control this relation is linked to the perceived power of the parties (i.e. relative power). Negotiators have power when they have ‘the ability to bring outcomes they desire’ or ‘the ability to get things done the way (they want) them to be
done' (Salancik and Pfeffer, 1977). It can be assumed that a party with power can induce another party to do what the latter otherwise would not do, thereby affecting the negotiation process (Dhal, 1957, Kotter 1979). The concepts of power have received significant attention in negotiation research and have been referred to as relative power or power vs dependence (for e.g. Zartman 1978; Bazerman and Neale 1983; 1992; Heiba 1984; Phatak and Habib 1996; Ghauri 1983; 1996; McCall and Warrington 1984).

Zartman (1978) points out the importance of power by stating that there are many phases of power, and there exist inter-relation between the sources, or what constitutes 'power'. Graham (1987) proposed that power relationships and the perceptions of such power influences negotiation practices, as well as mentioning the importance of interpersonal skills in the negotiation process frame (which this study is also exploring). Neslin and Greenhalgh (1983) in exploring the Nash equilibrium (and cooperative and non-cooperative ‘games’), also observe that power provides “the ability of one party to take the initiative in a given situation and thus shape the issues or agenda in a way that benefits that party, becoming a key factor in international business negotiations.

The sources of power are considered as centrally important to international business negotiations (Lewicki, Barry and Saunders 2006; Potgieter 2007) and have therefore been applied in the international business negotiation study. The question the author was pressed to answer was constitutes power in international business negotiations, and how do they influence the negotiation process in terms of integrative processes or distributive processes. As Salancik and Pfeffer (1977) state, “because power derives from activities rather than individuals, an individual’s or subgroup’s power is never absolute and derives ultimately from the context of the situation. The amount of power an individual has at anytime depends, not only on the activities he or she controls, but also the existence of other persons or means by which the activities can be achieved and those who determine what ends are desired.” This has implications for international business negotiations.

The processes of power can be useful as well as complex as they are often disguised in negotiations (Pruitt 1981). Power can be observed varying forms of literature concerning power in political science, sociology and social psychology offering a variety of distinctions among different types of social power (Asherman and Asherman 1990), and debated in organizational behavior and organizational psychology literature. To understand international business negotiations and the power sources that arise, the study of power and its effect must first be understood; every interaction and every social relationship, both inside and outside international organizations, entails the usage of power (Pfeffer 1992). Potgieter (2007) views power as an easy means to accomplish things in the manner that you want them performed. The power of the manager who wants more financial resources for example, is in his skill to obtain these resources (Pitulla and Nicholson 2005).

Power is comprised of a relationship between two or more people. The political scientist Robert Dahl (1957) encapsulated this important relational focus in his definition of power, ‘A has power over B to the extent that he can get B to do something B would not otherwise do. A person or group cannot have power in isolation. Power has to be exercised or deployed, or have the potential of being deployed in relation to some other person or group (Dahl 1957).

Given this, Kim et al. (2005) in their article ‘Power Dynamics in Negotiations” argued that there are different types of power in negotiations, contending that it can be divided into potential power, perceived power, power tactics and realized power. Some empirical findings have indicated that when the most powerful party acts in a positive way, this generates integrative negotiations, partly due to the trust it fostered (Anderson and Thompson, 2004). Other studies have found that negotiators with low differences in perceived power reach more integrative agreements. The availability of alternatives (real or relative power in negotiations) also affected the negotiation processes (Wolfe and McGinn, 2005).
The Negotiating CEO: Examining the Role of Social Power in International Business Negotiations

The main purpose in the context of international business negotiations is to identify literature on the major sources of power and to define them systematically, so that one can compare them to the changes that they produce on the negotiation process. Sources of power imply a ‘persuasive message strategy’ and can be significant in influencing negotiations, and hence strategy (Miller, 1983). We explore the sources or bases of power. In international business negotiations, power can take many forms e.g. a negotiator may hold power in terms of his standing in an organization (e.g. the CEO) or may hold less power as he is anxious to receive ‘referred’ business from the other party i.e. referent power. In a seminal paper, French and Raven (1959) and revised by Raven (1993) proposed what constitutes the sources of power, and these sources have been extensively applied to international business negotiations (e.g. Lewicki, Barry and Saunders 2006) and will therefore be used as the independent variables of our study. We will explain these sources of power in relation to international business negotiations whilst formulating our hypotheses on this factor.

The perceptions of such sources of power can greatly affect the negotiation process, as perceptions may vary of the use of such power (Ghauri and Usunier 2003; Garcia 2002) and these perceptions could alter the negotiation process. It is important to mention that the concept of parity in power is crucial; in negotiations parity of power is the perception by one party that the other side can counter any form of power with a similar or different form of power that would render the further escalation of power useless (Bazerman and Neale 1983; 1992). Parity in power means that there must be a balance in power deployment and is hence key to the behavior of a successful negotiator (Potgieter, 2007). In literature, power and authority are seen as distinct (e.g. Colemen, 2000). Authority is viewed as the formal power that a person has because of the position that they possess in an organization (Potgieter, 2007) for example, managers who hold higher positions have legal authority over subordinates in lower positions. The sources of this power therefore have implications on the international negotiation process.

The sections following will explain where sources of power have been derived from (e.g. Raven 1965; 1983; 1993; Raven, Schwartzwald and Koslowski 1998) and applied to international business negotiations, followed by the resulting hypothesis inferred from the literature in terms of the affect on the international business negotiation process. Table 2 lists the studies in chronological time order to demonstrate the use and origins of the bases of social power in relation to international business negotiation literature, whilst the section following discusses the bases of social power themselves.

Table 1 omitted but would have been here

**INFORMATION POWER**

This type of power is one that is associated with special information an individual holds as a result of operations he performs and his special relationship with sources of information, which are of significance for the performance of another individual (Raven 1993). Information on the opposite party, as well its situation could be used to gain acceptance of proposals (McCall and Warrington 1984). Thus, gaining information results in increased information power, which could be used in the negotiation process. Such information could be obtained through profile checks before the negotiation, and may also have an affect on the outcome of the negotiation, in terms of positive or negative process. Information about the other party’s capabilities, financial position and limitations gives either party power to influence the negotiation process (Ghauri 1996; McCall and Warrington 1984). Proposals that are not initially accepted, can get this acceptance if the opposite negotiator indicates knowledge of information of which the oppose party is unaware of (McCall and Warrington 1984), though it can also cause suspicion or surprise on the length the other party goes to obtain information on the negotiating party. Information gathered may also give the impression of adequate preparation for the negotiation, and thus integrative processes result. Literature on this variable seems to be split between those who suggest information power causes distribution; whilst those who suggest it could cause integration e.g. Brooks and Roes (2004) state
information gathering could give the impression of adequate preparation and hence lead to integration, whilst McCall and Warrington (1984) suggest that it could go either way. Different nationalities may also have different perceptions of this information power and the affect on the overall negotiation process, as perceptions of these can be seen conflicting between international negotiators. For example, by accumulating and presenting data intended to change the other party’s point of view or position on an issue, and may be seen as offensive in some Asian cultures as they lose ‘face’ (Fang, 1997). Information on the opposite negotiator alters can also alter expectations in the negotiations processes (Scott, 1984), and if these created expectations are then not met, the process can flow negatively. The opposite party’s choice of behavior for example, is affected by transmitting positive information to opponents about the option they want them to ‘opt for’, or by hiding information about an option they don’t want them to choose (Kim et al. 2005; Potgieter 2007). The perception of having information power is inferred to create a degree of suspicion as a result (Garcia 2002; Kim et al. 2005) between international negotiators, and hence lead to a distributive negotiation process frame. We therefore make the following hypothesis:

H1: The perceptions of having more information power by one of the negotiating parties will lead to a distributive negotiation process

EXPERT POWER

This type of power is the belief that an individual or an organization has special, unique or in-depth knowledge or expertise within a given area (Kotter 1979; Raven 1992). For example an expert wine maker negotiating with a restaurant chain can exercise ‘expert’ power to the other party, which may or may not perceive these advantages (Pitulla and Nicholson, 2005). Thus viewing the opposite party as superior in terms of expertise can alter the power perceptions on both sides and affect negotiations. Hence inferring logically, expertise can lead to a source of power as well as a competitive advantage. Dunning (1999) calls knowledge or expertise as an ‘ownership advantage’) and this has implications for the international business negotiation.

Pfeffer (1992) states that expertise can greatly increase the chances of gaining a positive ‘framing’, as knowledge is related to advantages a firm processes. Such advantages can be perceived positively by the opposite party (Pfeffer 1992; Garcia 2002). Ghauri (1996) goes on to state that if a company is a leading expert in a particular field, it will use that as a source to influence the negotiation process, whilst Potgieter (2007) suggests that expert power will generally aid in clarifying operational details (and hence produce integrative negotiation processes frames). Lewicki, Barry and Saunders (2006) state that expertise, and hence expert power can stem from specialist knowledge in terms of technology, financial management and presence in a particular industry. Yulk and Tracey (1992) mention that ‘opponents’ may give the impression of expert power in order to influence the negotiation process by attempting to clarify complex details that may arise. Hence the perceptions of having expert power may be inferred to better the knowledge between international negotiators (Garcia 2002; Ghauri 1996; Pitulla and Nicholson 2005; Potgieter 2007), and hence lead to a positive negotiation process frame, as well as explicitly being used to influence the negotiation process. Thus the following hypothesis is made:

H2: The perception of existing expert power in either negotiating parties will lead to an integrative negotiation process

LEGITIMATE POWER

Legitimate power comes from the ability to influence because of position, and is sometimes referred as position-bases power (Raven 1993). International business managers at higher levels have power over the people below. However, each person with legitimate power applies their own individual style (Raven 1983). Potgieter (2007) points out that occasionally, one party will use legitimate power as a tactic against another party by:
1. Introducing someone who can influence important decisions, and who has credibility with the other party.
2. Assigning a lot of legitimate power to an individual in opposing parties to use the need for power and status in individuals to get major concessions.

This is related to the ‘location in structure’ variable suggested by French and Raven (1959) and Raven (1983) which implies power derived from occupying a key position in a hierarchical organization, or control over control of supply flows and resources. According to Raven (1983) legitimate power is seen as the foundation of the modern social structure i.e. when groups of individuals organize into any social system such as a task force or a negotiating team, which immediately creates a form of structure or hierarchy. The effectiveness of formal authority is derived from the willingness of followers to acknowledge the legitimacy of the organizational structure, and the system of rules and regulations that empowers its leaders such as CEO’s (Raven 1993). Hence in the context of international business negotiations; to the extent that a negotiator can convince the opposite party that he has a right to make a particular demand or proposal, the likelihood of an offer being accepted, is increased (Podsakoff and Schriesheim, 1985). Sending “top management” to a negotiation can therefore affect the atmosphere if the other party is aware of this status, as assumptions will be made that high power would mean quicker decision-making processes, thus positive atmosphere and smoother negotiations (Pfeffer 1992; Ghauri 1996). It is also possible to apply the notion of legitimate power to certain social norms or conventions, that exert strong control over people (Kotter 1979; Raven 1993; Raven, Schwartzwald and Koslowski 1998) and hence resulting negotiations, as legitimate power brings with it the notions of control of available resources available that are bought to the negotiating table by decision-making higher management, who have control of these resources; which the other party perceives (Potgieter 2007).

Legitimate power may also bring reciprocity (favors’ for favors’) and dependence (future business through the top management at the negotiating table as suggested by Khakhar and Rammal (2013) when discussing the use of ‘Wasta’ in the Middle East), if the other party recognizes this legitimate power. The ability to control and dispense these resources is a major power source in organizations (Pfeffer and Salancik, 1974) and hence international negotiation processes. In his book ‘managing with power’, Jeffery Pfeffer illustrated how powerful corporate figures have built successful businesses based on legitimate power (Pfeffer 1992). Coleman (2000) also suggests that if this power is used appropriately, conflict (i.e. distribution) can be avoided. Hence the following hypothesis is made:

H3: The perception of having greater legitimate power by one of the parties will lead to an integrative negotiation process

REFERENT POWER

This type of power results from the willingness of one individual, to be associated with another and to maintain such an association, in anticipation of future productive dealings (Raven 1965; Raven 1993). This could be with the same company or a company that that it has been referred to. It seems to appear that such willingness may come from knowing that the opposite party is one with potential “influence” for business; this may cause concession making as well as a dependency role for a particular company. Referent power is made ‘salient’ when one party identifies the dimension of commonality in an effort to increase their power over the other. Thus, a negotiator might start getting to know the other in order to discover commonalities (i.e. they may discover that they could do ‘business’ in the future, which may hopefully create a bond between the parties and facilitate agreement. It refers to the personal characteristics of the negotiator i.e. a person who is perceived as reference has more power, as the other party can depend on him for business (implicitly implied by McCall and Cousins 1989 and McCall and Warrington 1984). Hence a negotiator with this ability is inferred to have personal power that can positively contribute to the negotiation process frame.
Yan and Gray (1994) presume that the party in a negotiation that has more equity (referred business assumed here to be intangible equity) has more power in the negotiations, and will therefore influence the process, and mentions management control of the project, special access to markets, favorable government relationships and superior knowledge of new markets, whilst Cavusgil and Ghauri (2002) point out that the market position of either of the negotiating parties is an element influencing the negotiation process. All these elements contribute to reference power. Pitulla and Nicholson (2005) point out if there is at least a potential for a long term gain to be made in terms of future business, the negotiators will be inclined to concede in present negotiations for the sake of probably getting a greater gain, in terms of business in the future; this keeps the negotiation process fairly straightforward resulting in a positive process or frame. Coleman (2000) implies that the ways negotiators process social information about such power differ, stating, ‘whether it is limited or expandable, competitive or cooperative (i.e. distributive or integrative), or equal or unequal’ will depend on the orientation of the situation and their willingness to use this power. International negotiations are also characterized by long-term expectations of future business (Ghauri and Usunier 2003) implying the importance of reference. Garcia (2002) states if this source of power is made transparent, positive process are likely. Hence the following hypothesis is made:

H4: The perception of reference or the use of referent power by either party will lead the negotiation towards an integrative process

Figure 1 represents the proposed relationships between the sources of power and the international business negotiation process frame. It represents the perceptions of power by either of the parties in the negotiation and their existence is assumed to affect negotiation process frames.

RESEARCH METHODOLOGY

Participants in the study were executives who had been involved in international business negotiations. To gain an appropriate population we assumed that foreign Multinational Enterprise (MNE) managers of subsidiaries based in the UK would have international business negotiation experience within their work environments with UK or European counterparts. The rationale for this assumption was that most business transactions are preceded by business negotiations (Reynolds, Simintiras and Vlachou 2003), and that therefore foreign MNE managers of subsidiaries would have appropriate international business negotiation experience. The initial population consisted of managers from lists that were obtained from a variety of sources, such as (1) The British Chambers of Commerce Directory of International Members based in the UK, (2) Manchester Business School Alumni Network lists (3) Lists of foreign MNE subsidiaries based in the UK obtained from the database AMEDUS. These lists were seen as reliable and comprehensive in detailing the electronic contacts, names, positions as well as identifying which foreign subsidiaries were in active within the UK. We identified 1,213 potential respondents, who were sent a series of invitation and reminder emails describing the nature of the study, and an invitation to participate if they felt that they could be classified as executives with experience in international business negotiations. Thereafter, they were asked to recall their last international business negotiation experience when filling in the questionnaire. Following two reminder emails explicitly inviting the participation of experienced business negotiators only, a total of 155 useable questionnaires were completed online. This data collection process took approximately three months.

The study included a number of relevant respondents including business managers and negotiation practitioners from (1) international management consultancies specializing in advising on international negotiation strategies, (2) international business negotiators within international trade (3) procurement
The Negotiating CEO: Examining the Role of Social Power in International Business Negotiations

Consultants (4) real-estate negotiators and (5) sales negotiators. Over 60% of the respondents were male, whilst most of the responses were part of the 36-40 years age group and 37% were 41 years of age or above. Around only 4% of responses came from individuals aged 61 years or above. Over 57% of the participants had greater than three years of international business negotiation experience, confirming the appropriateness of our sample. Only 19% of the respondents had less than one year of international business negotiation experience. Over 52% of the respondents were in senior management, whilst 29% were in middle management, 61% had completed postgraduate studies, whilst 20% were educated to undergraduate level.

A two-step approach recommended by Anderson and Gerbing (1988) was utilized in analyzing the data using structural equation modeling (SEM). This was executed using confirmatory factor analysis (CFA) to provide the reliability and validity of our scales. It is also consistent with other business research (e.g. Chia Ling 2005; Hadjikhani and Thilenius 2005). Our resulting model had two components: a measurement model and a structural model. Substantive research in the social sciences has employed a two-step modeling approach for theory development and testing (e.g. Bollen 1989; Chia Ling 2005). In this approach the measurement model is separately estimated prior to the estimation of the structural model. By doing so, more reliable measurements were secured to avoid interaction between the measurement and the structural model. After running both measurement and structural models, our analysis shifted to calculation of the parameter estimates of the structural model in order to determine their statistical significance.

FINDINGS

The mean of each of our variables (on a scale from 1 to 5) are shown in table 2:

We analyzed the data by assessing the measurement model through CFA analysis, as the measurement items are required to provide adequate construct validity and reliability for the results of the data analysis to be credible (Ghauri and Gronhaug 2005). Putnam (2005) recommends the use of factor analysis within negotiation research due to its general popularity within the social science. An approach recommended by Anderson and Gerbing (1988) was utilized to assess the measurement model. A satisfactory measurement model using CFA demonstrates good reliability and validity (Anderson and Gerbing 1988). In this research, there was sufficient evidence that the indicator variables or questions really did measure the underlying constructs of interest and the model adequately fits the data. For both reliability and validity, there are a number of different ways that they may be measured using CFA. The model chi-square was 4029.865 with 1259 degrees of freedom, p<0.0001. The ‘normed’ or relative chi-square was (4029.865/1259) = 3.2. RMSEA=0.113, 90% CI for RMSEA=0.110; 0.117. The Comparative Fit Index (CFI) was 1.000 and the Goodness of Fit Index (GFI) was 0.945, and consistent with the fit statistics suggested by Stevens (2002). Fornell and Larcker (1981) recommend a minimum composite reliability of .60. An examination of the composite reliabilities revealed that all meet that minimum acceptable level. The variance extracted estimates assess the amount of variance that is explained by an underlying factor in relation to the amount of variance due to measurement error. Fornell and Larcker (1981) suggest that constructs should exhibit estimates of .50 or larger. Estimates less than .50 indicate that variance due to measurement error is larger than the variance captured by the factor. The variance extracted estimates meet this minimum threshold, so the validity of our latent constructs as well as the associated constructs was acceptable. Results for various reliability estimates are shown in table 3.

Data analysis thereafter focused on assessing the structural model fit. The aim of the structural model is to determine if the data fits the model well (Chia Ling, 2005). A more ‘parsimonious’ model was re-
The Negotiating CEO: Examining the Role of Social Power in International Business Negotiations

estimated yielding the following fit statistics; The chi-square for the model was 477.693 with 276 degrees of freedom (p<0.001). The normed chi-square was 1.73. RMSEA was 0.065; the 90% CI was 0.055; 0.075. The Comparative Fit Index (CFI) was 1.000 and the Goodness of Fit Index (GFI) was 0.986. These values are indicative of a model that fits very closely with the data. All indices were also better than those in the previous measurement model. Analysis then moved to the deduction of the correlations between the constructs of this structural model to ascertain relationships between the dependent and independent variables. The results are presented in Table 4.

Table 4 omitted but would have been here

Hypotheses one stated “The perceptions of having more information power by one of the negotiating parties will lead to a distributive negotiation process.” Examination of Table 4 revealed that the correlation between information power and negotiation process was 0.092, and significant at the 5% level (t=2.183; p<0.05). The hypothesized relationship was negative, suggesting an integrative negotiation process. The results do not support the hypothesis but suggest that the perceptions of having information power in either negotiating party will lead to an integrative negotiation process.

Hypothesis two stated, “The perception of existing expert power in either negotiating parties will lead to an integrative negotiation process”. The correlation between expert power and negotiation process was negative and not significant and hence the hypothesis is not supported at the 10% level (t=1.171; p>0.10), and the results cannot be verified.

Hypothesis three stated, “The perception of having greater legitimate power by one of the parties will lead to an integrative negotiation process”. The correlation between legitimate power and negotiation process was negative and not statistically significant. These results do not support the hypothesis at the 10% level (t=-0.948; p>0.10), and the results cannot be verified.

Hypothesis four stated, “The perception of reference or the use of referent power by either party will lead the negotiation towards an integrative process”. Examination of Table 3 revealed that the correlation between referent power and negotiation process was 0.145 and statistically significant at the 5% level (t=2.282; p<0.05). The results support the hypothesis that the existence of referent or the use of referent power by either party in a negotiation will lead to an integrative negotiation process.

In summary, H1, H2 and H4 are thus supported by these results in terms of significance. Unexpectedly, however, information power was positively correlated with integrative and cooperative outcomes and processes. The correlation related to H3 was negative but not statistically significant so this hypothesis was not supported.

DISCUSSION AND IMPLICATIONS

We proposed that the perception of having an information advantage that yielded information power in the negotiation process would lead to the process being distributive in nature i.e. a competitive or one-sided process. It is interesting to note that analysis did not support this hypothesis even though it was statistically significant. Literature regarding information power was divided between two streams. Firstly, it had pointed out that information power may be applied in a distributive manner by allowing the information to be manipulated so that parties can manage the options that are available to the other. The counter party’s choice of behavior for example was affected by transmitting positive information to the other party about the option they want them take, or by hiding information about an option they don't want them to take (Raven 1992) thereby creating suspicion. This use could be perceived as a tactic (e.g. Kim et al. 2005). Secondly, literature indicated information gathered may also give the impression of adequate preparation for the negotiation and thus integrative processes (e.g. McCall and Warrington
1984). Our result may however be explained by observing Brett et al. (1998) who suggested that different nationalities have different perceptions of information power, and hence the affect on the overall negotiation process as perceptions of these can be seen as varying between international negotiators.

Although literature indicated that information power could lead to distribution, our findings suggest an association to integration. Information on the other party may therefore not be perceived as a tactic or a negative element within the negotiation itself, but may for instance be seen by the parties involved as adequate preparation for the negotiation, in terms of gaining information on each of the parties. This preparation may therefore be perceived in positive terms as an effort to gain better understanding of the international partners and companies involved, and result in more integrative process frames for both the parties.

We hypothesized that the perceptions of having expert power is inferred to better the knowledge between international negotiators, and hence lead to an integrative negotiation process frame. Viewing the opposite party as superior in terms of, for example technology, management or know-how could alter the power perceptions, and thus affect negotiations. Lewicki, Barry and Saunders (2006) went further to suggest that expert power would aid in clarifying operational details. If the negotiating party acts in a negative way with their expertise, this may lead to distributive negotiations (Anderson and Thompson 2004; Kim et al. 2005). The perceptions of this expertise could also vary from culture to culture (Ghauri and Cateora 2006).

This study proposed that the perceptions of legitimate power (e.g. top management) at the negotiation would lead to an integrative process, through the presence of decision makers in the negotiation. The results cannot be verified due to lack of statistical significance, though the direction can be observed to be negative. The perception of legitimate power stemming from top management may be negative if used inappropriately with some nationalities. Power if used positively can lead to favorable perceptions of realized power to both the parties. Hence if legitimate power is used negatively, a possibility of distribution is possible.

The existence of reference or the use of referent power was inferred to create the potential of future business, and hence lead to an integrative negotiation process. Our analysis supports this hypothesis to a significant level. The potential for reference can create a cooperative or integrative atmospheres and outcomes in negotiations (Khakhar and Rammal 2013) state that informal connections in IBNs greatly aid outcomes in the Middle East). Cavusgil and Ghauri (2002) point out that the strong market position of either of the negotiating parties (implying the possibility of reference through dominance in the market) is an element that influences the negotiation process. The ways international negotiators process information about such power may usually differ, and even if the negotiations are cooperative or competitive, would depend essentially on the orientations of the situation in terms of personal motivation (Khakhar and Leigh 2015) and general willingness to use this referent power. This is also consistent with existing theory and the conceptual model by Ghauri (2003) i.e. power is relative to both sides in an negotiation process, and one may have relatively greater power, if there is an equal ‘dependence’ Ghauri (1983;1996) by an opposite party. The potential of referred business may create this dependence as also implied by Khakhar and Rammal (2013).

With regards to the implications of this finding, it will also depend on whether parties actually use referent power and their individual motivation to share personal points of reference and connections. Negotiators’ personal motivational issues can come from personal gains (e.g. bonuses for successful negotiations), possibility of developing connections as well as value placed on personal performance (Pitulla and Nicholson 2005). A negotiators self-motivation may influence the negotiation, as there are perceptions the opposite side can make on the strength of the particular team by observing individual motivation of their members Manning and Robertson (2004) also suggested that the negotiator has to be
motivated at a personal level to achieve integrative processes. Brooks and Roes (2004) argue that negotiation processes are also influenced by the reward structure as well as power relations. Game theory however, stated individuals make decisions that ultimately lead to self-gain (e.g. Myerson 1999), and would all mental processes to achieve this personal gain. The Theory of the Firm also suggested the notion of individual ‘opportunism’ implying individual motivations (Muringham et al. 1999). It is interesting to note that Myerson (1999) states that all human actions are dictated and altered, at either an explicit or implicit conscious level for self-gain. In this situation the best outcome would be some monetary gain at the personal level (e.g. bonuses for performance), and at worst, no loss at the individual level (Duvalett et al. 2004). Hence we can infer that if an international negotiator thinks that there is something to be gained at an individual level (through reference and hence referent power), his or her actions (e.g. motivations) could be altered in achieving this personal gain dictating corresponding behaviors. This resulting behavior has implications for both integrative and distributive negotiation process frames. If it does, concessions could be made in the short term in view of long-term business and relationships. This is prevalent in literature concerning Chinese negotiations (e.g. Fang 1997) and their importance based on forming future relationships. If referent power is not used then short-term concessions that could have been made, would not arise. Given this, the issue of trust has to be taken into account (Khakhar and Rammal, 2013) i.e. giving the impression of future reference when it does not exist (and if this is realized by either of the parties) may be viewed as a tactic, possibly leading to distributive or competitive negotiation frames. Our analysis only indicates that the perception of reference leads to integrative process frames and that the relative perception of genuine referent power can lead to integrative process frames. We have not explored the relationship between the genuine or non-genuine perception of referent power in the international business negotiation process, leaving this question open for a potential base of future research. However in a study by Hadjikhani and Thilenius (2005), higher trust was positively associated with commitment in business networks. Hence it may be possible to infer that a greater the relationship trust between the parties would entail a greater commitment between the parties in a business network implying a genuine use of referent power. Again, for genuine future referred business, the element of trust is important (Kim et al. 2005) as there is a possibility that it could be perceived as a tactic (Khakhar and Rammal, 2013).

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

It is important to note some of the limitations of the current study. Where possible we recommend further investigation to enhance our findings. Even though the response rate is comparable to studies of a similar nature in social sciences, it is still subject to the common biases associated with similar methods. Examples of these biases include sample selection bias and self-reporting bias.

Secondly, this study highlighted the important elements of social power inspired by Raven (1965), but did not study the impact of each of the elements on different parties in the negotiation, i.e. dyads. Instead, as previously stated, the view was taken that the underlying factors would apply to all parties, and ultimately their interests in the negotiation could be both mutual and conflicting in terms of price or cost (Cavusgil and Ghauri 2002; Ghauri and Usunier 2003). As a result, we did not distinguish on the operational types of negotiations. This study approached the topic from a culture-neutral point of view. Therefore, the current study is limiting in this area. However, given this, an interesting area of further investigation with regards to individual motivation arises; researchers could assess the perceptions of personal motivation and the use of referent power in different types of negotiations (and distinguishing negotiating parties), or varying perceptions of motivations in different cultures or nationalities (e.g. applying the scales in this study between competing sets of cultures in international business negotiations can be proposed to infer conclusions that could be added to various prescriptive cross-cultural issues). Could it also be possible that motivated or ‘eager’ negotiators (over stating there referent power or connections) cause competitive negotiation processes, with varying results for type of negotiations as well as potential cultural parties involved? As this research report did not examine these areas, further study is recommended to build
upon our conclusions. Again, these perceptions could be either culture or negotiation specific and addressing these points could also generate a deeper understanding of the complexity of international business negotiations.

The third limitation can be viewed in general terms by the use of questionnaires. Questionnaire surveys are a good method of researching negotiations if the objective of the study is to deduce perceptions, and assess the distribution of those among the population. A major drawback of questionnaires, particularly in international negotiation research, is that the questions that are asked are couched in the researcher’s frame of reference, and hence run the great risk of missing important information that is outside that frame (Wright 1990). The influence of different researchers means that survey items which may be inferred by one researcher may not be precisely those inferred by another researcher. The questionnaire items obtained by the researcher in this research are obtained from the ‘lens’ or the mind-frame of the researcher, and therefore experience a degree of subjectivity, in relative terms to other researchers who may have conducted the same study.

The fourth limitation relates to our methodology including measurement and structural models; it has to be noted that a SEM is not absolute, but relative per se. We accept that simplifying subjective concepts in negotiation study to linear structural equations may not reveal the true complexity and dynamism of negotiations themselves. Although structural equations analyses are intended for, and very effective in hypothesis-testing analysis amongst a comprehensive set of variables, it remains a statistical approach for determining causality, not a temporal one. Negotiations vary and their related variables may also alter with time (Ghauri and Usunier 2003). Repeating the study using different sequences of actual negotiations can, however, be a very difficult task and may significantly reduce the sample size required for a SEM method. The possibility of following a negotiating team within the frame of one (or several related) business deals for a longer period of time might yield important new insights into negotiation process. To do this, either a researcher might be present during sequential negotiations, or participants would be asked to keep a protocol or complete questionnaires of their actions at every stage of the process (Agndal 2007).

Another important objective would be to determine how training should be designed to help negotiators act collaboratively and the use of certain forms of power. At the same time, can negotiators also learn assertive behavior (or learn to alter power dynamics) to probe and test the other party’s limits in an aim to achieve a more favorable outcome as suggested by Khakhar and Leigh (2015).

CONCLUSION

Research on international business negotiation has been underway for 35 years and has developed within two major paradigms: the macro-strategic, which focuses on organizational wholes, and the micro-behavioral, which focuses on individuals (Weiss 2006). This research report adds to the micro-behavioral stream focusing on individuals and the bases of social power. The purpose of this research was to further the empirical understanding of factors related to international business negotiations and concepts of social power, and their link to corresponding processes. Previous prescriptive studies, although extremely useful in contributing to the understanding of often complex and dynamic negotiation processes, are sometimes lacking in quantitative analysis of real-life negotiation experiences.

Gaining an empirical understanding of the factors studied will add to the existing body of academic and practical knowledge in a specific way. The study of international business negotiations is often subjective and theories about them are constantly being updated. An existence of a body of empirical analysis will aid the evolution of the discipline for both scholars and practitioners.
Successful negotiation experiences should result in both parties feeling more satisfied with the relationship, thus enabling the parties to reap the benefits stemming from a long-term involvement. Thus, negotiation can be examined as a management mechanism that can allow both parties to benefit from the experience and move toward a stronger relationship (Atkin and Rinehart 2006). Research that explores the impact of negotiator characteristics on negotiations will, we believe, facilitate the creation of these strong relations through the pragmatic understanding of the impact of these individual level characteristics.

REFERENCES


The remainder of the references and all of the figures and tables cited in this paper are omitted due to space considerations. Interested parties are invited to contact the author for a complete copy of the paper.
JIT and Small Companies

Key words: Just in Time, Kanban, Total Preventive Maintenance, Total Quality Control

WHAT IS JIT?

Just-in-time manufacturing means producing the necessary items in necessary quantities at the necessary time. It is a philosophy of continuous improvement in which non-value-adding activities (or wastes) are identified and removed. Putting this concept into practice means a reversal of the traditional thinking process. In conventional production processes, units are transported to the next production stage as soon as they are ready. In JIT, each stage is required to go back to the previous stage to pick up the exact number of units needed.

COMPONENTS

- Production Leveling
- Pull System
- Kanban system
- Good Housekeeping
- Small Lot Production
- Setup Time Reduction
- Total Preventive Maintenance (TPM)
- Total Quality Control
- JIT Purchasing
- Line Balancing
- Flexible Manufacturing
- Small-group Activities
LONG-TERM COMMITMENT

Some operational issues also need alternative thinking to evolve. Taking the concept of Production Leveling (producing the same quantity and mix of items everyday), the small suppliers lack bargaining power at both ends. One is when they purchase, the quantity is normally small and they do not get any discounts. Second is when they supply to the large manufacturer. The lots are small and they are at the mercy of the manufacturer, because in JIT the commitment is for long term. So the price is literally dictated by the large manufacturer who procures from small suppliers.

Subsequently they have to cut the cost and quality is at peril. This defeats another component of JIT – TQC. The number of defective items increases and rejection rate also increases. It, in fact is against the very principles of Kaizen (waste in the form of defective units). Moreover it keeps adding to the total cost of the manufactured item because the loss incurred by way of defective items has to be compensated by non-defective parts.
REQUIREMENTS AND PROBLEMS

One of the key requirements of JIT is flexible manufacturing system (FMS), which requires the service of “multi-function” workers. Implementation of FMS may not possible for the small manufacturing firms owing to the lack of expertise to simplify the design of flexible manufacturing system. Even if the firm decides to train the supervisors, they will not be able to send them for training owing to their lean workforce.

To ensure continuous supply of materials, the firm can never risk breakdown maintenance. Essentially the firm has to adopt Total Preventive Maintenance. Here again cost constraint acts as a deterrent.

Another system requirement is Material Requirement Plan or Manufacturing Resource Planning at a higher level. Again cost constraint in computerization will be another problem faced by small supplier.

DESIGN

JIT manufacturing focuses on

- Elimination of waste
- Implementing flow
- Implementing pull

Variable demand

Principles of flow, takt time, level scheduling and pull (Kanban) all break down when attempting to serve variable demand with a large variety of products

(*Takt time is the time between completion of each piece)

–The JIT strategy was designed for situations with relatively stable demand and largely for replacement products (Womack and Jones, 1996).
ARE THE OBJECTIVES BEING DEFEATED?

Primarily for the manufacturer to run with low level of inventories, flawless supply of components is required. This may force the supplier to hold above-normal stock given the Indian situation of infrastructure problems. When this is thrust, a large portion of the working capital of the small supplier gets locked up in the inventory.

Ultimately the supplier is forced to take loans to meet the shortfall in working capital. The lending institutions always doubt the credit rating of small suppliers and they end up paying a higher rate of interest. This increases their total expense and is reflected in the product. This is passed on to the next stage resulting in a cascading effect.

On the contrary the large manufacturers normally have a better credit rating and can borrow at a lesser interest rate. If they can stock the inventories it will be relatively less expensive. In the process of adapting JIT this is one of the impediments.

ALTERNATE

Large manufacturers pioneered the components of JIT, and thus it is likely that some of them do not match small business characteristics. Different pathways may be chosen depending on the situation faced by the company, however some generic solutions are possible.

1. If the small suppliers demonstrate more reliability and consistency the problem of carrying large inventory will not be there.
2. Once this is achieved the problem of meeting additional working capital is also taken care of automatically. The locking of working capital is avoided.
3. When the supplier promises consistency, naturally his purchases will also be fairly regular and he can bargain on the purchase price.
4. Training need not always be provided ‘off the site’ and by training the supervisors and workers ‘on-site’ their skills and subsequently quality of the product can be improved.
5. Many corporate bodies have vendor development department, which can help to solve the problem of training the supervisors by extending the service of their executives to conduct training sessions.
6. The corporate bodies also have access to a much large and knowledgeable work force in designing the manufacturing system. They can help the vendors to develop the FMS.

Still it leaves the questions of Total Preventive Maintenance, MRP and post-training attrition unanswered. Small firms must develop their own solutions for these problems, which will work in their factory.

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Spare Parts Requirements Strategy for Plant Operations

Keywords: Inventory Management, Inventory Requirement Planning, Financial Risk, Data Mining

INTRODUCTION

Manufacturing systems, power plants, and aviation industries become the part and parcel of the people requirement nowadays (Karsten & Basten, 2014). However in this industry, the biggest challenge is to maintain the availability of the system and the common practice to avoid the failure is to replace failure compare with a functioning spare part. Obviously, this strategy has a trade-off between cost of holding the stock and availability when it’s needed (Karsten & Basten, 2014). For instance, (Flint, 2006) stated that the commercial aviation industry has as much as $30 billion worth of spare engines on stock. (Cohen, Agrawal, & Agrawal, 2006) indicated that the spare part business has contributed for about 8% of United States gross domestic product. Being out of stock in semiconductor industry has created opportunity loss of ten thousand of euros per hour (Kranenburg, 2006).

In view of this situation, process facility is required to have an effective inventory management (Hassan et. al, 2012). (Kennedy, Wayne Patterson, & Fredendall, 2002) stressed that the spare parts inventory management is the backbone of maintenance policies as the function used to maintain equipment in working condition. However, the biggest challenge faced by the inventory management player is the spare parts demand forecasting (Pham, 2006). According to (Bharadway & Silberschmidt, 2011) it is constrained by the issue holding the stock and the penalty of being stock unavailability. In previous literature, (José Roberto do Regoa, 2011; Pierskalla & Voelker, 1976; Kennedy et al., 2002; Nahmias, 1981) discuss rigorously about the maintenance inventories and policies, procurement strategies, inventory control and demand forecasting.

Besides having various techniques on effective inventory management, it is good starting point to analyze the optimum spare part inventory level by using risk based approach (Ibrahim et. al, 2010). Furthermore, risk based approaches are used in many sectors of industry and for prioritizing different types of actions; for example, there are risk based approaches in the process industry to manage maintenance and inspection and there are standards or guidance documents to implement these approaches (ASME,2003;API, 2000;API,2002;EEMUA,2006).

RISK QUANTIFICATION PROGRAM

Spare parts have great influence on all equipment reliability of process facility. For the case of critical spare parts this could lead to severe consequences like excessive downtime cost, safety performance and so on. Furthermore, failure of equipment incurred unavailability of the plant, which may prolong with the inadequacy of spare parts (Hassan et. al, 2012). In order to models the combination of the spare parts
reliability in which the causes of equipment failure and spare parts adequacy, it can be done using the following equation:

\[ S = K^j p \] (1)

where

- \( S \) = Number of spare parts failure combination
- \( K \) = possible equipment failure
- \( j \) = number of spare parts
- \( p \) = failure observation in periodic basis

\( K \) value of possible combination is primarily obtained from either expert judgment or historical failure data of the equipment. The \( j \) is referring to the number of spare part used in the equipment and \( p \) is acquired based on periodic time. For example, let \( K = 3 \), thus total combination of \( S \) for \( j = 4 \) and \( p = 2 \) for failure observation in half yearly basis (2) is 6561 possible combination. The summary of the spare parts failure combination is depicted in table 1.

<table>
<thead>
<tr>
<th>Table 1: Spare Failure Combination</th>
</tr>
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<tbody>
<tr>
<td><strong>Quarterly</strong></td>
</tr>
<tr>
<td>( (p = 4) )</td>
</tr>
<tr>
<td>Spare parts</td>
</tr>
</tbody>
</table>

In the table, the spare part is observed from two different equipment that having the same utilization of spare parts which are spare part A and B. From the observation, the \( K \) value for spare part A and B are assigned to value of 0, 1 and 2. The value of 0, 1 and 2 is determine from the judgment that if the equipment fail to perform its function, it may require certain amount of spare part to be installed in order to perform the function. Based on the above, the spare part might experience:

<table>
<thead>
<tr>
<th>Table 2.2: K Value</th>
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<tbody>
<tr>
<td><strong>K Value</strong></td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

By taking into consideration of the three possibilities states of equipment failure, \( K=0 \), define as none of spare part required for the equipment, \( K=1 \), means one unit of spare part need to be installed during the period and \( K=2 \) means two unit of spare part need to be installed. The possible combination for spare parts A and B based on the above table is assigned as 01000102.

**SPARE PARTS FAILURE PROBABILITY TABLE**

Once the value of spare parts failure combination are decided, then the next step is to determine the probability that can be used to generate the probability of spare parts failure. In order to achieve this, spare parts breakdown history will be observed based on years of the equipment operated. In this research, the breakdown history is taking into consideration the history of the spare parts starting from the plant operated which is 24 observations (from year 1991-2014). The summary of the observation is illustrated in table 3.
Table 3: History of Equipment 1-Spare Part A (Total Observation: 24)

<table>
<thead>
<tr>
<th>No of Observation</th>
<th>Year \ Quarter</th>
<th>1\textsuperscript{st} half</th>
<th>2\textsuperscript{nd} half</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1990</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
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<td>1</td>
<td>1</td>
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<tr>
<td>3</td>
<td>1992</td>
<td>1</td>
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</tr>
<tr>
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<td>1993</td>
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</tr>
<tr>
<td>5</td>
<td>1994</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
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<td>0</td>
<td>1</td>
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<td>9</td>
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<td>0</td>
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</tr>
<tr>
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<td>1999</td>
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<td>11</td>
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<tr>
<td>12</td>
<td>2001</td>
<td>0</td>
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</tr>
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<td>16</td>
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<td>1</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>2007</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>2009</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>2010</td>
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<td>2</td>
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<td>21</td>
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<td>1</td>
<td>0</td>
</tr>
<tr>
<td>23</td>
<td>2013</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>24</td>
<td>2014</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

The probability function depends on the ability of the spare parts to perform its intended function. Thus, an observation of spare parts failure from each impacted equipment will be taken into consideration. In this research, for each of the \( j \) value it can have a set of breakdown history in order to determine the probability value. The probability of the \( j \) spare parts is given by:

\[
Pr(j) = \frac{d}{z} \tag{2}
\]

where

\begin{itemize}
  \item \( Pr \) = spare part probability
  \item \( d \) = number of spare part breakdown history
  \item \( z \) = number of observation
\end{itemize}

For example, in 24 observation for spare part A in Equipment 1, there are two possibilities that are assigned for ‘1’ and ‘0’. In possibility of ‘1’, spare part A facing 8 times of down time and 8 is divide by 24 resulting \( Pr(1) = 0.33 \). While for possibility of ‘0’, 16 is divide by 24 resulting \( Pr(0) = 0.67 \). On the other hand, for spare part B, there are three possibilities which are ‘2’, ‘1’ and ‘0’. For the possibility of ‘2’ the total down time is 2 and 2 is divide by 24 resulting \( Pr(2) = 0.083 \), while the total of ‘1’ is 10 equivalent to \( Pr(1) = 0.42 \) and ‘0’ is 12 equivalent to \( Pr(0) = 0.5 \). The summary of the probabilities for are depicted in table 4.
Table 4: Spare Part Probability Table

<table>
<thead>
<tr>
<th>Spare parts</th>
<th>1st half</th>
<th>2nd half</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pr (0)</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>0.67</td>
<td>0.50</td>
</tr>
<tr>
<td>Pr (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.033</td>
<td>0.46</td>
</tr>
<tr>
<td>Pr (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0.04</td>
</tr>
</tbody>
</table>

The value of the probability is implemented in accordance to the value of the combination. However, the probability is vary from one period to another period. For instance, if the observation done in quarterly basis, the value of probability will be observed on that particular quarter. While the next observation done, might show different in terms of probability value. Summary of probability result and combination is showed in table 5.

Table 5: Probability with Spare Parts Failure Combination

<table>
<thead>
<tr>
<th>Spare parts (s = 2)</th>
<th>1st half</th>
<th>2nd half</th>
<th>Total Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Probability (Pr(j))</td>
<td>0.67</td>
<td>0.46</td>
<td>0.63</td>
</tr>
</tbody>
</table>

In the above table, the first level of possible combination can be assigned as 0100010202 which is comprised of spare parts A and B in two different equipment. The total probability of the spare parts possible combination for 0100010202 is 0.67x0.46x0.63x0.67x0.50x0.29x0.54x0.08 = 0.000815. The total set of possibilities for this research is 6561.

**DETERMINATION OF FAILURE IMPACT VALUE**

This section will discuss the development of Failure Impact Value due to the spare parts not available in the plant. In section 2.0, the failure of the spare parts are referring to the situation of the spare parts cannot perform its intended function and it needs a replacement. Simultaneously, the failure of the spare parts to perform its function may result the plant suspend its operation for the maintenance work. This scenario will lead to production and financial loss to the company. In this research, the calculation for the failure impact can be done by using the following equation:

\[ I = \sum (V \times S \times D \times j) \quad (3) \]

where:
- \( I \) = Impact value (RM) for each possible combination
- \( c \) = possible combination
- \( V \) = financial loss (RM)
- \( S \) = plant condition rate
- \( D \) = installation day
- \( n \) = possible equipment failure, 0, 1, or 2
- \( m = 1 \) and 0.8
- \( d = 8 \) and 10
- \( j = \) spare part, A1, A2, B1, or B2
The plant has the capacity to produce 2100MT of urea per day and current market price of urea granular is approximately USD476.20 per tan. By multiplying the value of the production capacity and urea price, the total value of financial losses is equivalent to RM4, 200,084.00 (conversion of USD1=RM4.2). Second element in the total impact value is the plant condition rate. If the plant experience total operation shutdown, the S will be assigned as 1. In this case, the value of 1 is referring to the operation reach 100% shutdown. On the other hand the plant also experienced slow down due to spare part problem and need to be replaced. For this occasion, the plant production is still running but it can only performed its function at 80%.

The balance of 20% is meant for installation purposes. In slow down situation the S will be assigned as 0.8. The third element in impact calculation is the numbers of days to perform the installation of the spare part. In this research, the value of D is given by d=8 and d=10 which referring to numbers of day to perform the spare part installation until it stabilize the operation. D_{10} is assigned to Equipment 1 as, it require 10 days to perform the installation work. However, Equipment 2, require 8 days before it can perform its function back to normal and it is assigned as D_{8}. The value for V,S and D will be depending on the j set of spare part possible failure from the equipment.

**SPARE REQUIREMENT USING CLASSIFICATION METHOD**

In this classification method, the possible of spare parts requirement option from a specific inventory cost and risk calculation is classified based on the quantity of the spare part required. Each class consists of an equal data interval along the dispersion of the Total Exposure that was discussed in chapter 3.0. In order to determine the class interval, the whole range of the spare requirement is generated from the lowest requirement until the highest level of consumption. In this scenario, the lowest level of requirement is considered 0 for DGS and 0 also for Br. And this requirement assumption, goes the same to the higher level of requirement for DGS which is 8 and for Br is also 8.

The selection of the quantity is discussed in detail in chapter 3.0 as it based on the probability failure for each of the spare part. So, this means the minimum number of each spare part can be from as low as 1 and as high as 8. The quantity requirement for DGS and Br is combined together in order to create the interval in which representing the value of the interval. The range of combination from each spare required is shown on below table.

<table>
<thead>
<tr>
<th>Table 6: Spare Part Requirement Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>30</td>
</tr>
<tr>
<td>40</td>
</tr>
<tr>
<td>50</td>
</tr>
<tr>
<td>60</td>
</tr>
<tr>
<td>70</td>
</tr>
<tr>
<td>80</td>
</tr>
</tbody>
</table>

Each of combination of the above, representing the predefined class of interval. Each interval such as for 01 in which stated that the quantity of DGS is 0 and the Br 1 will predetermine the value of total risk, total inventory cost and the range of the total exposure. A different result of Total Exposure are examined based on the low, medium and the highest quantity required from the optimization process.
The selection of the criteria was chosen due to the reason to look into the comparison of the classification from the perspective of total risk and spare part price. For the lowest criteria, the combinations of 00, 01, 02, 03, 04, 05, 06, 07 and 08 is examined. For the medium criteria, the combinations of 40, 41, 42, 43, 44, 45, 46, 47, and 48. And the last is the combination from the highest requirement of spare parts which are 81, 82, 83, 84, 85, 86, 87 and 88. The table below exhibited the class interval for DGS=0 and Br=1.

**Table 7: Spare combination 0 and 1**

<table>
<thead>
<tr>
<th>Total Exposure</th>
<th>Total Risk</th>
<th>Tinv Cost</th>
<th>Stock Spare Parts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>DGS</td>
</tr>
<tr>
<td>198,297.88</td>
<td>71,297.88</td>
<td>127,000.00</td>
<td>0</td>
</tr>
<tr>
<td>193,961.57</td>
<td>66,961.57</td>
<td>127,000.00</td>
<td>0</td>
</tr>
<tr>
<td>193,718.97</td>
<td>66,718.97</td>
<td>127,000.00</td>
<td>0</td>
</tr>
<tr>
<td>187,572.48</td>
<td>60,572.48</td>
<td>127,000.00</td>
<td>0</td>
</tr>
<tr>
<td>183,568.64</td>
<td>56,568.64</td>
<td>127,000.00</td>
<td>0</td>
</tr>
<tr>
<td>179,030.45</td>
<td>52,030.45</td>
<td>127,000.00</td>
<td>0</td>
</tr>
<tr>
<td>168,532.43</td>
<td>41,532.43</td>
<td>127,000.00</td>
<td>0</td>
</tr>
<tr>
<td>162,499.44</td>
<td>35,499.44</td>
<td>127,000.00</td>
<td>0</td>
</tr>
<tr>
<td>152,401.87</td>
<td>25,401.87</td>
<td>127,000.00</td>
<td>0</td>
</tr>
<tr>
<td>150,579.35</td>
<td>23,579.35</td>
<td>127,000.00</td>
<td>0</td>
</tr>
</tbody>
</table>

In table 7, the potential risk for the compressor on having only 1 unit stock of Br is from the range of RM23, 579.35 until RM71, 298.88. While for the inventory cost the requirement is slightly low as the cost is RM127, 000.00 in which it representing of only 1 unit of Br. Nevertheless, the total exposure for this selection of quantity combination on DGS and Br is from the range of RM150, 579.35 to RM198, 297.88.

**PERFORMANCE ANALYSIS OF VARIOUS COMPONENTS**

In this work, two validation schemes (Conventional Validation-ConV and 10-fold cross validation-CrossV (Kohavi, 1995)) are used to prove the reliability of the classification results. In a 10-fold cross validation scheme, the proposed combination components are divided randomly into 10 sets and training is repeated for 10 times. In Conventional Validation scheme (one training set and one testing set), 810 different total exposures are used. Out of the data extracted from 810 samples, the data extracted from randomly selected 486 samples (60%) are used for training and the data extracted from remaining 324 samples (40%) are used for testing. All the networks are trained and tested using total exposures data. In this section, the performance of the proposed method for classify 81 different classes of spare part capability is tested in terms of, Sensitivity (SE), Specificity (SP), Accuracy (AC) and Area under Curve (AUC) under different spare part components. The entire performance measures are defined below.

SE is the proportion of actual positives spare part components which are predicted positives spare part components and is written as:

\[
SE = \frac{TP}{TP + FN} \times 100
\]

(4)

SP is refers to the proportion of actual negatives spare part components which are predicted negatives spare part components and is computed as:
AC is the ability to classify those positives and negatives spare part components using the following equation:

$$AC = \frac{TP + TN}{TP + TN + FP + FN} \times 100$$  \hspace{1cm} (6)

AUC represents the overall accuracy of a test, with a value approaching 1.0 indicating a high sensitivity and specificity. AUC is calculated by:

$$AUC = \frac{1}{2} \left( SE + SP \right)$$  \hspace{1cm} (7)

where TP is true positive (the spare part components is positive and the test is positive), TN is true negative (the spare part components is negative and the test is negative), FP is false positive (the spare part components is negative but the test is positive), FN is false negative (the spare part components is positive but the test is negative).

### Table 8: Performance Results for Various Spare Part Components with k-NN Classified

<table>
<thead>
<tr>
<th>Validation Method</th>
<th>Type of Spare Part Components</th>
<th>Sensitivity</th>
<th>Specificity</th>
<th>Accuracy</th>
<th>AUC</th>
<th>Time (s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ConV</td>
<td>SP00</td>
<td>99.861</td>
<td>99.010</td>
<td>99.767</td>
<td>99.436</td>
<td>0.317</td>
</tr>
<tr>
<td></td>
<td>SP01</td>
<td>99.861</td>
<td><strong>99.057</strong></td>
<td><strong>99.768</strong></td>
<td>99.459</td>
<td>0.162</td>
</tr>
<tr>
<td></td>
<td>SP02</td>
<td>99.861</td>
<td>99.022</td>
<td>99.767</td>
<td>99.442</td>
<td>0.833</td>
</tr>
<tr>
<td></td>
<td>SP03</td>
<td>99.861</td>
<td>99.046</td>
<td><strong>99.768</strong></td>
<td>99.453</td>
<td>0.017</td>
</tr>
<tr>
<td></td>
<td>SP04</td>
<td>99.861</td>
<td>99.034</td>
<td>99.767</td>
<td>99.448</td>
<td>0.409</td>
</tr>
<tr>
<td></td>
<td>SP05</td>
<td>99.862</td>
<td>98.944</td>
<td>99.766</td>
<td>99.403</td>
<td>0.529</td>
</tr>
<tr>
<td></td>
<td>SP06</td>
<td>99.861</td>
<td>99.010</td>
<td>99.767</td>
<td>99.436</td>
<td>0.016</td>
</tr>
<tr>
<td></td>
<td>SP07</td>
<td>99.862</td>
<td>98.958</td>
<td>99.767</td>
<td>99.410</td>
<td>0.099</td>
</tr>
<tr>
<td></td>
<td>SP08</td>
<td>99.862</td>
<td>98.997</td>
<td>99.767</td>
<td>99.429</td>
<td>0.086</td>
</tr>
<tr>
<td></td>
<td>SP40</td>
<td>99.862</td>
<td>98.984</td>
<td>99.767</td>
<td>99.423</td>
<td><strong>0.007</strong></td>
</tr>
<tr>
<td></td>
<td>SP41</td>
<td>99.861</td>
<td>99.057</td>
<td><strong>99.768</strong></td>
<td>99.459</td>
<td>0.793</td>
</tr>
<tr>
<td></td>
<td>SP42</td>
<td>99.862</td>
<td>98.997</td>
<td>99.767</td>
<td>99.429</td>
<td>2.120</td>
</tr>
<tr>
<td></td>
<td>SP43</td>
<td>99.861</td>
<td>99.034</td>
<td>99.767</td>
<td>99.448</td>
<td>0.833</td>
</tr>
<tr>
<td></td>
<td>SP44</td>
<td>99.862</td>
<td>98.971</td>
<td>99.767</td>
<td>99.417</td>
<td>3.750</td>
</tr>
<tr>
<td></td>
<td>SP45</td>
<td>99.860</td>
<td>99.079</td>
<td>99.768</td>
<td><strong>99.470</strong></td>
<td>3.444</td>
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<tr>
<td></td>
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<td>99.861</td>
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<td>99.767</td>
<td>99.442</td>
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<td>99.767</td>
<td>99.448</td>
<td>0.018</td>
</tr>
<tr>
<td></td>
<td>SP48</td>
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<td>98.971</td>
<td>99.767</td>
<td>99.417</td>
<td>0.066</td>
</tr>
<tr>
<td></td>
<td>SP49</td>
<td>99.861</td>
<td>99.034</td>
<td>99.767</td>
<td>99.448</td>
<td>0.052</td>
</tr>
<tr>
<td></td>
<td>SP50</td>
<td>99.861</td>
<td>99.022</td>
<td>99.767</td>
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<td>0.015</td>
</tr>
<tr>
<td></td>
<td>SP51</td>
<td>99.861</td>
<td>99.022</td>
<td>99.767</td>
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<td>0.317</td>
</tr>
<tr>
<td></td>
<td>SP52</td>
<td><strong>99.863</strong></td>
<td>98.901</td>
<td>99.766</td>
<td>99.382</td>
<td>0.162</td>
</tr>
<tr>
<td></td>
<td>SP53</td>
<td>99.861</td>
<td>99.022</td>
<td>99.767</td>
<td>99.442</td>
<td>0.833</td>
</tr>
<tr>
<td></td>
<td>SP54</td>
<td>99.861</td>
<td>99.034</td>
<td>99.767</td>
<td>99.448</td>
<td>0.017</td>
</tr>
<tr>
<td></td>
<td>SP55</td>
<td>99.861</td>
<td>99.034</td>
<td>99.767</td>
<td>99.448</td>
<td>0.409</td>
</tr>
<tr>
<td></td>
<td>SP56</td>
<td>99.861</td>
<td>99.010</td>
<td>99.767</td>
<td>99.436</td>
<td>0.529</td>
</tr>
<tr>
<td></td>
<td>SP57</td>
<td>99.862</td>
<td>98.984</td>
<td>99.767</td>
<td>99.423</td>
<td>0.016</td>
</tr>
</tbody>
</table>
Different performance resulted when $k$-nearest neighbors (k-NN) classifier was employed. Two types of validation, namely the Conventional Validation and 10-fold schemes, on the lowest, medium and high combination spare part criteria are adopted. This work briefly discusses on this particular spare part combination only since the other spare part combination analysis obtained the same result. Appendix A gives the details of performance results under other various spare part combinations. The maximum classification results are highlighted in Table 8 for 10% noise level with various spare part combinations.
DISCUSSIONS AND CONCLUSIONS

This paper presents a strategy in determining spare parts requirement by quantifying the value of risk and financial loss. Then, the classification method in data mining is used to decide the investment value of the spare part requirement in terms of risk and quantity. By looking from the aspect of financial risk value, it facilitate the inventory planner making a good judgment in terms of the spare parts requirement. The technique contributes as basic guidelines for the maintenance planner to plan their inventory spare parts for the maintenance activity.

Therefore the better judgment on equipment reliability is increased and indirectly the cost of inventory will be minimized. Ultimately, the developed technique will contribute to the performance of the plant operation in terms of decision making process towards maintenance and inventory requirement planning. On the other hand the technique also can be extended in other areas that dealing with risk management such as financial, insurance, property management where challenging risks of failure need to be managed within limited resources.

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The Roles Relationship Value and Trust in Franchising Relationship: The Evidence from Malaysia Franchise Sector

Keywords: Value, Trust, Franchising, Business Relationship, Malaysia

INTRODUCTION

There has been a major shift in ensuring the existence of an organization in its business life-cycle, especially in open markets. Paradigm shifts in business organization are needed in order for businesses to improve their market share and expand into new ventures. Firms have options to develop new business models such as franchising and licensing; these can be imitated and work in diverse economic systems and different geographical areas. Nevertheless, franchising is found to be the best option to enter for a new market either local or international markets (Quinn & Doherty, 2000). Frank and Stanworth (2003) argue that franchising is becoming more important in generating national economies and has attracted the interest of scholars, researchers, journalists, politicians, etc. in exploring the uniqueness of the franchise system. Furthermore, franchising allows for rapid and effective market penetration using franchisee resources such as financial capital, managerial talents and local market knowledge (Stanworth & Curran, 1999). For example, the US Sewing Machine Company, Singer, has successfully used franchising of its business by appointing enterprises to distribute its products and provide continuing customer support throughout the US market (Stanworth & Curran, 1999).

The franchise model has proven to be an effective business model. McDonald, one of the largest franchised fast-food restaurants in the world was established in 1955 and successfully ventured into over 119 countries across 35,000 outlets (McDonald, 2007). Others chains such as Hertz Rent-A-Car, A&W Restaurants, Holiday Inns, Burger King, Dunkin’ Donuts, Pizza Hut, Subway, KFC and Kenny Rogers Roasters also use franchise systems (Blair & Lafontaine, 2005). Despite the importance of value in the marketing discipline, research on customer value in B2B markets is still under-researched and is conducted at a conceptual level (Eggert & Ulaga, 2002; Ulaga, 2001). Relationship value (RV) is found to be a new research area and the measurement of value in a buyer-seller relationship is still an under-researched concept (Ulaga, 2003).

Furthermore, superior value provided by a firm is considered the key in creating and sustaining long-term buyer-seller relationships in B2B markets (Eggert, Ulaga, & Schultz, 2006; Ulaga & Chacour, 2001).

In the marketing literature, many research studies focus on service quality and relationship marketing, while research dealing with relationship quality is scarce (Athanassopoulou, 2009; Watson & Johnson, 2009). The development of the B2B relationship is crucial due to extensive customization and the long-term relationship with customers (Athanassopoulou, 2006). However, there is limited research on the application of RQ from a franchising context (Bordonaba-Juste & Polo-Redondo, 2008; Chiou, Hsieh, & Yang, 2004; Doherty & Alexander, 2004; Monroy & Alzola, 2005).
Therefore, this study focuses on the franchisor-franchisee relationship quality which is considered an important element in maintaining the franchising venture success over the long term. Additionally, Clarkin & Rosa (2005) highlight that the relationship quality between inter-firms parties ultimately determines the success of a franchise business. In the relationship quality (RQ) studies, there is a lack of consensus on the dimensions of RQ, though there is consensus that relationship quality is a higher order construct consisting of several distinct, but related dimensions (Skarmeas & Shabbir, 2011). In this study, the researchers have identified trust as the main construct of RQ in franchising relationship. The study also examined the effect of relationship value and RQ towards loyalty from the perspective of franchisees in Malaysia context.

LITERATURE REVIEW

Relationship value
Ulaga (2003) highlighted that the concept of relationship value is rooted in business and service marketing. Eggert & Ulaga (2002) define value from the industrial marketing perspective as the trade-off between benefits and sacrifices of a supplier’s offering, as perceived by key decision-makers in the customer’s organization, and taking into consideration the available alternative suppliers’ offering in a specific use situation.

In franchising, the customer who perceives value is the franchisee (as a buyer) who purchases the rights from the franchisor (seller) to operate the business in the franchise system. Meanwhile, franchisor who is the owner of trademark/business system will transfer the knowledge to franchisee and expect them to perform the business operating procedures and paying franchise fees as a continuity business supports by franchisor. The franchisee has made a huge investment (monetary and non-monetary) in the franchise business such as paying the franchising fees, initial set-up costs, etc. and looking for future success or profitability in the long term.

The franchisee perceived relationship benefits refer to franchisor products, brand, support service, standard operating procedures (SOP), training, marketing collaboration and other support as stipulated in the franchise agreement which refers to franchisor obligations. Moreover, the intrinsic trade-off between the value derived by the franchisee and the franchisor is considered an important driver in the relational exchange (Harmon & Griffiths, 2008).

The Relationship Quality
The concept of RQ is rooted in the field of relational marketing (RM) (Crosby, Evans, & Cowles, 1990; Dwyer, Schurr, & Oh, 1987). The key aspects of RM are important not only in gaining customers and creating transactions but also in maintaining and ensuring continual relationships (Grönroos, 1996). RQ is an important aspect in maintaining inter-firm relationships and is considered the essence of relationship marketing (Jap, Manolis, & Weitz, 1999). The high quality of relationships between firms will bind the relationship together (e.g. buyer-seller, franchisor-franchisee) and will create more stable exchange of goods and currency in the long term (Ford, 1980; Macneil, 1980). RQ is defined as “the customer is able to rely on the salesperson’s integrity and has confidence in the salesperson’s future performance because the level of past experience has been consistently satisfactory” (Crosby, et al., 1990). There is no commonly used or consensus of definition of RQ in the business-to-business context. Different dimensions are used to conceptualize RQ in order to align with the objectives of a study and this finding is supported by Roberts et al. (2003). There is no consensus in the literature on the set of dimensions that represents the construct of RQ (Athanasopoulou, 2009; Skarmeas & Robson, 2008). Many studies related to RQ employ different dimensions in various research contexts and business settings. In franchising, Modell (2010) highlighted that trust is considered as a key factor to of successful franchise relationship. Furthermore, trust in franchising is function as the bond to strengthen the relationship between franchisor and franchisee for mutually cooperation in business operations. Therefore, this study is employed trust as
main constructs of RQ which predicted as main a key factor for franchisor-franchisee relationship success.

**Trust**
In franchising, Dickey et al. (2007) and Chiou et al. (2004) have used trust as a major construct of RQ in their study, meanwhile Bordonaba-Juste & Polo-Redondo (2008) conceptualize RQ as the long term relationship which is characterized by high levels of trust and commitment. Ishak & Jantan (2010) also find, in their meta-analysis, that most cited studies in RQ are identified as trust as core dimensions of RQ. As align with Bordonaba-Juste & Polo-Redondo (2008), the researchers will include trust as the main constructs in franchisor and franchisee RQ.

Trust has generally been described through two different components, namely; trust in the partner’s credibility (or honesty/integrity) and trust in the partner’s benevolence (Ganesan, 1994; Kumar, Scheer, & Steenkamp, 1995). Credibility refers to the extent to which one partner believes that the other has the required expertise to perform the job effectively and reliably; while, benevolence refers to the extent that one partner believes that its counterpart has intentions and motives that are beneficial to the former when new conditions arise (Monroy & Alzola, 2005). Bordonaba-Juste and Polo-Redondo (2008) also support the importance of trust in the franchisor-franchisee relationship. They find that franchisee’s trust in their franchisor influences their levels of satisfaction and intention to continue to a greater extent in short-term relationships.

**Loyalty**
The concept of customer loyalty is frequently seen as an expected outcome of relationship marketing activities (Palmatier, Dant, Grewal, & Evans, 2006). Moreover, loyalty marketing is used interchangeably with relationship marketing (Egan, 2008). The loyalty concept has become an important factor in sustaining a firm’s competitive advantage (Dick & Basu, 1994). According to Rauyruen and Miller (2007), the concept of loyalty was not widely studied from the business-to-business perspective compared with the consumer context and the service market. The importance of loyalty in B2B is supported by researchers who use several constructs that reflect the key aspect of retention (loyalty) in long-term relationships such as relationship continuity, long-term orientation, repurchase intention, intention to continue, commitment, attitudinal loyalty and loyalty intention (Bordonaba-Juste & Polo-Redondo, 2008; Crosby et al., 1990; Dwyer et al., 1987; Ganesan, 1994; Palmatier, Dant, Grewal, & Evans, 2006; Selnes, 1998). In franchise businesses, loyalty is applicable for the franchisor and franchisee who continue to remain in the business.

**Hypotheses development**
Ulaga and Eggert (2006) found that relationship value is positively correlated with trust, commitment and satisfaction among senior purchasing managers (buyers) towards their supplier in US manufacturing industries. Moliner (2009) highlights that perceived value is identified as important in the formation of benevolence and honesty (trust dimensions). In the marketing field, loyalty is widely recognized as an important construct producing greater collaboration, fewer complaints, and greater profitability from the customer (Fiol et al., 2009; Yi & Jeon, 2003). In the context of business-to-business, loyalty is a key variable for studying long term relationships between firms (Fiol et al., 2009). De Wulf et al. (2001) found that the higher level of trust and commitment will lead to a higher level of behavioral loyalty. Furthermore, Auh and Shih (2005) highlight in their findings that the better the relationship quality a customer has with the vendor will result in greater customer loyalty. Based on the above discussion, the following hypothesis is generated:

H1: There is a positive relationship between relationship value and franchisor’s credibility
H2: There is positive relationship between relational value and franchisor’s benevolence.
H3: There is a positive relationship between franchisor’s credibility and loyalty.
The Roles Relationship Value and Trust in Franchising Relationship: The Evidence from Malaysia Franchise Sector

H4: There is positive relationship between franchisor’s benevolence and loyalty.

METHODOLOGY

This study focuses on the Malaysian franchise system and will exclude foreign franchise businesses from the research sampling. The respondents are franchisees who operated franchise business in Malaysia. This study is based on a quantitative approach, applying a cross-sectional study. A total of 400 questionnaires were distributed and 133 questionnaires were successfully returned. The usable response rate was 32 percent comprising 128 usable responses from a total of 400 questionnaires sent to franchisees. The questionnaire consists of three main sections, namely: Section 1 detailing the franchisee’s background data; Section 2 to measures the franchisee’s relationship value and trust, whereas Section 3 to measures franchisees’ loyalty.

The relationship value is measured by six item scales which indicate the respondents’ perception of the overall evaluation of comparable value derived from relationship benefits and sacrifices. The constructs of relationship value was adapted from Ulaga & Eggert (2006). Trust was measured by six items and commitment was measured by seven items. Trust items are adopted from various studies such as Ruiz-Molina, Gil-Saura, & Moliner-Velázquez (2010); Geyskens, Steenkamp, Scheer, & Kumar (1996) and Ganesan (1994). Franchisee loyalty was measured by two items each for behavioral and attitudinal loyalty. Four items of franchisee loyalty were adapted from Gilliland and Bello (2002). Most questions in Section 2 and 3 are mainly in a 5-point Likert Scale, while category and dichotomous scale was used widely in Section 1. All studied items were identified as reflective measurements.

FINDINGS

The measurement and structural model were tested by using structural equation modelling. The study uses SmartPLS software version 2.0 M3 in order to evaluate the validation of measurement scales and to test all hypotheses proposed (Ringle, Wende, & Will, 2005). PLS is used when ordinary assumptions such as multivariate normality and large sample size are not met. PLS is a statistical tool specifically designed to cope with small datasets, missing values and the presence of multi-collinearity often exists in samples used in marketing research (Graber, Czellar, & Denis, 2002).
In order to proceed with SEM-PLS, there are two stages for performing SEM which consist of a measurement model and structural model (Anderson & Gerbing, 1988; Hair, Ringle, & Sarstedt, 2011). Firstly, the measurement model is evaluated by checking the reliability and validity of each measure used in the framework model. The composite reliability and internal consistency reliability (Cronbach’s alpha) are evaluated to ensure each value follows the recommended evaluations. The cut-off value for composite reliability and internal consistency reliability (Cronbach’s alpha) is 0.7 (Bagozzi & Yi, 1988; Gefen, Straub, & Boudreau, 2000; Nunnally & Berstein, 1994). After all measurement of all constructs have adequate reliability and validity assessment, all the measurement items are kept for testing the structure model. As tabulated in Table 1, the AVE of all latent constructs ranges from 0.650 to 0.795, which exceeds the recommended level of 0.50 (Hair, Black, Babin, Anderson, & Tatham, 2006).

Table 5: Measurement Model

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
<th>Loadings</th>
<th>CR(^a)</th>
<th>AVE(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loyalty</td>
<td>LY1</td>
<td>0.832</td>
<td>0.936</td>
<td>0.784</td>
</tr>
<tr>
<td></td>
<td>LY2</td>
<td>0.917</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LY3</td>
<td>0.883</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LY4</td>
<td>0.908</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship</td>
<td>RV1</td>
<td>0.802</td>
<td>0.917</td>
<td>0.650</td>
</tr>
<tr>
<td>Value</td>
<td>RV2</td>
<td>0.672</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RV3</td>
<td>0.806</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RV4</td>
<td>0.845</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RV5</td>
<td>0.845</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RV6</td>
<td>0.852</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>TT01</td>
<td>0.887</td>
<td>0.921</td>
<td>0.795</td>
</tr>
<tr>
<td>Credibility</td>
<td>TT02</td>
<td>0.915</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TT03</td>
<td>0.872</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>TT04</td>
<td>0.814</td>
<td>0.852</td>
<td>0.658</td>
</tr>
<tr>
<td>Benevolence</td>
<td>TT05</td>
<td>0.870</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TT06</td>
<td>0.745</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^{a}\) Composite reliability (CR) = \(\frac{(\text{square of the summation of the factor loadings})}{(\text{sum of the square of the factor loadings}) + (\text{sum of the square of the error variances})}\)

\(^{b}\) Average variance extracted (AVE) = \(\frac{(\text{sum of the square of the factor loadings})}{(\text{sum of the square of the factor loadings}) + (\text{sum of the error variances})}\)

For discriminant validity, the square roots of AVE for each construct as presented in Table 2 are less than the AVE latent variables. In conclusion, the measurement model demonstrates adequate convergent validity and discriminant validity between the construct and the other constructs (Compeau, Higgins, & Huff, 1999).

In statistically term, the squared root of each construct’s AVE should be greater than its highest correlation with any other construct in measurement model (Hair, Hult, Ringle, & Sarstedt, 2014). As shown in Table 2, the squared roots of the AVE latent variables are greater than the correlations for each construct.
Table 6: Discriminant Validity of Constructs

<table>
<thead>
<tr>
<th>Construct</th>
<th>Benevolence</th>
<th>Credibility</th>
<th>Loyalty</th>
<th>Relationship value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benevolence</td>
<td>0.811</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credibility</td>
<td>0.789</td>
<td>0.892</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loyalty</td>
<td>0.631</td>
<td>0.663</td>
<td>0.886</td>
<td></td>
</tr>
<tr>
<td>Relationship value</td>
<td>0.661</td>
<td>0.659</td>
<td>0.683</td>
<td>0.806</td>
</tr>
</tbody>
</table>

Note: The square root of AVE values is shown on the diagonals and printed with bold; non-diagonal elements are the latent variable correlations.

For hypothesis testing, the path analysis was used to verify all hypotheses generated in this study, the PLS software generates estimates of standardized regression coefficients which refer to beta values for model path (Hammedi, Riel, & Sasovova, 2011). PLS uses re-sampling procedures known as nonparametric bootstrapping to evaluate the significance of the parameter estimates (Henseler, Ringle, & Sinkovics, 2009). In this study, the researcher uses 5000 resampling procedures for bootstrapping as aligned with previous studies in the business-to-business context (Hair et al., 2011).

Figure 3: Results of the Path Analysis.

Table 7: Path Coefficient and Hypotheses Testing

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Coefficient (B)</th>
<th>T-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship value -&gt; credibility</td>
<td>0.659</td>
<td>12.756**</td>
<td>Supported</td>
</tr>
<tr>
<td>Relationship value -&gt; benevolence</td>
<td>0.661</td>
<td>12.258**</td>
<td>Supported</td>
</tr>
<tr>
<td>Credibility -&gt; loyalty</td>
<td>0.437</td>
<td>3.680**</td>
<td>Supported</td>
</tr>
<tr>
<td>Benevolence -&gt; loyalty</td>
<td>0.287</td>
<td>2.439**</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Note: **Significant at p<0.05 based on one tail t-statistic table, as t-value greater than 1.65.
The results of the model estimation including standardized path coefficient, one-tailed significance (1.65) of the paths are presented in Figure 2. Based on Table 3, the results of hypothesis testing show that all hypotheses are at significance levels of p < 0.05. Relationship value is positively related to franchisor’s credibility, whereas franchisor’s credibility is positively related to franchisee’s loyalty. Moreover, relationship value has positively related to franchisor’s benevolence and it’s positively related to loyalty. Therefore, all hypotheses in this study; H1, H2, H3 and H4 are accepted. Overall, this model is explained 47% of variance in franchisee’s loyalty.

DISCUSSIONS

The positive relationship between relationship value and trust reflects that the higher the relationship value of the franchisee, the higher they tend to perceive themselves to be higher in trust. The positive relationship between relationship value and trust indicates that franchisees really recognize all valuable benefits received from the franchisor (such as training, services support, market analysis assistance, software support) over their investment in the franchise business. This suggests that when franchisors invest time and efforts to ensure that they are together with their franchisees, that they are more trusted by their franchisees. Therefore, franchisors shall look into the investment values (benefits - gives and gets components) received by franchisee in maintaining good relationship quality.

Moreover, the finding suggests that franchisor’s credibility and franchisor’s benevolence are important indicators of RQ in franchise relationships. Therefore, this findings are aligned with previous findings in which most of researchers in relationship marketing argued that trust is important indicators to measure RQ especially in business-to-business context (Caceres & Paparoidamis, 2007; Palmatier, Scheer, Houston, Evans, & Gopalakrishna, 2007; Ulaga & Eggert, 2006a). Therefore in the franchising context, the development of trust is important to establish a successful relationship. The positive relationship between trust and loyalty in this study reflects that franchisees with high levels of trust will stay loyal in the franchise system and contributes to a positive performance. Indeed, the higher level of trust in franchisees, the more likely they are to stay in relationship.

CONCLUSION

Our study is contributed advances in franchise knowledge. Specially, it’s showed that the relational value, trust and loyalty are inter-related in franchising relationship. Relationship value is important criteria in ensuring all benefits are received well by franchisees. Relationship value seems to become a mechanism for franchisees to evaluate the episode benefits / relationship benefits over episode/relationship sacrifice. Based on franchise investment (monetary and non-monetary) in the franchise system, franchisees will appreciate the support and assistance offered by franchisors in ensuring their franchise business success over the long term.

Furthermore, trust is identified as important factor in ensuring the franchisee’s to stay loyalty in franchise business. The existence of trust in franchise relationships will reduce transaction costs (monitoring costs) and lead to higher commitment in the franchise relationship. Trust is built in franchise relationships through the experiential interaction and communication between franchisor-franchisee whereas building and retaining trust is important to a successful franchise relationship. Future study is fully recommended to replicate this model in other business-to-business models such as importer-exporter, supplier-manufacturer, wholesaler-retailer etc. By considering existing research limitations, more effort for subsequent research is needed in identifying other antecedents and outcomes of RQ especially from the franchising perspective.

REFERENCES


Celebrity Endorsement and Consumers’ Attitude towards Advertisement

Keywords: Celebrity Endorsement, Attitude, Consumer Product, Perception, Malaysia

INTRODUCTION

Traditionally businesses build product and brand awareness among consumers in an incremental way. Companies need to spend a lot of money and time just to get consumers’ attention to their products and brands. The situation could be reversed if a celebrity is being employed in the advertisement. Product or brand endorsement by celebrities is commonly used by marketers to maximise the impact of an advertisement. Among the reasons for engaging celebrity in advertisement is to attract consumers to the advertisement message and to shorten the period of build product awareness among consumers. Product and brand awareness building can be achieved in a shorter period or even may result in an instant image impact. Celebrity is also being used to position a brand in order to make the brand more believable. Celebrity could attract consumers to try new products. Potential customers who continually see the advertisement with the celebrity may be convinced to try the product over time. The benefit of celebrity endorser is extensive. However study of celebrity endorsement for consumer daily products is limited compared to shopping and luxury products and brands.

LITERATURE REVIEW

Consumers’ attitude towards advertisement is the dependent variable in this study. While the independent variable is the endorser characteristics which are represented by four factors namely, (i) physical attractiveness, (ii) trustworthiness, (iii) expertise and (iv) product-brand congruency. The variables in this study will be elaborated below.

Attitude toward Advertisement
Attitude towards advertisement is referring to the consumer response towards the advertisement shown to them at a particular point in time. Consumer may show favourably or unfavourably reaction towards the advertisement.

Attitude towards advertisement have been studied from various perspectives such as the message, the product attributes, influencing the consumer’s belief. However in this study, the focus of the advertisement function is on creating a favourable attitude towards the advertisement. Favourable attitude could create a positive feeling on the consumer cognitively after being exposed to the advertisement as suggested by Shimp (1981). In other words, the aim of this study is to identify the cognitive changes in the mind of the consumers after being exposed to the endorsement made by the endorser in the advertisement.

Physical Attractiveness
Physical attractiveness is usually the first thing being judged on a person. Physical attractiveness is conveyed through weight, height and facial beauty of a person. Physical attractiveness of the endorser is closely related to a celebrity (Bardia et al., 2011). Physical attractiveness could create positive stereotype on a person. Physical attractiveness also could create the perception of credibility on the endorser (Ohanian, 1990). Earlier studies have found that attractive people are more successful in changing beliefs compared to the unattractive people (Ohanian, 1991). Consumers see the endorser as attractive when they
Celebrity Endorsement and Consumers’ Attitude towards Advertisement

feel there is something in common between them and the endorser. When using a celebrity as the endorser, the advertisement seems to be more effective. The advertisement could also enhanced the attractiveness of the celebrity (Chan et al., 2013, Till and Busler, 2000, Zhaid et al., 2002).

Consumers tend to develop a positive attitude toward both the product or brand and the advertisement evaluation when the physical attractiveness of the endorser is also congruent with the product that is being endorsed (Kahle and Homer, 1985). The endorser’s attractiveness could also significantly enhance the brand perception image (Hakimi et al., 2011, Tantiseneepong et al., 2012). Attractive communicator is able to persuade and gather greater agreement from respondents compared to the unattractive communicator (Chaiken, 1979). In another study using different attractiveness level, race and sex of the endorser, consumers are more inclined towards the advertisement and willingness to purchase the product when the advertisement is being endorsed by an attractive endorser (Petroshius and Crocker, 1989).

Trustworthiness
Trustworthiness can be defined as “the honesty, integrity and believability of an endorser” (Erdogan et al., 2001). Trustworthiness is also refers to the validity of the assertions or statement about the product made by the endorser. The concept of trustworthiness is from the perspective of the consumers. Trustworthiness is the most effective tool and useful way to make customer feel more confident and believe in the product (Hakimi et al. 2011; Ohanian, 1990). Therefore selecting the right celebrity with high degree of trustworthiness, honest and affinity would further enhance the advertisement (Shimp, 2003).

This type of celebrities would bring good faith and positive effects to customers’ value perception and thus may influence the customer purchase choice (Erkden and Swait, 2004). Trustworthiness could be an effective tool for weak product-related arguments advertisement (Chan et al., 2013; Priester and Petty, 2003).

Expertise
Expertise is referred to the perceived knowledge of the endorser in the advertisement (Erdogan, 1999). Knowledge about product was found to be the best measurement of the endorser’s expertise level (Ohanian, 1990). In another study, the more attractive the endorser is the higher is the level of perceived expertise of the endorser (Eisend and Langner, 2010). The more knowledgeable the endorser is about the product, the more effective it is for the endorser to persuade the consumer to by the product (Badia et al., 2011). This also leads to positive attitude toward the brand (Chan et al. 2013; Erdogan, 1999)

Product – Brand Congruency
According to Till and Busler (2000), product or product - brand congruency is referring to the right matching of the endorser’s image and the endorsed product or brand. If the endorser is congruent with the product advertised, it creates a high level of believability among the consumers (Chan et al., 2013; Kamins and Gupta, 1994; Kotler, 1997; Thwaites et al., 2012). An example is the case of using a ‘mother figure’ to promote people to consume healthy foods as the figure is closely related to food and health issues in a family. There the product-brand congruency is high in this case.

RESEARCH FRAMEWORK

Based on earlier research in the area (Salam and Wahid, 2012; Lutz, Mackenzie and Belch, 1983), part of their research framework was adopted in the study. It is postulated that the independent variables that represent the celebrity endorsement characteristics is related to the attitude towards advertisement in this study.
Research Objectives
The research objectives of this study are to explore: (i) the relationship of celebrity endorsement and attitude towards advertisement for consumer goods and (ii) the influence of the endorser impact on consumers’ attitude towards advertisement for consumer goods. Based on the literature review and research objectives, the following hypotheses were formulated.

H1: Physical attractiveness is related to consumers’ attitude towards advertisement.
H2: Trustworthiness is related to consumers’ attitude towards advertisement.
H3: Expertise is related to consumers’ attitude towards advertisement.
H4: Product-brand congruency is related to consumers’ attitude towards advertisement.
H5: Physical attractiveness, trustworthiness, and expertise and product-brand congruency have an effect on consumers’ attitude towards advertisement.

METHODS
The closed-ended questionnaire is used as the research instrument in this study. A celebrity endorsement printed advertisement of consumer products was used. The list of questions was adopted from earlier studies in the same area. There are three parts in the questionnaire. The general demographic questions represent the first part of the questionnaire. The second part of the questionnaire comprised questions on the antecedents of attitude towards advertisement, namely physical attractiveness (5 items), trustworthiness (5 items), expertise (4 items) and product-brand congruency (5 items). The third part of the questionnaire covered questions on the attitude of consumers toward advertisement (5 items). Items are designed on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). 200 questionnaires were distributed to the public in Federal Territory of Putrajaya using the convenience sampling method. As shown in the table below, 157 questionnaires were successfully collected. After the data cleaning process, only 153 questionnaires were found usable for further analysis.

Table 1: Questionnaire Distributed and Collected

<table>
<thead>
<tr>
<th>Type</th>
<th>Distributed</th>
<th>Collected</th>
<th>Usable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celebrity printed advertisement</td>
<td>200</td>
<td>157</td>
<td>153</td>
</tr>
</tbody>
</table>
RESULTS

The following table is the respondents’ background information. Married female respondents represent two third of the sample. More than half the total respondents are married. Majority are below 30 years of age with diploma level education qualification and earning between RM 1001 – RM 5000 on monthly basis.

Table 2: Background of Respondents

<table>
<thead>
<tr>
<th>Item</th>
<th>Classification</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>29.4</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>70.6</td>
</tr>
<tr>
<td>Status</td>
<td>Single</td>
<td>37.9</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>56.2</td>
</tr>
<tr>
<td></td>
<td>Single Parent</td>
<td>5.9</td>
</tr>
<tr>
<td>Age</td>
<td>17 and below</td>
<td>2.6</td>
</tr>
<tr>
<td></td>
<td>18-29</td>
<td>42.5</td>
</tr>
<tr>
<td></td>
<td>30-39</td>
<td>47.1</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>6.5</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>60 and above</td>
<td>0.7</td>
</tr>
<tr>
<td>Education</td>
<td>Certificate</td>
<td>30.7</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>47.7</td>
</tr>
<tr>
<td></td>
<td>Degree</td>
<td>19.0</td>
</tr>
<tr>
<td></td>
<td>Masters</td>
<td>2.6</td>
</tr>
<tr>
<td>Income</td>
<td>RM1000 and less</td>
<td>11.8</td>
</tr>
<tr>
<td></td>
<td>RM1001-5000</td>
<td>72.5</td>
</tr>
<tr>
<td></td>
<td>RM5001-10000</td>
<td>13.1</td>
</tr>
<tr>
<td></td>
<td>RM10001-15000</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>RM15001 and above</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Reliability Analysis

The Cronbach’s coefficient alpha statistics in Table 3 shows that the value is above 0.70 as recommended by Hair et al. (2010) and thus implying that the survey instruments is reliable to measure all constructs consistently.

Table 3: Reliability

<table>
<thead>
<tr>
<th>Item</th>
<th>Item</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude towards advertisement</td>
<td>5</td>
<td>0.938</td>
</tr>
<tr>
<td>Physical attractiveness</td>
<td>5</td>
<td>0.953</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>5</td>
<td>0.960</td>
</tr>
<tr>
<td>Expertise</td>
<td>4</td>
<td>0.973</td>
</tr>
<tr>
<td>Brand-congruency</td>
<td>5</td>
<td>0.969</td>
</tr>
</tbody>
</table>
Descriptive
The table below is the mean score for the data set for all the variables.

Table 4: Mean Score for Celebrity Endorser

<table>
<thead>
<tr>
<th>Endorser Characteristics</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude toward Advertisement</td>
<td>153</td>
<td>1.00</td>
<td>7.00</td>
<td>4.4176</td>
<td>1.27407</td>
</tr>
<tr>
<td>Physical Attractiveness</td>
<td>153</td>
<td>1.60</td>
<td>7.00</td>
<td>4.6284</td>
<td>1.20963</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>153</td>
<td>1.00</td>
<td>7.00</td>
<td>4.2118</td>
<td>1.36983</td>
</tr>
<tr>
<td>Expertise</td>
<td>153</td>
<td>1.00</td>
<td>7.00</td>
<td>4.3395</td>
<td>1.39135</td>
</tr>
<tr>
<td>Product-Brand Congruency</td>
<td>153</td>
<td>1.00</td>
<td>7.00</td>
<td>4.6107</td>
<td>1.48018</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>153</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Correlation Analysis
The table below shows the correlation analysis results between physical attractiveness, trustworthiness, expertise, product-brand congruency with the attitude towards advertisement. The result shows that product-brand congruency is highly related to attitude towards advertisement compared to other variables. This is followed by the trustworthiness variable.

Table 5: Correlation Results

<table>
<thead>
<tr>
<th>Endorser Characteristics</th>
<th>Attitude Towards Advertisement:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Attractiveness</td>
<td>0.638**</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>0.701**</td>
</tr>
<tr>
<td>Expertise</td>
<td>0.693**</td>
</tr>
<tr>
<td>Product-brand congruency</td>
<td>0.719**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Regression Analysis
Referring to the regression result, it could be concluded that the celebrity endorsement has higher influence (p < .001, $R^2 = 0.651$. Adjusted $R^2 = 0.641$) on attitude towards advertisement. Based on interpretation of the coefficient table below, the beta weights and structure coefficients the product-brand congruent ($\beta = 0.349$, $r^2 = 0.000$) was the best predictor of the attitude towards advertisement. The next variable leading the model was the trustworthiness ($\beta = 0.237$, $r^2 = 0.002$).

Table 6: Regression for Celebrity Endorsement

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.807a</td>
<td>.651</td>
<td>.641</td>
<td>.763</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Congruency, Physical Attractiveness, Trustworthiness, Expertise

Coefficients*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>I(Constant)</td>
<td>.579</td>
<td>.256</td>
</tr>
<tr>
<td>Physical Attractiveness</td>
<td>.160</td>
<td>.076</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>.221</td>
<td>.070</td>
</tr>
<tr>
<td>Expertise</td>
<td>.180</td>
<td>.073</td>
</tr>
<tr>
<td>Product-brand Congruency</td>
<td>.300</td>
<td>.060</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Attitude towards Advertisement
Results of Hypotheses Testing

All hypotheses formulated for this study is accepted. Therefore the celebrity endorsement characteristics are related to consumers’ attitude towards advertisement. The celebrity endorsement characteristics also have an effect on the consumers’ attitude towards advertisement.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Physical attractiveness is related to consumers’ attitude towards advertisement.</td>
<td>Accepted</td>
</tr>
<tr>
<td>H2: Trustworthiness is related to consumers’ attitude towards advertisement</td>
<td>Accepted</td>
</tr>
<tr>
<td>H3: Expertise is related to consumers’ attitude towards advertisement.</td>
<td>Accepted</td>
</tr>
<tr>
<td>H4: Product - brand congruency is related to consumers’ attitude towards advertisement.</td>
<td>Accepted</td>
</tr>
<tr>
<td>H5: Physical attractiveness, trustworthiness, expertise and product - brand congruency has an effect on consumers’ attitude towards advertisement</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

DISCUSSION

Based on the analysis conducted shows that physical attractiveness, trustworthiness, expertise and product-brand congruency has strong and moderate relationship to consumers’ attitude towards advertisement. Among the independent variables, the product-brand congruency factor is the important factor that consumers would consider towards developing their attitude towards an advertisement. This is the opposite of another study conducted in Iran (Sallam and Wahid, 2012) where consumers are very much attracted to the physical attractiveness of the endorser. This study shows that the selection of a celebrity to represent the advertisement is important. The celebrity must have association with the product to be endorsed by the celebrity in order for the message to be accepted by consumers. Thus the image of the celebrity is important. For example, the congruency between sports equipment and a famous athlete. If the product and celebrity is highly congruent it may create a high level of believability among the consumers (Chan et al., 2013; Thwaites et al., 2012).

The following influencing factor is trustworthiness. As mentioned by Hakimi et al. (2011) trustworthiness is an effectiveness tool and useful way to make customer feel more confident and believe in the product. As a conclusion, engaging celebrity to endorse product or brand through the advertisement is an effective way to introduce benefits of product or brand. Celebrity could bring their own emblematic meaning to the endorsement process and later passed it on the consumer. Celebrity has the capability of delivering deeper meanings and power on the product. Furthermore the lifestyle and personality of a non-celebrity could not match the celebrity.

REFERENCES


Celebrity Endorsement and Consumers' Attitude towards Advertisement


http://doi.org/10.5539/ibr.v5n4p55


Exploring Best SHRM Practices-Trust Relationship: An Empirical Approach

Keywords: SHRM Practices, Perceived Organizational Support, Employee Trust, SEM, Libya

INTRODUCTION

In the economic realities, organizations are constantly changing forcefully due to the pressure of controlling costs by reducing staffs or by asking employees to deliver more with less. Organizations need employees who are willing to contribute beyond their job description. It is the challenge for the organization to deal with the internal capabilities to cope up with the external turbulence. For some time human resource management is reported to have assumed greater importance within organisations (Legge, 1995; Nankervis and Debrah, 1995).

The insecure and uncertain situation of the local citizen in Libya has been further compounded by the uneven application of the regulatory standards in oil exploration. There is an inconsistent application of international regulations as different countries have different systems for allocating licenses for oil and gas exploration and different regulations of production. In order to generate a good and sound business strategy, firms need to initially examine and understand their internal organizational strengths and weaknesses.

Since, after the revolution the Libyan oil industry along with the other industries had a massive fall economically, therefore this research wants to identify the strategic management policies of the Libyan Oil companies that survived during the war and have flourished after the war. Libya’s oil sector long the lifeblood of this desert nation, has made a surprising recovery since the country’s 2011 revolution. Libya’s oil and gas industry accounts for about 90 percent of government revenue, and officials say a broad understanding of the sector’s importance has helped spare the country from episodes like the deadly January attack by militants on a gas field just across the border in Algeria. Oil industry reserves in Libya were first developed in nineteenth century extracting under existing market conditions. Libya's oil production has been impressively restored after months of conflict and insecurity. However, considerable uncertainty surrounds the future of the oil sector and the political regime that will govern it. Revolution is considered as a negative incident that causes the demise of an organization. Managers who fail to recognize the negative impact of revolution and the risk exposure of their companies and does no crisis planning find them in very bad situation. The economy of Libya relies mainly upon revenues from the oil industry, which contribute almost all the export earnings and around one quarter of the country's GDP (Belman, 2007).

Due to rapid growth and advancement in technology, and the degree of worldwide competitions, it is urged that the companies need to maintain its growth and gain competitive advantage in future through the contribution of SHRM role. The HR managers are very essential for the success of the company. HR delivers alignment between organizational success and employee’s performance effectively. This major role of HR managers motivates to conduct this study contributing to the pertaining literature. Much of the previous researches focused on the relationship between HRM practices and organizational performance, but very few studies focused on the effect of SHRM practices on perceived organizational support and trust of employees (Şendoğdu, Kocabacak, and Güven, 2013). Thus the main purpose of this paper is to
examine the linkage between best strategic human resource management (SHRM) practices, perceived organizational support and employee trust. The proposed framework and findings intends to aid the understanding of the perceived organizational support that mediates between SHRM practices and employee trust.

**SHRM and Trust**

A significant body of literature has suggested specific SHRM practices which are considered to promote attributes in human resources that can help the organization to gain competitive advantage. Trust, being a feeling, can be described as a psychological state (Rousseau et al., 1998). Pneumatic reflects higher aspects of commitment that emerge from one's being. Morgan and Hunt (1994) suggest that trust is a precursor of relational commitment, i.e. the state of commitment having been achieved. Rotter (1967) defined trust as expectancy held by an individual or a group that the word, promise, verbal or written statement of another individual or group can be relied upon. Along with this definition trust in leader is generally defined as faith in and loyalty to the leader (Ngodo, 2008).

Employees’ trust on their organization is a prerequisite for the long-term and sound relationship between the organization and its employees. A good and trust-based relationship can help reduce the different conflicts within the organization, improve job satisfaction and work efficiency, and lower transaction and management costs. The risks and uncertainties faced by organizations, especially in this modern era of fierce competition for talented personnel, make organizational development through improvement of trust. Moreover, Morgan and Hunt (1994) provided commitment trust theory and concluded the concept of commitment and trust to be an important factor to maintain the relationship. They argued for a focus on theory building rather than theory testing, and an approach to developing definitions of relational constructs.

Pahl and Richter (2009), mentioned that an employee trust is hard to identify the value statements about the working ethics and attitude to serve goal of organizational culture. HRM need to pay attention on the specific characteristics of employees like structure, management policies and practices, technological systems and the corporate values and behaviour of leaders must be taken into consideration. Trust influences employee reactions and affects the success and effectiveness of human resource activities. Although research on organizational trust has traditionally focused on its effect on the success of organizational activities, human resource activities may also affect its development. Using exchange theory, (Whitener, 1998) argued that trust was a consequence of the content and process of human resource activities and a mediator of the impact of HR practices on important outcomes. Moorman et al., 1993; Konovsky and Pugh, 1994; Pillai et al., 1999; Ertürk, 2007; Ngodo, 2008) have found that trust is an important mediator.

Decision made by the organization must be informed to the employees as a process of decision making. Through this approach, a company not only gains the employee’s trust but also increases company benefits from the direct cooperation of the employees. Furthermore, Kim and Mauborgne (2003) acknowledged that a fair decision making process influence the decision to trust. When employees feel that the decision taken by the organization affects them was fair the trust towards organization increases effectively. Thus there is a question arise: how the organization can gain trust of their employees when they do not have interactions on the daily basis with the leaders of top management. Thus human resource management is the important aspect that creates and maintains organizational trust through an effective communication process between managers and employees generating the feelings of trust.

Research focusing on enhancing trust among employees is not new as a desirable attribute and have been extensively investigated by studies like (Brown, Metz, Cregan, and Kulik, 2009; Dirks and Ferrin, 2002; Graham and Tarbell, 2006; Kramer and Tyler, 1996; Mayer and Davis, 1999). Trust was also linked with various other constructs like work behavior (Konovsky and Pugh, 1994), employees’ performance (Mayer
and Davis, 1999), intention to turnover (Albrecht and Travaglione, 2003), problem-solving (Guest and King, 2004), level of openness within a top management team (Taylor, Levy, Boyacigiller, and Beechler, 2008), support for authorities (Tremblay, Cloutier, Simard, Chênevert, and Vandenberghe, 2010), satisfaction (Eskildsen and Nussler, 2000), and organizational commitment (Herrbach, Mignonac, Vandenberghe, and Negrini, 2009; Meyer and Smith, 2000). Traditional HRM practices and policies focused on improving functions like training, selection, health, safety and performance appraisals and the like focus on improving communicational skills, internal ladders, motivation, procedural justices and so on have also been developed within the organization (Schuler et al., 2001, Ulrich, 1998). But it had been argued that such a practice may affect the climate of trust reinforcing the validity of the psychological contract in the organization. Thus it is obvious to investigate the role of SHRM towards building and developing employee trust. The following hypothesis are therefore, proposed:

**H1:** SHRM practices have a positive influence on employee trust.

**POS as Mediator**

POS as mediator is well established in the literature and has been researched from various perspectives. This includes resource based view (RBV), knowledge management (KM) contingency approach, organizational learning (OL) theory and social exchange theory. POS is defined as “the degree to which the employees believes that the organization values their contribution and well-being fulfilling the socio-emotional needs”. There are three antecedents of POS; they are fairness, supervisor support and organizational rewards. Eisenberger et al., (1990), mentioned that perceived organizational support play a role of generating trust that would fulfil its exchange obligations of rewarding employees providing their efforts for the organizational success.

Furthermore, Rousseau (1995) exchange relationship is described through the employment relationship between employees and organization. There have been many researches on the exchange relationship potentials within the organization, but the influence of perceived organizational support that refers to the “global belief of the employees to which extent the organization values their contribution and care about their well beings” have not critically examined (Masterson, Lewis, Goldman, and Taylor, 2000).

Exchange of employee’s efforts and loyalty for the organization has been examined by many organizational theorists. The characterization of the relationship between employee and employer leads to attainment and treatment of employees. Employees that are treated well are known for the affective commitment in the organization by exceeding work responsibilities, flexibility to organizational problems and opportunities (Aselage and Eisenberger, 2003). Consequently, the following hypothesis is proposed:

**H2:** POS mediates the relationship between SHRM practices and employee trust.

**THEORETICAL BACKGROUND**

**SHRM and SET**

A theoretical framework consists of concepts, together with the definitions and existing theory that are used for the study. The framework demonstrates the theories and concepts that are relevant to the research and the broad field of knowledge. Underpinning theories in the research strengthen the study through the explicit statement of theoretical assumptions connecting the researcher’s existing knowledge on the basis of hypothesis and choice of research methods.

Social exchange theory (SET) is one of the most influential paradigms understanding workplace organizational behavior. Social exchange involves a series of interaction generating obligations. SET is usually seen as interdependent and contingent in action of one person on another person. Social exchange consists of the peoples interacting with each other’s and waiting for their response. Social behavior is the
result of an exchange process. The main goal of the change is to maximize benefits and minimize costs. According to the theory, both benefits and risk are the association of exchange relationships. According to Baker (2001), social exchange theory is derived from interactionism using economic cost benefit analysis. McCool and Moisey (2001), mentioned that social exchange theory is about understanding the exchange of resources between individuals and group. Wikhamn and Hall (2012), mentioned that social exchange theory enables to describe motivation between employee behaviours and attitudes.

Social exchange theory provides theoretical underpinning for the study predicting organizational support for the employee trust based on the quality of relationship exchange between managers and employees of oil and gas companies in Libya. A theoretical alignment between SHRM and organizational support can be determined by social exchange theory. In the past years numerous researches have been conducted on the trust and commitment of individuals, groups, organizations in the social exchange relationship from various perspectives.

The employee–organization connection can be taken as a social exchange relationship between the employee and the organization, and organizational commitment as the employee’s psychological attributes and feelings after the establishment of such relationship. Any kind of risk perceived by employees in the organization will affect their trust in the organization. This phenomenon can be explained using the social exchange theory. The employee–organization relationship is a social exchange relationship: the organization invests in employees who then return something to the organization.

According to the social exchange theory, employees’ trust in the organization is also a resource for which the organization has to provide reasonable payment and a good working environment. If there is insufficient organizational investment in this aspect, employees’ return is affected (Tsui, Wang, and Zhang, 2002). Employee perceptions of their relationships within the organization can be understood from the social exchange theory perspective. Two major types of social exchange relationships were established by researches on employee with the organization. They are perceived organizational support (POS) and relationship with the supervisors (Lee, 2007).

**PROPOSED RESEARCH MODEL**

Following the previous discussions, the research model presented in figure 1 perceives employee trust emerging from the best SHRM practices, exercised at both operational and strategic level in the company. The main value in this framework lies in the reflection of factors and their relationships that appear to play unique role in the SHRM-trust relationships.

![Figure1: SHRM Practice system](image)

In this study, the field of SHRM research is discussed critically for the improvement and advancement of literature on HRM systems. HRM increases the quality of HR which consumes a source of sustainable competitive advantage according to resource based view. In order to link organizational and employee
goals, organizational commitment is considered as the main factor (Ahmad and Schroeder, 2003). Best SHRM practices are expected to enhance employee trust by promoting inimitable attributes in HR.

**METHODOLOGY**

**Sampling and data collection**

This study uses probability sampling technique with simple random sampling approach for the data collection. In Libya there is only one government owned company, National Oil Corporation of Libya (NOC) that have the power to dig the oil. A survey was undertaken to gather all the appropriate data by use of a structured questionnaire. In order to achieve sufficient sample size and generalizability of the result the sample frame for this study consisted of all 52 oil and gas companies in Libya that employed at least 50 employees. The population was drawn from a telephonic conversation with the HR department. After the telephonic conversation with the oil companies it was found that there are approximately 1906 low and middle level managers. Thus 1906 are considered as a total population for the study.

The questionnaire was pre-tested through in-depth discussions with academics and professionals in the area of human resource management. The final questionnaire included 57 items. To ensure that the HR managers of the sample firms were willing to participate in the questionnaire it was decided to exclude company privacy concerns. A total of 349 questionnaires were returned. Of these eighteen questionnaires were discarded because they were unanswered. The overall response rate was 18.3 percent. Considering that the total population of this study consists of 1906 HR managers, then the minimum sample size should be around 320 HR managers (Saunders et al., 2000).

**RESULTS AND DISCUSSION**

The study hypothesised a significant influence of SHRM practices on perceived organizational support and employee trust in the Libyan oil and gas companies. The hypothesised model was evaluated using goodness fit indices in order to confirm the structural model fit that was further also accepted by Cunningham (2008) who mentioned that support for the hypothesised model can be achieved with an effective and acceptable goodness fit criteria. Structural equation modelling (SEM) was used to confirm the hypothesised model in the form of structural model. According to Byrne (2013), “SEM is particularly valuable in data analysis where the patterns of inter-relationships among the constructs are specified according to a prior established theory. SEM has the flexibility to model relationships amongst multiple criteria and predictors and statistical testing is prioritised empirically through the CFA (Hoe, 2008).

Measurement model for the underlying constructs that is provided with the path diagram. In each of the measurement models, multiple items are used to measure each underlying factor. However, if items become redundant, the measurement model needs to be re-specified by removing the redundant items (Arbuckle, 2005; Hair, Black, Babin, Anderson, and Tatham, 2006; Kline, 2005). Parsimonious unidimensional estimation can be achieved by removing the redundant items (Gerbing and Anderson, 1988). The discriminant validity is achieved when the model and its constructs are free from redundant items. Thus AMOS software was used to identify the pair of redundant items in the model in terms of high modification indices. In this study, the data set is validated using content validity, construct validity, and convergent validity using structural equation modelling technique. The factor loadings for these measures were all above 0.60 indicating that standardised estimates for these measures were deemed to be statistically significant at P<0.001. From the measurement model of the constructs, the discriminant validity criteria is confirmed as the correlation between the constructs does not exceeded 0.85.

In the measurement model, it was noticed that the AVE for all the variables were above the required level of 0.50. Thus, it is confirmed that the criteria of AVE was satisfied. The result on AVE also provided an additional support for convergent validity. It was also possible to provide the discriminant validity.
between the factors due to positive definite issue of the matrix. Construct validity is confirmed based on goodness-fit-indices Hsieh and Hiang (2004) reported in the earlier section. Evidence of convergent validity is found based on high factor loadings (greater than 0.50) of all factors (Holmes-Smith, Coote, and Cunningham, 2006).

Figure 2: Measurement Model for the Variables

Table 1: Reliability and Validity Test for Measurement Model

<table>
<thead>
<tr>
<th>Endogenous Path</th>
<th>Exogenous</th>
<th>Factor Loading</th>
<th>C.R</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Career Ladder</td>
<td>ICLL</td>
<td>0.755</td>
<td>0.839</td>
<td>0.567</td>
</tr>
<tr>
<td>ICL1</td>
<td>ICLL</td>
<td>0.795</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICL2</td>
<td>ICLL</td>
<td>0.721</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICL3</td>
<td>ICLL</td>
<td>0.738</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICL4</td>
<td>ICLL</td>
<td>0.738</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>--------------------------</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR1</td>
<td>---</td>
<td>TRR 0.794</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR2</td>
<td>---</td>
<td>TRR 0.788</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR3</td>
<td>---</td>
<td>TRR 0.793</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR4</td>
<td>---</td>
<td>TRR 0.759</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR5</td>
<td>---</td>
<td>TRR 0.785</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appraisal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP1</td>
<td>---</td>
<td>APP 0.709</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP2</td>
<td>---</td>
<td>APP 0.859</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP3</td>
<td>---</td>
<td>APP 0.902</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP4</td>
<td>---</td>
<td>APP 0.780</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment security</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES1</td>
<td>---</td>
<td>ESS 0.760</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES2</td>
<td>---</td>
<td>ESS 0.872</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES3</td>
<td>---</td>
<td>ESS 0.883</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES4</td>
<td>---</td>
<td>ESS 0.751</td>
<td></td>
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</tr>
<tr>
<td>Pay for Performance</td>
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<td></td>
</tr>
<tr>
<td>PP1</td>
<td>---</td>
<td>PPP 0.758</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PP2</td>
<td>---</td>
<td>PPP 0.794</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PP3</td>
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<td>PP5</td>
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<tr>
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<td>PO7</td>
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<td>PO8</td>
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<td>Employee Trust</td>
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<tr>
<td>ET1</td>
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<td>ET 0.770</td>
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<td></td>
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<tr>
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<td>ET4</td>
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<td>ET6</td>
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<td>ET 0.739</td>
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<tr>
<td>ET7</td>
<td>---</td>
<td>ET 0.776</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: C.R – Composite Reliability; AVE – Average Variance Extracted

Structural Model
In order to confirm that the structural model fit the data, the model was evaluated in the terms of goodness of fit indices. According to Cunningham (2008), a good fit to the sample data provides support for the hypothesised model. For hypotheses testing purposes, parameter estimates together with coefficient values were examined. Parameter estimates are used to generate the estimated population covariance matrix for the model (Tabachnick and Fidell, 2001). Coefficients’ values are derived by dividing the
variance estimate by its standard error (S.E). When the critical value (C.R) or z-value is greater than 1.96 for a regression weight (standardised estimates), the parameter is statistically significant at the .05 levels. After the modification indices and removal of few redundant measured items, Figure 3 shows that the fitness criteria are achieved.

Figure 3: Final Re-specified Model

<table>
<thead>
<tr>
<th>Endogenous</th>
<th>Path</th>
<th>Exogenous</th>
<th>Estimate</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
<tbody>
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<td>0.401</td>
<td>5.062</td>
<td>***</td>
</tr>
<tr>
<td>POS</td>
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<td>3.184</td>
<td>0.001</td>
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<tr>
<td>POS</td>
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<td>APP</td>
<td>0.151</td>
<td>2.180</td>
<td>0.029</td>
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<tr>
<td>POS</td>
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<td>0.001</td>
</tr>
<tr>
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<td>1.886</td>
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<tr>
<td>ET</td>
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<td>ICLL</td>
<td>0.284</td>
<td>3.496</td>
<td>***</td>
</tr>
<tr>
<td>ET</td>
<td>&lt;---</td>
<td>TRR</td>
<td>0.217</td>
<td>3.387</td>
<td>***</td>
</tr>
<tr>
<td>ET</td>
<td>&lt;---</td>
<td>APP</td>
<td>0.168</td>
<td>2.548</td>
<td>0.011</td>
</tr>
</tbody>
</table>
According to Klein, Ettenson, and Morris (1998), the four major fitness indices like GFI, TLI, RMSEA or CFI are used for evaluating the model fit. Similarly, Smith (2006) stated that there must be at least three fitness indices significant in order to confirm the model fit. This study adopts the major fitness indices that are commonly used in research. The absolute values like GFI and RMSEA, incremental values includes CFI, TLI and parsimonious values like chi-square/df were used to confirm the model fit. An examination of the goodness-of-fit indices showed that the model fitted the data effectively ($\chi^2 = 741.824$, df= 573, p=.000). The GFI=.892, AGFI=.874, CFI=.978, TLI=.976, RMSEA =.030 and $\chi^2$/df = 1.295. The results confirmed that the system of SHRM has significant positive effects on employee trust. However, absolute fit index value GFI was found to be very near to the acceptable value of greater than 0.90. According to previous studies performed by (Chang and Chen, 2009) with GFI = 0.89 and AGFI = 0.86, claimed AGFI greater than 0.80 whereas; GFI to be greater than 0.90. Similarly, (Chau and Hu, 2001) provided the cut off value of AGFI as above 0.80. (Tabachnick and Fidell, 2013) further added, “AGFI value adjusts the GFI based on the degree of freedom and AGFI tends to increase with sample size”.

From the square multiple correlation result, it is noted that the model fit criteria are solved and there is a high correlation between the collaboration and networking with labour productivity. With the significant standardised regression weights of all the constructs and items, the overall square multiple correlation was found to be 0.83 (75%) which is considered a very active and important finding of the study.

The path estimates between SHRM components was found to be (standardized path coefficients $\beta = 0.217, t = 3.387, p = 0.000$) for training on employee trust, (standardized path coefficients $\beta = 0.284, t = 3.496, p = 0.000$) for internal career ladders on employee trust, (standardized path coefficients $\beta = 0.138, t = 2.678, p = 0.007$) for pay for performance on employee trust, (standardized path coefficients $\beta = 0.168, t = 2.548, p = 0.011$) for performance appraisals on employee trust. According to Guest, et al. (2003) concerns over the validity of data gathered centrally from senior HR managers in terms of how reliable and valid a measure of HRM such responses really provide for commitment are performed. Employee trust is hard to identify the value statements about the working ethics and attitude to serve goal of organizational culture. Unlike most previous studies of HRM, the data on SHRM implementation have been gathered from low or middle level managers within the oil and gas industries of Libya.

**CONCLUSION**

The finding of the study also showed that perceived organisational support played a partial mediating effect between SHRM practices and employee trust. The lack of organizational support aggregate performance along with individual’s personality. Even though the direct link between HRM practices and labour productivity was significant, with the appropriate usage of organizational support, employees are able to contribute to enhance organizational performance. Libya as a developing country and Libyan oil and gas companies contributing to the country’s GDP must be able to motivate their employees by compensating based on their performance. Employees and managers must have good cooperative skills and work in the field as a team in order to overcome the problems and increase trustworthiness. Furthermore, managers must consider SHRM as a strategy to get the work done in an effective manner without any conflicts among the employees.
Compatibility between SHRM practices is very important in order to increase trust of employees. SHRM practices whose HR Principles are consistent with the high commitment HR Programs would be more likely to support these programs and enforce their application. Managers understand the internal requirements for successful strategy implementation and they insist that careful attention be paid to the details required for first-rate execution of the chosen strategy. They personally lead the process of strategy implementation and execution. Several main challenges like building an organization capable of carrying of strategic plan. Developing strategic objectives, linking the motivation and reward structure directly to achieve result, initializing policies and procedures for proper implementation of strategies is the crucial part for the study.

The main implication for managerial implication is that the strategic role of the manager in the organization must include strategies to increase trust of employees in order to increase the relationship between managers and employee. From the validation of the framework, it is obvious to make sure that all the HRM functions must be in accordance with increasing productivity along with in line with the organizational objectives. Thus, operating in a stable and dynamic environment, managers and employees need to work as a team in order to develop new knowledge and complete tasks for effective productivity. Skills that is developed on the foundation of traditional literacy and research, technical and analytical skills in the organization in order to interact meaningfully. It is very crucial for the managers to understand the estimated value of commitment and trust for the employees so as to identify and manage the cost and time allocation. Thus supporting the organization with more HRM practices including skills and abilities for qualities trained and developed employees that can enhance the communication, negotiation and the process of participation.

REFERENCES


Acquisition of Experts’ Opinions to Explore the Drivers of Business Success in the Construction Industry

Keywords: Business Success, Construction Industry, Entrepreneurship, Constructionpreneurship, Delphi Study, Malaysia

INTRODUCTION

Evidence has pointed that the construction industry is a key sector of every nation’s economic growth. However, a nation can only fully benefited from the stimulus that the construction activities brought to its economy if it has an efficient construction industry (Ofori, 2012). Hence, all activities within the construction industry must be performed effectively and efficiently. One way to achieve this is by ensuring the success of entrepreneurs who run the construction business because they are the key players in the industry. Hofstrand (2010) asserted that successful entrepreneurs should have a detailed knowledge of the key factors needed for their success. Indeed, discovering which factors or practices lead to business success and which lead to failure is a primary, and as yet unfulfilled, the purpose of business research (Rogoff et al., 2004).

Understanding the success factors and hence, identifying those factors becomes an important issue for the construction business, and has led to an increasing research effort contributed to this area. Previous studies have gauged the success of construction enterprise from the outcomes of project execution, which emphasized on the effectiveness of project management practices (Toor & Ogunlana, 2008; Elwakil et al., 2009). In this sense, cost, time, and scope were the fundamental elements of business success. A construction enterprise may consider as a success if the executed project meets its completion date or budget or if the end results conform to the original scope. Although it is difficult to separate project success from company success since individual project often represents a significant proportion of an organization’s total revenue, nevertheless, an exclusive focus on project-level success criteria only addresses the short-term goals of a construction enterprise (Farinde & Sillars, 2012).

It is argued that too much research attention has paid to grandiose the theory on a project-related success factors, but not enough research has been conducted on corporate issues to determine the long-term success and survival of the construction business. It is suggested that the short-term and long-term goals must be balanced to safeguard the long-term continuity of the business. While at the same time obtaining the short-term results are necessary to provide the foundation for planning the future (de Waal, 2012). Therefore, a construction enterprise must have to better positioning themselves by ensuring all aspects of their business functions remain competitive in order to achieve the long-term business success without ignoring the short-term goals.

One facet of business approach adopted in most industries outside the construction sector to achieve success is that of entrepreneurship. Entrepreneurial attitudes and behaviours are important for companies of all types and sizes in order to prosper and grow (Dess & Lumpkin, 2005; Hitt, 2005; Kraus, 2013). It is
Acquisition of Experts’ Opinions to Explore the Drivers of Business Success in the Construction Industry

evidence that the construction and entrepreneurship activities are regarded as the fuel to the every nation’s economic growth (Filser & Eggers, 2014; Hillebrandt, 2000; Kuratko, 2009; Kraus, 2013; Tijhuis & Fellows, 2011). For that understanding, the construction and entrepreneurship activities constitute a critical component of any nation’s economic development. However, very few studies, if any, have explored the applicability of the entrepreneurship perspectives in searching for predictors of success in the construction industry. In most regards, the construction engineering management (CEM) and entrepreneurship literature have evolved separately, with little cross-fertilization within the two. This paper reports the study undertaken in the context of the Malaysian construction industry aims to bridge the gap between the two bodies of literature, by exploring the success indicators for the construction enterprise through the lens of the entrepreneurship perspectives.

THEORETICAL FRAMEWORK

Entrepreneurship is considered as an important driving factor for the long-term business success and survival (Antoncic & Hisrich, 2003; Covin & Selvin, 1991; Filser & Eggers, 2014; Kraus, 2013; Lumpkin & Dess, 1996; Wiklund & Shepherd, 2003). Indeed, many businesses outside the construction industry are increasingly attempting to foster entrepreneurship in order to explore and exploit business opportunities (Kraus, 2013; Vecchiarini & Mussolino, 2013). It argues that the construction enterprises should also take advantage of what the entrepreneurial mindset brought for the success in business.

Drawing upon the existing theories on the link between entrepreneurship and performance, we developed a theory by identifying four knowledge areas that could contribute to the construction business success: (i) entrepreneurial orientation, (ii) entrepreneurial organization, (iii) entrepreneurial competencies, and (iv) entrepreneurial environment. All of these areas have been studied in many previous studies and may have some validity on their effect to the performance, for examples: entrepreneurial orientation (Antoncic & Hisrich, 2001; Kraus, 2013; Lumpkin & Dess, 1996), entrepreneurial organization (Mokua & Ngugi, 2013; Shahu et al., 2012; Turró et al., 2014), entrepreneurial competencies (Man et al., 2002; Mitchelmore & Rowley, 2013; Shigang, 2011), and entrepreneurial environment (Bakar et al., 2012; Jabeen & Mahmood, 2014; Voiculet et al., 2010).

The important of these knowledge areas in the construction business can be viewed from the following perspectives. First, the nature of construction businesses that compounded with highly competitive and uncertainties highlighted that the construction entrepreneurs must have to focus on entrepreneurial orientation. It refers to the entrepreneurial strategy-making processes that the business must have to achieve a competitive advantage (Vecchiarini & Mussolino, 2013). In this focus, the construction entrepreneurs will be guided to the operational basis of entrepreneurial decisions and actions. Second, success cannot be gained without appropriate entrepreneurial organization. Entrepreneurial organization provides the fundamental for strategic direction to achieve a common goal or set of goals (Robbins & Mathew, 2009). In this sense, a construction enterprise must adapt the appropriate organizational structure and organizational culture because the effectiveness of any strategy can only achieve if it fit with these elements. The assumption is that, if the structure and culture are appropriate, then all processes and relationships within the organization will occur effectively.

Third, entrepreneurial competencies are another aspect that construction enterprise must consider. It is about the capability of the organization to acquiring, using, and developing successful resources for their business purposes, in the specific context in which firm operates (Capaldo et al., 2014). For example, project management competencies are very important in the execution phase of the project’s life-cycle. Finally, the entrepreneurial environment is another aspect that needs to be considered. In this regard, a construction enterprise must aggressively scan their external environment to detect, and exploit the opportunity in the marketplace. Environmental turbulence is seen to be strongly influenced business activities, include processes, systems, and strategies (Aldrich & Pfeffer, 1976). Although external
environmental beyond the influence and control of the organization, they actually provide the opportunities. In the context of the Malaysian construction industry, for example, construction enterprise can take advantage of the availability of new policies and development plans. For example, those included in the 11th Malaysia Plan, which recently launched, and set a strategy to acquire the available opportunities. Therefore, a construction enterprise must suit their strategies accordingly to the external environment.

Given the importance of these elements to the construction business performance, we argue that a construction enterprise must adopt the entrepreneurial mindset if they desire to success and survival in their business. In this sense, they should focus on entrepreneurial orientation, enabled by the appropriate entrepreneurial organization, driven by the entrepreneurial competencies, and foundation by the capability to absorb the entrepreneurial environment. Figure 1 illustrated the success indicators for the construction business from the entrepreneurship perspectives.

![Figure 1: The Construction Business Success Indicators from the Entrepreneurship Perspectives](image)

**RESEARCH METHODOLOGY**

The exploration of the long-term success indicators of construction business from the entrepreneurship perspectives requires advanced knowledge and experience because it is a new aspect of the CEM literature. It involves in the developing new ideas for the construction business. Hence, we judged that the Delphi study seemed to be an appropriate strategy of inquiry for this study. The Delphi technique is useful for situations where individual judgement to be seized in order to address the lack of understanding along the incomplete state of knowledge (Delbecq et al., 1975; Skulmoski et al., 2007). The Delphi study is the stronger methodologies for a rigorous query of experts and stakeholders, and has increasing used in the CEM research (Hallowell & Gambatese, 2010).

**Delphi Technique Overview**

The Delphi technique was developed by the RAND Corporation in the 1950’s for the United States Air Force sponsored project. It aims to solicit expert opinions about real-world topics that are often subjective. Hence, Delphi concept is particularly useful for a research instrument when there is incomplete knowledge about a problem or phenomenon where there are no ‘correct’ answers (Skulmosti et al., 2007; Paliwoda, 1983). It uses an iterative feedback technique with a group of experts and concerning to a set of qualitative research methods. It relies on the opinions of individuals who are believed to be experts on the subject under consideration to achieve consensus (Schmidt, 1997). As compared to the traditional surveys, the Delphi method requires participants to expert certification before the survey process begins (Tran et al., 2014).
Delphi Questionnaire
In the first round of a Delphi study, researchers have the choice to use either an open-ended questionnaire or a structured questionnaire or both structured and open-ended questionnaires. The utilization of both approaches is an acceptable and a common practice that frequently found in academic research (Hsu & Sandford, 2007; Kalaian & Kasim, 2012). We adopt a Delphi study with the use of a structured questionnaire in the first round. It is because the entrepreneurship perspectives are rare and new in the CEM research. Participants may provide inappropriate answers if they do not understand well the concepts of entrepreneurship and may leasing to the meaningless of the whole research effort. However, the open-ended questions were also provided at the end of each perspective. This approach was consistent with the recent work of Zou & Moon (2014).

The first round questionnaire consisted of demographic information, experience, qualifications, and other information that would able to confirm the invited participants are experts in the field of study. Twenty three items from the four entrepreneurship perspectives were included in the questionnaire. The content of each section of the questionnaire was explained clearly including the brief description of each of the items asked. The participants were instructed to rate the importance of the items to the construction business success using the importance scale based on a five-point Likert-scale: 1 = no judgment, 2 = very unimportant, 3 = unimportant, 4 = important, and 5 = very important. Participants were also asked to list and describe any other additional items that they think are important and should consider in the evaluation of success indicators in the provided column at the end of every perspective.

Pilot Study
Skulmoski et al. (2007) highlighted the need to pilot a Delphi questionnaire as to improve its comprehension, and to rectify any procedural problems. However, a literature search revealed no clear guidelines about whether to pilot the whole process, each round, or just the initial round. Following the recommended by Clibbens et al. (2012), we employed a pilot study of eight experts for all rounds of the Delphi study in advance of recruiting for the full Delphi study. The participants of the pilot study did not involve in the actual study. All the comments and feedback received from the pilot participants were considered. Therefore, the instrument is considered to be achieved the content validity. Moreover, the used of importance scales for consensus building is to ensure that the measures achieved internal consistency.

Reliability
Although, there was no evidence in the literature indicated the reliability of the Delphi study, nevertheless, an attempt has been made to determine the reliability of the tool being used. We contended that the measurement of the instrument reliability could be possible if the initial round of the Delphi study used the structured questionnaire as the case of this study. Reliability was evaluated using Cronbach’s alpha coefficient from the data of the pilot study. Upon analysis, the Cronbach’s alpha for the instrument was found as 0.827 or 82.70%, which implies a higher acceptable reliability (Nunnaly and Bernstein, 1994).

Panel Composition and Size
The success of the Delphi study clearly rests on the combined expertise of the participants in the relevant field that make up the expert panel (Powell, 2003). The expert panellists must be experienced professionals who can provide an informed view or expert opinion on the issues being investigated (Nworie, 2011). However, the optimal size of participants in Delphi technique has not been established. As a consequence, there was a varied opinion on the prerequisite panel size. In a summary of Rowe and Wright (1999), for example, the size of a Delphi panel in peer-reviewed studies ranged from a low of three members to a high of eighty. We form a heterogeneous group of four independent panels of eight to fifteen members each. The basis of this decision was that the panel size is congruent with established...
methodological norms, and to allow for potential drop-out (Briedenmann & Butts, 2006). It is also small enough to ensure the respondents are all experts in their fields (Pan et al., 1995). The four independent panels were: (i) Contractors/Developers, (ii) Professional consultants (architects, engineers, and quantity surveyors), (iii) Government technical officers, and (iv) Academicians. Also, the selection of panel size is based on purposive sampling on the basis of ‘closeness’ to the topic under study (Donohoe & Needham, 2009). Therefore, this size was deemed to be sufficient for the composition of highly qualified expert panellists.

**Panel Member Qualification**

The selection of qualified experts is one of the most critical requirements in the Delphi study. According to Needham & de Loë (1990) the experts must be representative of the industry or sectoral experience that relates to the subject of research. This criterion is measured in terms of demonstrated education and training (natural, social, and engineering sciences), profession and occupation (commerce, education, government, industry), and regional and sectoral affiliation. In the context of this study, first, the experts must be representative of the Malaysian construction industry. Second, the experts must also exhibit recognised authority or sufficient expertise. It is measured in terms of standing within the discipline of the subject under study (academics and researchers), standing within profession sensitive to subject under study (contractors, developers, and professional consultants), and experience with applied management and research (administrators, managers, research analysts). In addition, the findings of Vick (2002) and Simonton (2014) on the development of engineering expertise indicated that engineering experts reach the height of their expertise between career ages of ten and thirty three. Therefore, the requirements for each panel are:

- Have a minimum of 10 years experienced in the construction industry;
- A minimum of a bachelor degree in the fields directly related to the construction industry, from an accredited institution of higher learning (except academician panel);
- At least five years registered as a certified professional engineer, professional architect, professional quantity surveyor, or project management professional (for professional engineering consultant panel);
- At least ten years of experience as the faculty member at an accredited institution of higher learning with research or teaching focus on the CEM, or other subjects related to the construction industry (for academician panel);
- A minimum of a master's degree in the engineering or other fields related to the construction industry, from an accredited institution of higher learning (for academician panel);
- Primary or secondary author of at least three peer-reviewed journal articles on the topic related to the CEM.
- Invited to present at a conference focused on the topic related to the CEM (for academician panel);
- Author and editor of a book or book chapter on the topic related to the CEM.

**Delphi Round**

The objective of rounds in Delphi study is to reach consensus by reducing variance in responses as to improve precision. It is achieved through the use of controlled feedback and iteration (Hallowell & Gambatese, 2010). Giannarou & Zervas (2014) suggested that the Delphi rounds are open to the choices of the researcher. However, to allow feedback and revision of responses, a minimum of two rounds are required (Christie & Barela, 2005; Mullen, 2003). Indeed, a highly suggestive is from the outcome of Dalkey’s et al. (1972) experiment that the answers were more accurate on round two and became less accurate on subsequent rounds. Thus, this study is designed to limit to two rounds of Delphi process only. It aims to eliminate fatigue and time pressure that result in high panel attrition (Mitchell, 1991).

**Criteria for Attaining Consensus**
One of the aims of using Delphi is to achieve greater consensus amongst panellists (Rowe & Wright, 1999). Consensus simply means the general agreement on the subjects under investigating (Gunhan & Arditi, 2005). Although the principal aim of the Delphi study is to reach consensus among the experts, a common practice to measure consensus does not exist (Holey et al., 2007). For this study, we had pre-determined the criteria to reach a consensus: median 4 to 5, and 80% or more of respondents rating the indicators within 4 to 5 on the importance scale. The indicators that achieved these criteria are considered to have reached the consensus. These criteria are consistent with the works of Hollander et al. (2013).

Results and Analysis
The final questionnaire was electronically transmitted via email in two rounds of the Delphi process. In Round 1, the questionnaires were sent to thirty nine respondents who have officially agreed to participate and qualified as an expert based on the pre-determined criteria. All the thirty nine experts returned the Round 1 questionnaires, representing 100% response rate. In Round 2, experts were given an opportunity to review their rating based on the group mean and median achieved in Round 1. The questionnaires were sent to thirty nine respondents who responded the Round 1 survey. Of thirty nine respondents, thirty six experts returned the questionnaire, representing 92.3% response rate. The three experts who did not respond in Round 2 provided no reasons for doing so. Table 1 summarizes the results emerged from the two iteration rounds.

Table 1: The Importance of Indicator Emerged from the Delphi Rounds

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Round 1</th>
<th>Round 2</th>
<th>Round 1</th>
<th>Round 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Response (Score 4 &amp; 5)</td>
<td>Importance Mean</td>
<td>Importance Median</td>
<td>% Response (Score 4 &amp; 5)</td>
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<td>Autonomy</td>
<td>3.85</td>
<td>4.00</td>
<td>72.2*</td>
<td>3.94</td>
</tr>
<tr>
<td>Innovativeness</td>
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<td>4.00</td>
<td>94.4</td>
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<td>Risk-taking</td>
<td>87.2</td>
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<td>4.00</td>
<td>94.4</td>
</tr>
<tr>
<td>Proactiveness</td>
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<td>4.49</td>
<td>5.00</td>
<td>97.2</td>
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<tr>
<td>Competitive aggressiveness</td>
<td>94.9</td>
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<td>4.00</td>
<td>89.9</td>
</tr>
<tr>
<td>Religiosity**</td>
<td>82.1</td>
<td>4.07</td>
<td>4.00</td>
<td>72.2*</td>
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<tr>
<td><strong>Entrepreneurial Organization:</strong></td>
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<td>91.7</td>
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<tr>
<td>Founder’s personal</td>
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<tr>
<td>competencies</td>
<td>89.8</td>
<td>4.31</td>
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</tr>
<tr>
<td>Marketing competencies</td>
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<tr>
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<td>3.54</td>
<td>4.00</td>
<td>58.3*</td>
<td>3.58</td>
</tr>
<tr>
<td>Technological competencies</td>
<td>53.9*</td>
<td>3.54</td>
<td>4.00</td>
<td>58.4*</td>
</tr>
<tr>
<td>Political competencies</td>
<td></td>
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</tr>
</tbody>
</table>
Entrepreneurial Orientation
In Round 1, under the entrepreneurial orientation, four indicators were achieved consensus: ‘Innovativeness’, ‘Risk-taking’, ‘Proactiveness’, and ‘Competitive Aggressiveness’. These indicators indicated the importance median of 4 to 5 and rated more than 80% by the experts as being strongly important or important. In addition, one expert suggested and described one additional indicator that he/she believed as an important indicator in evaluating the entrepreneurial orientation. This indicator was accepted as the sixth indicator of entrepreneurial orientation and named as ‘Religiosity’:

‘Religious beliefs and faiths such as honesty should also consider as the important indicator of the success of construction business as they could minimize the risk of unethical practices within the industry’.

In Round 2, out of six indicators, four indicators were achieved consensus, namely ‘Innovativeness’, ‘Risk-taking’, ‘Proactiveness’, and ‘Competitive Aggressiveness’. These indicators indicated the importance median of 4 to 5 and rated more than 80% by the panel experts as being strongly important or important. This result concurred with the result of the Round 1.

Entrepreneurial Organization
In both Round 1 and Round 2, all of the entrepreneurial orientation elements were achieved consensus. The importance median for the indicators fell between 4.0 and 5.0 and more than 80% of the experts rated ‘Organizational Structure’ and ‘Organizational Culture’ as both being strongly important or important. Therefore, both of them were achieved consensus.

Entrepreneurial Competencies
In both Round 1 and Round 2, five indicators were seemed to achieve consensus: ‘Founder’s Personal Competencies’, ‘Business and Management Competencies’, ‘Marketing Competencies’, ‘Technical Competencies’, and ‘Technological Competencies’. All of these indicators indicated the importance
median 4 to 5 and were rated more than 80% by the experts as being strongly important or important. Therefore, these indicators were attained consensus.

**Entrepreneurial Environment**

In Round 1, five indicators, namely ‘Financial Resources’, ‘Government Policies’, ‘Government Programs’, ‘Entrepreneurial Education and Training’, and ‘Commercial and Professional Infrastructure’ were achieved consensus as rated more than 80% by the panel experts as being strongly important or important and indicated the importance median of 4 to 5. In addition, one expert has been suggested and described two additional indicators that he/she considered as important indicators for evaluation the entrepreneurial environment, and were added as the tenth and eleventh indicators two additional indicators. These indicators were named as ‘National Economy Growth’ and ‘National Political Stability’:

‘The progress of the national economy is very important to the survival of construction enterprise in which the growth of the nation’s economy resulting in increases the demand for construction projects not only by government but also by the private sector. Customers will have purchasing power, and the market value of the projects and services will also increase as a result of the economic progress over time’.

‘The political stability of the government is also important to the success of construction business. The stable government normally has the policies in the development of national economies, infrastructures, and societies, as well as lesser risks in doing businesses’.

In Round 2, out of eleven indicators, seven indicators, namely ‘Financial Resources’, ‘Government Policies’, ‘Government Programs’, ‘Entrepreneurial Education and Training’, ‘Commercial and Professional Infrastructure’, ‘National Economy Growth’, and ‘National Political Stability’ attained the required consensus. They were rated more than 80% by experts as being strongly important or important, and indicated the importance median of 4 to 5.

**DISCUSSION**

The reaching consensus as recommended by experts after only two rounds of Delphi process is a good indication that all the chosen business success indicators were relevant in addressing the problem that stated in this study. In addition, the Kendall’s Coefficient of Concordance, \( W \) was positively significant at \( p < 0.05 \), and has increased from 0.492 in Round 1 to 0.632 in Round 2. The result suggests that the importance of the selected indicators was not particularly controversial. Although the result indicates the moderate level of consensus \( (W = 0.632) \) reached by the Delphi panellists, nevertheless, it was not the result of sharp disagreements over the ranking of particular indicators. The achieved by moderate levels of consensus has provided a reasonable level of confidence in the results of the current study, which consistent with the suggestion of Habibi et al. (2014) and Schmidt (1997).

The important results revealed from the Delphi study is that the expert panellists have perceived eighteen indicators as the important success indicators for the construction business as summarized in Table 2. The ranking was based on the mean values, and if any of the indicators have the same mean, then the percentage of experts’ agreement on that particular indicator was used. Of the four success perspectives, entrepreneurial competencies and entrepreneurial environment were the most domain perspectives. Each three indicators of these perspectives included in the top ten of the most important indicators of construction business success, follow by each two indicators from the entrepreneurial organization, and entrepreneurial orientation.
Entrepreneurial orientation has been posited by many scholars as associated positively with firm profitability and growth (Hitt, 2005; Kraus, 2013; Rauch et al., 2009). The existence consensus of findings was consistent with the majority of previous studies that reported a positive relationship between ‘Innovativeness’, ‘Risk-taking’, ‘Proactiveness’, and ‘Competitive Aggressiveness’ and business performance (Arshad et al., 2014; Putniņš & Sauka, 2013; Shehu & Mahmood, 2014). The results provided evidence of synergies relating to the link of entrepreneurial orientation and business performance. Entrepreneurial orientation is not only strategy-making processes of construction business, but also an ongoing process to achieve a competitive advantage in the hostile business environment such as the construction business is (Vecchiarini and Mussolino, 2013; Zain and Hassan, 2007).

It was surprising to note that ‘Autonomy’ did not reach the consensus. Thus, in a situation where the owners or founders of construction enterprise lose their autonomy over their business decisions, an effect on performance would expect. However, it is possible that the owners believe the important for all business decisions undertaken as the collective decisions by them and their managers. Another reason on this issue could be due to the fact that people play key roles in nearly aspects of all construction process and management (Abowitz & Toole, 2010). It has implied the need for collaboration among people in the construction organization, even in decisions making process. The finding has consistence with the study of Zain & Hassan (2007) within the Malaysian construction industry who revealed that ‘Autonomy’ was negatively associated with the growth of construction companies. It also supported evidence offered by Arshad et al. (2014) that no correlation found between autonomy and business performance in Malaysian technology-based SMEs. However, the absence of consensus on ‘Religiosity’ orientation was not surprising since there were substantial disagreements in the literature on the relationships between the
The entrepreneurial organization has been seen by many scholars as a strategic direction that includes renewing products, processes, services, strategies, or even the organization as a whole (Colvin & Miles, 1999). It is the most influence indicators on firm’s productivity (Hunter, 2002). In relation to ‘Organizational Structure’, the finding has been supported the views forwarded by Mokua & Ngugi (2013) where the proper organizational structure could enhance organization’s entrepreneurial activities that lead to performance improvement. It also supported the evidence offered by Chen & Lee (2007) that organization structure of a construction enterprise was affecting the performance of specific projects. Indeed, a high correlation was found between the project success and organizational structure (Shahu et al., 2012). In relation to the ‘Organizational Culture’, the result has supported the findings of Turró et al. (2014) where organization culture appeared to be positively significant and has a direct effect on corporate entrepreneurship. Indeed, Ogbonna & Harris (2000) found that that innovative culture and competitive culture had positively linked to the business performance. It also supported the evidence that organizational culture is one the key indicators of the construction industry performance, among others, in term of trustworthiness and inter-project knowledge sharing (Wiewora et al., 2014), international strategic alliances (Yitmen, 2013), industry mentality (Cheung et al., 2012), and conflict amongst stakeholders (Harinarian et al., 2013).

The entrepreneurial competencies have been seen by many scholars as important factors to the firm’s performance and competitiveness (Man et al., 2002), and business success and growth (Mitchelmore & Rowley, 2010; Solesvik, 2012). The findings revealed that five indicators had achieved consensus. It includes ‘Marketing Competencies’, ‘Technical Competencies’, ‘Business and Management Competencies’, ‘Founder’s Personal Competencies’, and ‘Technological Competencies’. These indicators associated with the fundamental functions of the existence of construction business. It involves the processes of marketing to acquire or sell the project or product, operation to build the project, and management to manage all the processes involved (Schleifer, 1989; Stevens, 2007).

‘Marketing Competencies’ is crucial to every construction enterprise that may include the functions of estimating, pricing, bidding, networking, and so on. It emerged the importance of marketing efforts to acquire the projects. The project is the ‘commodity’ of the construction business, and without the project, construction business does not exist. The operational functions that involve the execution of the project are very important to the construction business. It aimed to ensure the project is constructed accordingly since they have strategic implications on the success and profitability of the business (Jari & Bhangale, 2013). In this regard, ‘Technical Competencies’ and ‘Technological Competencies’ are the elements that played the vital roles in the project’s execution phases. It may include the factors such as construction knowledge, project management practices, information technology or the use of a new method of construction. The construction business is seen further emphasizes the importance of management aspects to managing all the operational processes within the organization. In this view, ‘Business and Management Competencies’ are the important aspects of competencies that have implication to the organization performance. Among the important ‘Business and Management Competencies’ that important to the construction business are strategic management, risk management, human resource management, financial management, and so on.

The ‘Founder’s Personal Competencies’ which highlighted the importance of background characteristics and psychological attributes of the founding entrepreneurs are also the important aspects of the construction business. It supports the view forwarded by Driessen & Zwart (2014) that the greatest determinant of business success is the entrepreneur him/herself. It also supported evidence offered by Baum & Locke (2004) and Che Rose et al. (2006) that entrepreneurs, as the owner-managers, play a prominent role in determining business success. Indeed, the lack of entrepreneurial competencies among
the main founder-owner was the most significant reason for most enterprises failures (Kiggundu, 2002). These findings also corroborated by the findings of Mitchelmore & Rowley (2013) who found that personal competency and, business and management competencies were associated with the business growth. In the context of the construction business, these findings supported the evidence offered by Shigang (2011) who revealed that entrepreneurial capability, marketing, and project management competencies were a significant positive relationship with the overall performance of the construction enterprises.

The absence of consensus on two other indicators, namely ‘Political Competencies’, and ‘Social Responsibility Competencies’ were seen to be associated with external indicators that outside the fundamental elements of the construction business. However, the findings are considered to have offered a significant contribution to the literature where there existed substantial disagreements in the literature on the effects of ‘Political Competencies’ and ‘Social Responsibility Competencies’ on performance. Some researchers had found the positive relationship while others contradictory.

Economies have long noted that firms that maintain any political connections receive a variety of economic benefits in returns (Blau et al., 2013). In this context, the ‘Political Competencies’ which represents the used of political connections in securing projects was ignored by most of the experts. However, it is possible that the experts considered that the lobbying efforts were one of the activities of ‘Marketing Competencies’. The absence of consensus on ‘Corporate Social Responsibility Competencies’ had supported the viewed of Iqbal et al. (2012) and Nasiieku et al. (2014) that the relationship of corporate social responsibility to the performance was unclear. Indeed, corporate social responsibility activities significantly decrease short-term profitability in certain industries (Inoue & Lee, 2011). Furthermore, the gains expected from corporate social responsibility practices are more in the form of intangible benefits such as image/reputation, recognition, and loyalty benefits, all of which may result in turn of profits. However, these intangible benefits may less necessary for construction business because all of the benefits did not guarantee for securing future projects which become the major objectives of the construction business. It could be true in the manufacturing industry where image or reputation and recognition of the company were able to gain loyal benefits and results in gaining superior income.


With respect to these indicators, the availability of financial support was seen to have the highest consensus among the expert panellists. This finding has been supported the evidence offered by Alkali & Isa (2012) and Shamsuddin et al. (2012) that availability of funds is significantly associated with business performance. Indeed, lack of financial support have been widely reported as the main problem facing entrepreneurs in Malaysia and was apparent in research done in both developed and developing countries (Ahmad & Xavier, 2012). This finding highlights that the availability of ‘Financial Resources’ is of paramount importance to the construction business. In this sense, construction enterprise may need capital to execute the projects, and it could acquire through internal funds or loans, mortgages, and others from financial institutions.
The needs of consistencies of ‘Government Policies’ and ‘Government Programs’ to support entrepreneurial activity are also crucial for the construction business. It can be done by improving ‘Entrepreneurial Education and Training’ with special emphasis on four perspectives of entrepreneurship theory that have been used in the current study, namely entrepreneurial orientation, entrepreneurial organization, entrepreneurial competencies, and entrepreneurial environment. Moreover, ‘Government Policies’ and ‘Government Programs’ could also support entrepreneurial development by providing the ‘Commercial and Professional Infrastructure’ which accessible to the construction companies.

‘National Economy Growth’ and ‘National Political Stability’ were other indicators that have achieved consensus. ‘National Economy Growth’ and ‘National Political Stability’ were deeply interconnected. In this sense, the relationship between economic growth and stability refers to the manner in which the political stability of a nation can lead to its economic growth which in turn providing safely and stable business environment. These findings had supported the evidence forwarded by Bazza & Daneji (2013) that the performance of business organization depends heavily on the stability of government. In the context of the construction industry, if the country prospered, then more development projects will exist and resulting in more chances to the construction business.

CONCLUDING REMARKS

This study forwarded eighteen valid indicators under four entrepreneurship perspectives as the predictors of success for entrepreneurs in the construction industry. The findings are considered to have offered a significant contribution to the literature, since this study is the first to use the entrepreneurship perspectives in searching the indicators for the success of the construction business. It could be said to have shed light on a symbiotic relationship between the entrepreneurial activities and business success in the construction industry. It suggests that the entrepreneurial-oriented construction enterprises can position themselves to take advantage of market opportunities. Construction enterprises should consider and adopted the concept of entrepreneurship as a tool for running a business. They should focus and give priority to the indicators if they want to success in their business. Moreover, construction industry policy makers’ should also consider the indicators while developing the industry’s policies.

We argued that the long-term success of construction business could achieve through the corporate entrepreneurship. Rather than viewing the construction business success from the projects executed outcomes, we hypothesized that the success of the construction business can be derived from entrepreneurial activities implemented within the organization. The results of this study suggests that that entrepreneurship phenomenon was universally applicable to all industries in several and significant ways. However, it needs to be tailored to suit the industry’s fundamental differences as to warrant successful application.

It is practical to suggest possibilities for future research. By using this research as a platform, future research efforts should able to support or refute the findings revealed from this study. It is recommended to extend the findings of the current study by conducting an empirical survey of the wider population of the construction organizations. However, it is important to ensure that the respondents well understand the concept of entrepreneurship. It also suggested to replicate the study in cooperating data from wider geographical regions to improve the external validity of the instruments and to substantiate results reported by the Malaysian construction industry. New success indicators could be designed, depending on what have been agreed to be termed as entrepreneurship perspectives to improve the model. For example, it could use the perspectives of entrepreneurial schools of thought consisted of the micro view and macro view of entrepreneurship. It is also interesting to know if the model is universally and could use in other industries.
REFERENCES


Acquisition of Experts’ Opinions to Explore the Drivers of Business Success in the Construction Industry


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The remainder of the references cited in this paper are omitted due to space considerations. Interested parties are invited to contact the author for a complete copy of the paper.
Introduction

Insurance firms are considering as a vital sector of the financial services industry which is offering and supplying a wide diversity of services; these services help to improve and support citizens' quality of life (Han, Li, Moshirian & Tian, 2010; Wong, Tong & Wong, 2012). In a recent decade, service quality has received more attention for playing a significant role in attachment with customer satisfaction and patronage intentions (Chingang Nde & Lukong, 2010; Ranaweera & Neely, 2003; Sharma, 2014). Several researchers agreed in their study that customer satisfaction and customer patronage intention with superior quality of service provided can achieve a successful business completion (Gronroos, 2006; Parasuraman, 1997; Rahman, Mohamad & AbdellFattah, 2014; Rao, 2015; Zeithaml, 2000). Both service quality and customer satisfaction considered as an arrangement level between customers’ expectations and customer perception (Bosque, Martín, Collado & Salmones, 2009; Dutta & Dutta, 2009; Grönroos, 2000; Singh & Khanduja, 2010). In the same line, Grönroos (2000) asserted that expectations used as a standard reference against with the performance. From a customer point of view, Babakus and Boller (1992) stated that customers should decide what the service characteristic is mainly beneficial to them instead of the service provider determining these features.

In order to achieve competitive advantage, the healthcare insurance in Malaysia needs to meet the consumers’ expectation that led them to adopt and apply a new model of customers’ patronage intention (Hennig-Thurau & Klee, 1997; Aaker & Joachimsthaler, 2000). Previous studies are slightly fragmented, mainly in the area of service quality which is considered as the key to success in the customer-oriented in the future (Bolton & Drew, 1991; Gera, 2011; Lovelock, 2008; McDougall & Levesque, 2000). Moreover, the majority of previous research discussions on marketing were mainly in the context of western culture. Seldom this concept being discussed under Asia Pacific Region in the context of service quality, customer satisfaction on customer's patronage intention under a multiracial environment in Malaysian healthcare insurance industry.

This study proposed a model for service quality: customer satisfaction and customer patronage intention in Malaysian healthcare insurance products. To underscores the effect of moderating and mediating variables in improving customer patronage intention. It also intends to enhance the theoretical understanding and realization of the intricacy of service quality and its measurement on healthcare insurance industry. This study deliberately focuses on the level of abstraction in Malaysian healthcare insurance industry to contribute the spacious theoretical and empirical data on the relationships among the involved variables.

Constructs Development
Service Quality and customers satisfaction
The concept of service quality has attracted researchers' attention in the marketing fields. As they have demonstrated in their study that there is strong interaction between service quality and customer satisfaction on the financial performance, customer retention as well as customer loyalty and it is role in marketing strategy success (Ahmad & Sungip, 2008; Mcfarlane, 2013; Rintamäki, Kuusela & Mitronen, 2007; Sharma, 2014; Trubik & Smith, 2000). Thus, firms operating in the services industry take into its account the concept of service quality as a strategic component in their marketing plan (Kheng, Mahamad & Ramayah, 2010; Petridou, Spathis, Glaveli & Liassides, 2007; Rahman et al., 2014; Siddiqi, 2011). In this regard, firms can access to a superior level of service quality that leads to customer satisfaction as well as preserve a constant and stable competitive advantage (Bitner, Brown & Meuter, 2000; Guo, Duff & Hair, 2008; Rintamäki et al., 2007; Tam, 2004). Also, service quality considered as a vital concept in the financial industry (Elmayar, 2011).

According to Auka (2012), service quality is the consumer’s expectation of services and judgement of the overall quality. So it is the differences between the expectation about and the perception of the performed service. McQuitty, Finn and Wiley (2000) stated that the gap between expectations and perceived performance is the best predictor of customers satisfaction. However, service quality is sufficient when the customers perception is equal or exceed to the expectation (Auka, 2012). In the same context, Huang, Li, and Yang (2011) suggested that service quality has a direct effect on customers satisfaction toward the customer patronage intention as well. By keeping the mentioned discussions in mind, the first hypothesis formulated as follows:

**H1: Service quality is positively related to customers' satisfaction.**

Service Quality towards Customer Patronage Intention
As stated earlier, several studies have reported that there is a direct positive relationship between service quality and customer satisfactions (Auka, 2012; Brady & Cronin, 2001; Cronin & Taylor, 1992; Mano & Oliver, 1993). These studies established that customer satisfaction with a service quality attributes is associated with customer patronage intention. Indeed, Zhang (2005) suggests that the assumption drives the application of customer's satisfaction in service firms to repurchase. Furthermore, Cronin and Taylor (1992) identified a correlation between service quality and customer preference loyalty by focusing solely on the relationship between perceived service quality and customer patronage intentions. Also, service quality and customer satisfaction, in general, are considered as a customer's determinant to repurchase (Chau, 2012; Duodu & Amankwah, 2011; Sagib & Zapan, 2014).

According to the aforementioned literature, service quality may also be related to customers patronage intention mediated by customers' satisfaction. Previous empirical works indicated that there was a positive relationship between service quality and customer satisfaction (Jan, Abdullah & Smail, 2013; Ogunnaike & Olaleke 2010; Wong et al., 2012). However, when the relationship between customer satisfaction and behavioural intentions is examined, the results were varied. The majority of studies indicated that service quality influences behavioural intention only through customer satisfaction (Al-Otaibi, 2014; Auka, 2012; Bei & Chiao, 2001; Gera, 2011; Siddiqi, 2011). The same result was also indicated by Cronin and Taylor (1992). Thus, this paper attempts to examine three hypotheses resulted from the direct and indirect relationships between service quality and customers satisfaction on customer's patronage intention of healthcare insurance products.

**H2: Service quality is positively related to customer patronage intention of healthcare insurance products.**

**H3: Customers’ satisfaction is positively related to customer patronage intention of healthcare insurance products.**
**H4: Customers’ satisfaction has a mediating role in the relationship between service quality and customers patronage intention of healthcare insurance products.**

The Moderating Variable of Customers Switching Behavioral Intention

Creating a state of customer satisfaction enables the company to maintain and retain their customers who cost substantially less to the company than acquiring new ones (Qudah, Al-beshtawi, Al-Tarawneh, Mohammad, & Abu-Laimon, 2013). Most of the customers are leaving or switching a particular firms because they feel they are not satisfied with the service or product offering (Rust & Zahorik, 1993).

Hoyer and MacInnis (2001) assured that customers’ satisfaction can be associated with feelings of acceptance, happiness, relief, excitement, and delight of a service. To achieve customers satisfaction, customer needs and wants must be fulfilled (LaBarbera & Mazursky, 1983).

Bowen and Chen (2001) declared that extremely satisfied customers are less prone to overtures from the competition. Similarly, Keating, Kriz and Quazi (2008) asserts that customers’ satisfaction is positively associated with patronage intentions and the likelihood to recommend a product or service offering.

The discussions above indicate that satisfaction is a determinant of customer patronage intention to service firms. Hence, firms need to ensure that customers are satisfied to enhance their behavioural intention.

Rust and Zahorik (1993) conclude that numerous studies treat satisfaction as a necessary premise for customer loyalty. As this paper proposed that even customers be satisfied, customer's might still switch to other service providers. On the other word, the lower the customers' are switching behaviour intention, the higher will the customers' intention to patronage. Hence, customers' switching behaviour intention is introduced as a moderator in the relationship between customers' satisfaction and customers' patronage intention of healthcare insurance products. Thus, the fifth and final hypothesis was formulated as shown:

**H5: Customers’ switching behaviour plays a moderating role in the relationship between customers’ satisfaction and customers’ patronage intention.**

**THE CONCEPTUAL FRAMEWORK DEVELOPMENT**

In order to develop a conceptual framework for this study, the researchers carefully examined the literature on service quality (SQ), customers' satisfaction (CS), customers switching behavioural intention (CSB) and customers’ patronage intention of healthcare insurance products (CPI). In this scene and as shown in Figure 1, the proposed constructs were utilized to develop the study framework as well as formulating the hypothesis for additional empirical examination. However, the exogenous variable is service quality (SQ) and, customers satisfaction (CS). The customer patronage intention (CPI) was considered in this study as an endogenous or outcome variable. The customers' satisfaction (CS) variable is also applied as a mediating variable in between service quality (SQ) and patronage decision intention (CPI), whereas customers switching behaviour (CSB) employed as a moderating variable in between customers satisfaction (CS) and customer patronage intention (CPI).
The data for this inquiry were collected through a self-administered structured survey that adapted from pre-existing studies. A convenience sampling procedure was applied in the Klang Valley area in Malaysia. This research also utilized university and mall in the collection of data. A five-point Likert scale was applied to explain the respondents' perception in the used instruments with (1= strongly disagree) and (5=strongly agree).

A total of 270 instruments was distributed to the targeted respondents, and only 242 questionnaires were collected. After screening and examining the questionnaires, we only found 237 questionnaires valid for further data analysis. In the present inquiry, participants of this research were 237 customers from diverse healthcare insurance service providers in Malaysia. The mean age of participants was 25 years. In respect to the gender, out of 237 respondents, 55% of the respondents were female followed by male 45%. Also, 60% of the participants were single. The majority of the respondents (75%) reported that to have their healthcare insurance policy more than eight years. Among the respondents majority of them were from Malay (52%) followed by Chinese (28%) and Indian (20%).

A twenty-two items were adopted and modified to suite the context of healthcare insurance in Malaysia. As a consequence, the adopted items were used to measure all the involved study constructs. A test of reliability was calculated by Cronbach’s alpha to measure of each construct. Based on scholar’s suggestion that the cutting off value of Cronbach’s alpha is ranging between 0.60-0.70 were adopted in this study. The service quality variable was measured with ten items adapted from Zeithaml, Berry and Parasuraman (1996) measures; this includes five dimensions: Tangibles, Reliability, Responsiveness, Assurance and Empathy. The scale confirmed sufficient and reliable with (α = 0.873). While, customers' satisfaction variable were operationalised using four items adapted from Athiyaman (1997); Cronin, Brady and Hult (2000); Hellier, Geursen, Carr and Rickard (2003); McDougall and Levesque (2000). These scales also resulted (α = 0.921). The measurements of the customers switching behaviour were adapted from Wong and Mula (2009) with four items with value (α = 0.886). In measuring customers’ patronage intention, the researchers adapted from Sharma (2014) with value (α = 0.776).

The research model was tested by Confirmatory Factor Analysis (CFA) and Structural Equation Modelling (SEM) by using AMOS 20.0. In order to recognize the hypothetical construct measurement through the observed variables, this research applied CFA to assess the adequacy of the measurement model.
DATA ANALYSIS

This study applied CFA to verify the measurement regarding constructs’ dimensions using AMOS 20.0 software as depicted in Table 1 which shows the reliability of the scale used. This research was calculated Cronbach’s alpha, the average variance extracted (AVE) and composite reliability (CR) for all the latent variables’ measurement scales. As mentioned in Table 1, the results show that all the scales are reliable for further data analysis. This research also attained the composite reliability (CR) derived from the CFA test, which is suggesting that all the criteria are reliable and valid as earlier mentioned in Table 1 (Hair, Black, Babin, & Anderson, 2010). To test the convergent validity this research appeared on the individual factor loadings and their relative AVE (SQ = 0.721, CS = 0.734, CSB= 0.701 and CPI = 0.622). Based on Fornell and Larcker (1981) suggestion, all the AVE results were greater value 0.70, which reproduced an adequate discriminant validity of the constructs. Also, all the constructs CR is higher than 0.7 which support the measures’ reliability. By following Hair et al. (2010) recommendations, the model fits, this study employed the Chi-Square ($X^2$); Goodness-Of-Fit Index (GFI); Comparative Fit Index (CFI) and the Root Mean Square Error Of Approximation (RMSEA).

<table>
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<tr>
<th>Construct/Indicators</th>
<th>Loading Factor</th>
<th>α</th>
<th>CR</th>
<th>AVE</th>
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<tr>
<td><strong>Service Quality(S)</strong></td>
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<tr>
<td>(X²=434.48; df=158 (p=0.00); (GFI=0.91; CFI =0.92; RMSEA=0.05)</td>
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<tr>
<td>Visually appealing physical facilities (SQ1)</td>
<td>0.915</td>
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<tr>
<td>Visually present service materials(SQ2)</td>
<td>0.837</td>
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<tr>
<td>Keeping promises (SQ3)</td>
<td>0.821</td>
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<td>Settling claims with no unnecessary delays (SQ4)</td>
<td>0.758</td>
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<tr>
<td>Offering prompt service to customers (SQ5)</td>
<td>0.864</td>
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<tr>
<td>Always willing to help customers (SQ6)</td>
<td>0.83</td>
<td>0.873</td>
<td>0.962</td>
<td>0.721</td>
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<tr>
<td>Employees and agents instilling confidence in customers (SQ7)</td>
<td>0.84</td>
<td></td>
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<tr>
<td>Employees and agents being consistently courteous with customers(SQ8)</td>
<td>0.921</td>
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<tr>
<td>Employees and agents giving customers personal attention(SQ9)</td>
<td>0.874</td>
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<tr>
<td>Having the customers’ best interests at heart (SQ10)</td>
<td>0.817</td>
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<tr>
<td><strong>Customers’ Satisfaction (CS)</strong></td>
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<tr>
<td>(X²=7.78; df=2(p=0.03); GFI= 0.96; CFI = 0.97; RMSEA= 0.02)</td>
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<tr>
<td>I am pleased that I bought the healthcare insurance policy from my current healthcare insurance company(CS1)</td>
<td>0.873</td>
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<tr>
<td>My current healthcare insurance coverage fulfils my needs (CS2)</td>
<td>0.932</td>
<td>0.921</td>
<td>0.917</td>
<td>0.734</td>
</tr>
<tr>
<td>My healthcare insurance company gives me the service I expect (CS3)</td>
<td>0.842</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am very satisfied with my current healthcare insurance company (CS3)</td>
<td>0.779</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Customers’ Switching behaviour (CSB)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(X²=6.98; df=2(p=0.01); GFI= 0.94; CFI = 0.92; RMSEA= 0.08)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have the intention to renew my current healthcare policy with my current healthcare insurance company (CSB1)</td>
<td>0.861</td>
<td>0.886</td>
<td>0.881</td>
<td>0.701</td>
</tr>
<tr>
<td>I intend to renew my healthcare insurance policy</td>
<td>0.850</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Patronage Intention of Healthcare Insurance Products: Service Quality and Customers Satisfaction – An Embedded Model</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I believe that switching to another healthcare insurance company will be costly (CSB2)</td>
<td>0.752</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I anticipate the changing my insurance policy is costly (CSB3)</td>
<td>0.763</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Customers’ Patronage Intentions (CPI)</strong>&lt;br&gt;( (\chi^2=13.48; df=8(p=0.00); (GFI=0.90; CFI =0.91; RMSEA=0.06) )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I intend to continue to purchase, at least the same healthcare insurance policy over the next 12 months (CPI 1)</td>
<td>0.738</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I intend to continue to contribute, at least the same amount, to personal healthcare from my present financial services company over the next 12 months (CPI 2)</td>
<td>0.781</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With all my considered, I would likely to purchase, at least same policy of healthcare insurance over the next 12 months (CPI 3)</td>
<td>0.749</td>
<td>0.776</td>
<td>0.869</td>
<td>0.622</td>
</tr>
<tr>
<td>If I had the chances, I would continue to purchase, at least the same healthcare insurance, over the next 12 months (CPI 4)</td>
<td>0.895</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: Cronbach alpha (\(\alpha >0.70\)); AVE=Average Variance Extracted (value > 0.50); CR=Composite Reliability (value > 0.70); \(\chi^2=\text{Chi-Square}; \) d.f = Degree of Freedom; GFI= Goodness of Fit Index; CFI=Comparative Fit Index; RMSEA= Root Mean Square Error of Approximation.

As this study proposed five direct and indirect hypotheses, SEM was used to test this proposed hypothesis. As SEM techniques are primarily suited for evaluating the multiple relationships. To prove the model fit to the data at hand, this study assessed the model by using the \(\chi^2\), GFI, CFI, and the RMSEA. As mentioned in Table 2, the influence of the relationships among the constructs is represented by the respective standardized path coefficient. According to Cohen’s (1988) standardized path coefficient (\(\beta\)) with absolute values of <0.10 may indicate “small” effect; values of in the region of 0.30 reflect a “medium” effect; and values with >0.50 or more reflects a “large”. 
The result of this study as reported in Table 2, revealed that the standardized path coefficients (β) for SQ is acceptable which explain the positive effects of CS (β= 0.651; t-value= 2.792 and p-value= 0.001), on the other hand, the result also showed that CPI (β=0.572; t-value= 2.869 and p-value= 0.001). However, only the coefficient of CS with CPI is not significant. Hence, this study accepted H1, H2; while H3 was not supported due to it is not significant path.

To examine the fourth hypothesis (H4), this study employed the bootstrapping approach as recommended by Arbuckle and Wothke (1999) to assess the mediating or indirect effect of CS in the relationship between the antecedents (SQ) and the outcome (CPI). Several researcher like Bollen and Stine (1990);
Hayes (2009); MacKinnon et al. (2002); Preacher (2004); Shrout and Bolger (2002) advocate the use of bootstrapping method in assessing indirect effects. Bootstrap results also claimed to have more accurate probability estimates which can help with mediation issues in which the mediator and outcome variable are not normally distributed (Hayes, 2009; Shrout & Bolger, 2002).

<table>
<thead>
<tr>
<th>Hypothesis Path</th>
<th>Direct Effect</th>
<th>Indirect Effect</th>
<th>Total effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ→CS</td>
<td>0.651</td>
<td>--</td>
<td>0.651</td>
</tr>
<tr>
<td>CS→CPI</td>
<td>0.029</td>
<td>--</td>
<td>0.029</td>
</tr>
<tr>
<td>SQ→CPI</td>
<td>0.572</td>
<td>0.019</td>
<td>0.591</td>
</tr>
</tbody>
</table>

From the output of SEM path analysis as shown in Table 3, it is clear that SQ is positively linked to CPI. As shown in Table 3 the direct effect is 0.572. The total effect of SQ to CPI=0.591, with an indirect effect = 0.019 and direct effect=0.572.

Accordingly, we can conclude that the direct impact is more predominant than the indirect effect of CS towards CPI. Based on the result, we can demonstrate that CS as a mediating variable has a partially significant and positive influence on CPI. As a result, we reject H4.

To test the moderating effect of customer's switching behaviour intention in the relationship between customers satisfaction and customers patronage intention, this current study followed the methodology recommended by Marsh, Wen and Hau (2004); Zhao and Tamer Cavusgil (2006). Based on their suggestion, a two-group model was used because it could determine whether customer's switching behaviour intention moderates the effect of customer's satisfaction on customer's patronage intention. The sample was divided into two groups according to the mean score of the customer's switching behaviour intention of the respondents. In the result, the data above the mean were defined as high switching behaviour, while, the data below the mean as low switching behaviour intention. A two group AMOS model was used later to determine whether or not there was any significant difference between the structural parameters of the high and low switching behaviour intention group.

The unconstrained approach introduced by Marsh, Wen and Hau (2004) was applied to test the moderating effect of customer switching behaviour on the relationship between customer satisfaction and customer patronage intention with the purpose of testing the hypothesis H5. This method as suggested was applied to estimate the non-linear effects without bias (Marsh, Wen, & Hau, 2004; Zhao & Tamer Cavusgil, 2006).

Based on researchers recommendation like the moderating effect considered significant since the difference in chi-square value between the constrained and unconstrained model is above 19.675 at 11 degrees of freedom. The findings of this study showed that the difference in chi-square value = 20.106, while the difference in the Degrees of Freedom df= 11. As shown in Table 4, in order to the test to be significant, the difference in chi-square value must be more eminent than the value of chi-square with 11 degrees of freedom, which equal to 19.675. The result also showed the evidence to support the moderating effect of CSB on the structural model measuring the impact of CS on CPI. Hence, this result accepts H5.

<table>
<thead>
<tr>
<th>Fit indices</th>
<th>Constrained Model</th>
<th>Unconstrained Model</th>
<th>Chi-Square Difference</th>
<th>Result on Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>341.919</td>
<td>321.813</td>
<td>20.106</td>
<td>Supported</td>
</tr>
<tr>
<td>Degrees of Freedom</td>
<td>117</td>
<td>106</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>GFI</td>
<td>.742</td>
<td>.742</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGFI</td>
<td>.636</td>
<td>.620</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1134
Customer Patronage Intention of Healthcare Insurance Products: Service Quality and Customers Satisfaction – An Embedded Model

<table>
<thead>
<tr>
<th>CFI</th>
<th>0.702</th>
<th>.720</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMSEA</td>
<td>0.057</td>
<td>0.056</td>
</tr>
<tr>
<td>Chi-Square/ Degrees of Freedom</td>
<td>2.92</td>
<td>3.03</td>
</tr>
</tbody>
</table>

H5: Customer Switching Behaviour moderates the relationship between Customer’s Satisfaction and Customer’s patronage intention.

CONCLUSION AND IMPLICATION

Above all, this research only used 237 respondents to investigate the influence of service quality and customers satisfaction on customer patronage intention by testing the Moderating effects of customers switching behaviour in between customers' satisfaction and customer patronage intention into utilizing the structural equation modelling. As a result, the validity of the proposed model was accepted and supported. Apart from that, this research employed chi-square to examine the moderation effect. Based on the statistics above, it is quite clear that there is a strong relationship between service quality and customers' satisfaction as well as for the relationship between the service quality and customers patronage intention. The study also exposes the role of customers' switching behaviour played as moderation in between customers' satisfaction and customers' patronage intention. Also, this research also concludes that the role of customers satisfaction in between service quality and customers patronage intention partially mediate the proposed relationship. Meanwhile, the relationship between customers' satisfaction and customers' patronage intention is not important.

DISCUSSION AND IMPLICATIONS

This current study is an initial research in the healthcare insurance industry under Malaysian perspective that links all the important antecedents of customer’s patronage intention of healthcare insurance products in Malaysia. This research also examined the moderating effects of customer switching behaviour in between customers' satisfaction and customers’ patronage intention of healthcare insurance products in Malaysia. Since consumers of healthcare insurance service sectors are choosing their desired services or policy to face the risk of any unpredictable healthcare problem in their lifetime. Thus, this research will assist the service providers to understand the factors that benefit them to satisfy the needs of their current and prospective customers.

Regarding service quality, this research also revealed that healthcare insurance service providers need to concentrate on their physical environment of their respective organization and friendliness of the employees towards their customers are key elements for the success of healthcare insurance operations (Sharma, 2014). Trasorras (2008) argues that it be important for firms' to provide customers a positive and memorable service experience. However, this study also explores that company’s' service attributes, as well as their image, also affect customers patronage intention. The findings are similar to the researchers like Alok and Srivastava (2013); Auka (2012); Cronin et al. (2000); Dagger and Sweeney (2007); Ranaweera and Neely (2003); Wang (2009).

Nevertheless, the healthcare insurance sector has become the target of consumer primarily to protect the pursuit of one family welfare (World Investment Report, 2005). For this reason, it is necessary for the healthcare insurance companies to inspect on how to be the best among the competitors and create customers’ intention to purchase their services. Aside from that, companies also need to seek for a long term relationship with consumers in order to sustain and grow in this sector (Al Otaibi, 2014; Rahman et al., 2014). Researchers like Ahmad and Sungip (2008); Bala, Sandhu and Nagpal (2011); Robinson, Jakubowski and Figueras (2005); Siddiqui and Sharma (2010) suggest that given increasing competition in the insurance service providers need to look at their service quality where this research also agreed.
As a result, healthcare insurance service providers need to discover all the aspects that let the customers pursue their policy under their company by maintaining the reputation of the individual brand name, average services prices, service quality with expected performances, features of the services, the friendly behaviour of the front line staff. Future research with larger samples with a variable like a religiosity and spirituality can be used to identify more details about the customers’ patronage intention of healthcare insurance products.

ACKNOWLEDGMENT

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REFERENCES


A Critical Study on Motivational Factors Influencing Development of Women Entrepreneurs in SME’s in India

Keywords: Challenges, Entrepreneur, Motivational, Factors, SME (Small and Medium Enterprises), Women

INTRODUCTION

"Empowering women is a prerequisite for creating a good nation, when women are empowered, society with stability is assured. Empowerment of women is essential as their thoughts and their value systems lead to the development of a good family, good society and ultimately a good nation." - APJ Abdul Kalam, Former President of India.

Women play a very important role in the economic development of any country. They are involved in business activities at all levels, making important contributions to economic growth. Over the years, there is a rapid growth of women entrepreneurs all over the world. In India, in the year 1981, only 5.2 percent of women to total were self employed, but as per Census 2001, this figure has risen to 11.2 percent and if the prevailing trend continues it is likely that in another ten years women will comprise 20 percent of the entrepreneurial force.

In nutshell, they are as competent as their male counterparts if not better. The issue of women entrepreneurship is becoming more popular across the globe. The participation of women is considered as one of the prime contributors in economic growth. Irrespective of their involvement in small-/medium-scale enterprises or in the informal/formal sectors, their contribution to output and value addition is substantial. Women entrepreneurship has been considered to be an important resource of economic growth of any nation. Women entrepreneurs create opportunities not only for themselves but also provide employment for others. Entrepreneurship development is a significant part of human resource development. Women entrepreneurship is not only necessary for their economic survival but also for strengthening the social system. Encouraging women’s entrepreneurship development is therefore essential for economic growth and development of any nation.

According to the definition given by Govt. of India “Women entrepreneurship is an enterprise owned and controlled by a Women and having a minimum financial interest of 51% of the capital & giving at least 51 % of the employment generated in the enterprise to Women”. The onset of 21st century posed new challenges for the development of women entrepreneurship in India. During the last two decades, increasing numbers of Indian women have entered the field of entrepreneurship and also they are gradually changing the face of business of today, both literally and figuratively. Women in India have been taking an active and direct role in the nation’s economic and political fields. Women entrepreneurs are gaining momentum all over the country. They have achieved recognition and are making valuable contribution to the National Economy. But still the development of entrepreneurship among women hinges very much on organizations, education, stimulation and motivation of the clientele through concerted and systematic approach, focusing on the individuals and Women's status, very often, is deemed as an important indicator of the level of development of a particular society.
Small and medium-sized enterprises (SMEs) represent the backbone of local economies in most developing countries. Yet, most of these enterprises remain in the informal sector because they lack the ability to grow beyond the neighbourhood and comply with the demands of the complex business environment in the formal sector. Small and Medium Enterprises (SMEs) play a vital role for the growth of Indian economy by contributing 45% of industrial output, 40% of exports, employing 60 million people, create 1.3 million jobs every year and produce more than 8000 quality products for the Indian and international markets. SME’s Contribution towards GDP in 2014 was 20% which is expected to increase to 25% by 2016. There are approximately 32 million SME Units in India and 12 million persons are expected to join the workforce in the next 3 years.

SMEs are the fountain head of several innovations in manufacturing and service sectors, the major link in the supply chain to corporate and the PSUs. By promoting SMEs, the rural areas of India will be developed. SMEs are now exposed to greater opportunities than ever for expansion and diversification across the sectors. Indian market is growing rapidly and Indian entrepreneurs are making remarkable progress in various Industries like Manufacturing, Precision Engineering Design, Food Processing, Pharmaceutical, Textile & Garments, Retail, IT and ITES, Agro and Service sector.

**Table 1: Definitions of SMEs**

<table>
<thead>
<tr>
<th>Manufacturing Enterprises – Investment in Plant &amp; Machinery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
</tr>
<tr>
<td>Micro Enterprises</td>
</tr>
<tr>
<td>Small Enterprises</td>
</tr>
<tr>
<td>Medium Enterprises</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Enterprises – Investment in Equipments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
</tr>
<tr>
<td>Micro Enterprises</td>
</tr>
<tr>
<td>Small Enterprises</td>
</tr>
<tr>
<td>Medium Enterprises</td>
</tr>
</tbody>
</table>

**Table 2: State-wise Distribution of Small Scale Industrial Units Owned by Women Entrepreneurs**

<table>
<thead>
<tr>
<th>S.No</th>
<th>State/Union Territory</th>
<th>No. of SMEs</th>
<th>% to total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kerala</td>
<td>139225</td>
<td>13.09</td>
</tr>
<tr>
<td>2</td>
<td>Tamilnadu</td>
<td>129808</td>
<td>12.20</td>
</tr>
<tr>
<td>3</td>
<td>Karnataka</td>
<td>103169</td>
<td>9.70</td>
</tr>
<tr>
<td>4</td>
<td>Maharashtra</td>
<td>100670</td>
<td>9.46</td>
</tr>
<tr>
<td>5</td>
<td>Andhra Pradesh</td>
<td>77166</td>
<td>7.25</td>
</tr>
<tr>
<td>6</td>
<td>Uttar Pradesh</td>
<td>72667</td>
<td>6.83</td>
</tr>
</tbody>
</table>
A Critical Study on Motivational Factors Influencing Development of Women Entrepreneurs in SME’s in India

<table>
<thead>
<tr>
<th></th>
<th>State</th>
<th>Population</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>West Bengal</td>
<td>69625</td>
<td>6.55</td>
</tr>
<tr>
<td>8</td>
<td>Madhya Pradesh</td>
<td>68823</td>
<td>6.47</td>
</tr>
<tr>
<td>9</td>
<td>Gujarat</td>
<td>53703</td>
<td>5.05</td>
</tr>
<tr>
<td>10</td>
<td>Bihar</td>
<td>49443</td>
<td>4.65</td>
</tr>
<tr>
<td>11</td>
<td>Orissa</td>
<td>38233</td>
<td>3.59</td>
</tr>
<tr>
<td>12</td>
<td>Rajasthan</td>
<td>36371</td>
<td>3.42</td>
</tr>
<tr>
<td>13</td>
<td>Punjab</td>
<td>29068</td>
<td>2.73</td>
</tr>
<tr>
<td>14</td>
<td>Delhi</td>
<td>14383</td>
<td>1.35</td>
</tr>
<tr>
<td>15</td>
<td>Assam</td>
<td>11757</td>
<td>1.11</td>
</tr>
<tr>
<td>16</td>
<td>Manipur</td>
<td>10745</td>
<td>1.01</td>
</tr>
<tr>
<td>17</td>
<td>Chhattisgarh</td>
<td>10034</td>
<td>0.94</td>
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<tr>
<td>18</td>
<td>Haryana</td>
<td>9620</td>
<td>0.90</td>
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<td>19</td>
<td>Uttaranchal</td>
<td>8804</td>
<td>0.83</td>
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<tr>
<td>20</td>
<td>Jharkhand</td>
<td>7865</td>
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<td>21</td>
<td>Jammu and Kashmir</td>
<td>5742</td>
<td>0.54</td>
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<td>2243</td>
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<td>26</td>
<td>Pondicherry</td>
<td>1065</td>
<td>0.10</td>
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<td>27</td>
<td>Tripura</td>
<td>863</td>
<td>0.08</td>
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<tr>
<td>28</td>
<td>Goa</td>
<td>810</td>
<td>0.08</td>
</tr>
<tr>
<td>29</td>
<td>Daman, Diu, Dadra and Nagarhaveli</td>
<td>213</td>
<td>0.02</td>
</tr>
<tr>
<td>30</td>
<td>Nagaland</td>
<td>179</td>
<td>0.02</td>
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<tr>
<td>31</td>
<td>Arunachal Pradesh</td>
<td>150</td>
<td>0.01</td>
</tr>
<tr>
<td>32</td>
<td>Andaman and Nicobar Island</td>
<td>110</td>
<td>0.01</td>
</tr>
<tr>
<td>33</td>
<td>Sikkim</td>
<td>98</td>
<td>0.01</td>
</tr>
<tr>
<td>34</td>
<td>Lakshadweep</td>
<td>67</td>
<td>0.01</td>
</tr>
<tr>
<td>All India</td>
<td>1063721</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>


REVIEW OF LITERATURE

An exploratory study conducted by Cohoon, Wadhwa & Mitchell, (2010), presented a detailed description of men & women entrepreneurs’ motivations, background and experiences. The study is based on the data collected from successful women entrepreneurs. The study identifies top five financial & psychological factors motivating women to become entrepreneurs. These are desire to build the wealth, the wish to capitalizing one’s own business ideas, the appeal of startup culture, a desire to own company and working for some others did not appeal them. The challenges are more related with entrepreneurship rather than gender.

Tambunan, Tulus, (2009) author claims that most of women entrepreneurs in SMEs are from the category of forced entrepreneurs seeking for better family incomes. In a qualitative enquiry carried out by Carwile (2009) on women entrepreneurs, it was found that women entrepreneurs’ motivations for learning ranged from personal to business requirements. Dependence on family, friends, paid professionals and former coworkers is found to be intense. In their study Borges, C., et al., (2008) presented that the desire to create one’s own job, which allows for a balance between work and family life, is often a key motive for women entrepreneurs.

The small business sector has become more important as they emerge as a dominant force impacting the growth of national economies (Shridhar, 2006). There are a number of disadvantages inherently faced by SMEs as they transition into international environments (Chen and Huang, 2004). There are also
disadvantages related to a lack of competitive power as a consequence of the size of the organization. SMEs have difficulty in influencing global pricing as they rely on a small customer base, and are limited in expansion due to minimal access to financial resources (Kalantaridis, 2004).

Banerjee and Talukdars (2007) study of 30 women entrepreneurs revealed that majority of them were above 50 years of age, had good educational backgrounds, belonged to higher income group families and were concentrated in urban areas. It was further found that women entrepreneurs had greater motivations, greater job involvement and higher annual family incomes. Allen et al., (2007) found that Push or opportunity factors and pull or necessity factors, are delineated when describing women’s motivations for becoming entrepreneurs. Necessity or push factors, include being unhappy with a present job, lack of income, lack of opportunity, discrimination, or need for flexibility, while opportunity or pull factors, consist of independence, personal challenge, self-fulfilment, a desire for wealth, identification of a perceived business opportunity, and social status. In his study Mohiuddin (2006) pointed out the reasons behind women becoming entrepreneurs which include economic needs, challenge to satisfy some of their personality needs, utilize their knowledge gained, family occupation and as leisure time activity.

OBJECTIVES

1. To examine the influence of motivational factors on Women Entrepreneurship development.
2. To identify the motivational factors for women entrepreneurship.
3. To put forth certain suggestions and conclusions based on the findings that have been arrived.

HYPOTHESES

Null Hypothesis (H0): There is no significant influence of motivational factors on the development of Women Entrepreneurship.

Alternate Hypothesis (H1): There is significant influence of motivational factors on the development of Women Entrepreneurship.

RESEARCH METHODOLOGY

The survey was conducted in Hyderabad District in Telangana state. Hyderabad is the capital city of Telangana state. The study was conducted using both the primary data and secondary data. Field survey method was employed to collect primary data from 100 respondents in Hyderabad District by using judgement sampling. The participants selected for this study consisted of women entrepreneurs of different small and medium scale industries in Hyderabad District. Structured questionnaire is used for data collection. Secondary data was collected from various books, journals, newspapers, magazines, reports, periodicals, reports, internet, unpublished thesis. The reliability of questionnaire was determined by using Cronbach’s Coefficient alpha. The information thus collected has been analyzed using SPSS version 22.0. The data was analyzed quantitatively using frequency distributions and descriptive statistics while ANOVA was used to establish associations between variables.

RESULT ANALYSIS

The 15 variables indicating the importance and relevance of the various Motivational Factors of women entrepreneurs were measured using various items in the survey questionnaire asking the respondents to rate them on a 5-point Likert scale, ranging from 1 = Not at all motivating to 5 = Highly motivating. These variables were subjected to factor analysis using principal axis factoring, with varimax rotation. The results are depicted as follows.
Descriptive Statistics for Motivational Factors of Women Entrepreneurs
The table 3 reveals the descriptive statistics for all 15 variables of Motivational factors of women entrepreneurs under investigation. Typically, the mean, standard deviation and number of respondents (N) who participated in the survey are given. The table shows that ambition to become an entrepreneur is the most influential motivational factor with mean 4.4 and standard deviation of 0.54 and build a business to pass on has a lowest mean value of 3.6 with a standard deviation value of 1.1.

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Analysis (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAMILY BACKGROUND</td>
<td>3.6</td>
<td>1.1</td>
<td>100</td>
</tr>
<tr>
<td>PREVIOUS EXPERIENCE</td>
<td>4.2</td>
<td>.82</td>
<td>100</td>
</tr>
<tr>
<td>FAMILY ENCOURAGEMENT</td>
<td>4.0</td>
<td>1.0</td>
<td>100</td>
</tr>
<tr>
<td>GOVERNMENT SUPPORT</td>
<td>3.8</td>
<td>.99</td>
<td>100</td>
</tr>
<tr>
<td>BANKS &amp; OTHER FINANCIAL INSTITUTIONS SUPPORT</td>
<td>4.0</td>
<td>.97</td>
<td>100</td>
</tr>
<tr>
<td>AVAILABILITY OF EXPERIENCED PERSON IN FAMILY</td>
<td>3.6</td>
<td>1.1</td>
<td>100</td>
</tr>
<tr>
<td>SUPPORT FROM WOMEN ASSOCIATIONS ENGAGED IN ENTREPRENEURSHIP</td>
<td>4.2</td>
<td>.87</td>
<td>100</td>
</tr>
<tr>
<td>EASY ACCESS TO CAPITAL</td>
<td>4.1</td>
<td>.91</td>
<td>100</td>
</tr>
<tr>
<td>JOB SECURITY</td>
<td>4.3</td>
<td>.74</td>
<td>100</td>
</tr>
<tr>
<td>PERSONAL AUTONOMY</td>
<td>4.2</td>
<td>.84</td>
<td>100</td>
</tr>
<tr>
<td>GOOD MARKET POTENTIAL</td>
<td>3.8</td>
<td>1.02</td>
<td>100</td>
</tr>
<tr>
<td>ECONOMIC NEED</td>
<td>4.3</td>
<td>.87</td>
<td>100</td>
</tr>
<tr>
<td>PROVIDE JOBS FOR FAMILY MEMBERS</td>
<td>4.1</td>
<td>.90</td>
<td>100</td>
</tr>
<tr>
<td>AMBITION TO BECOME AN ENTREPRENEUR</td>
<td>4.4</td>
<td>.54</td>
<td>100</td>
</tr>
<tr>
<td>BUILD A BUSINESS TO PASS ON</td>
<td>3.6</td>
<td>1.1</td>
<td>100</td>
</tr>
</tbody>
</table>

Kaiser-Meyer-Olkin (KMO) and Bartlett's Test for Motivational Factors of Women Entrepreneurs
KMO test measure is 0.83 depicts the strength of the relationship among variables relating to motivational factors of women entrepreneurs. From the table 4, it is evident that the Bartlett's test of sphericity is significant (p<.001) conforming the factorability of the correlation matrix.

<table>
<thead>
<tr>
<th>KMO and Bartlett's Test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
<td>.83</td>
</tr>
<tr>
<td>Bartlett's Test of Sphericity</td>
<td>Approx. Chi-Square</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
</tr>
</tbody>
</table>

Commonalities for Motivational Factors of Women Entrepreneurs

1144
A Critical Study on Motivational Factors Influencing Development of Women Entrepreneurs in SME’s in India

The table of communalities shows the variance in the variables that has been accounted for by the extracted factors. From the table 5 it is evident that Good Market Potential is accounted for 80.0% of the variance whereas 18.6% of the variance is accounted for closer to family.

Table 5: Communalities for Motivational Factors of Women Entrepreneurs

<table>
<thead>
<tr>
<th>Communalities</th>
<th>Initial</th>
<th>Extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAMILY BACKGROUND</td>
<td>1.000</td>
<td>.48</td>
</tr>
<tr>
<td>PREVIOUS EXPERIENCE</td>
<td>1.000</td>
<td>.58</td>
</tr>
<tr>
<td>FAMILY ENCOURAGEMENT</td>
<td>1.000</td>
<td>.61</td>
</tr>
<tr>
<td>GOVERNMENT SUPPORT</td>
<td>1.000</td>
<td>.62</td>
</tr>
<tr>
<td>BANKS &amp; OTHER FINANCIAL INSTITUTIONS SUPPORT</td>
<td>1.000</td>
<td>.53</td>
</tr>
<tr>
<td>AVAILABILITY OF EXPERIENCED PERSON IN FAMILY</td>
<td>1.000</td>
<td>.61</td>
</tr>
<tr>
<td>SUPPORT FROM WOMEN ASSOCIATIONS ENGAGED IN ENTREPRENEURSHIP</td>
<td>1.000</td>
<td>.48</td>
</tr>
<tr>
<td>EASY ACCESS TO CAPITAL</td>
<td>1.000</td>
<td>.47</td>
</tr>
<tr>
<td>JOB SECURITY</td>
<td>1.000</td>
<td>.44</td>
</tr>
<tr>
<td>PERSONAL AUTONOMY</td>
<td>1.000</td>
<td>.60</td>
</tr>
<tr>
<td>GOOD MARKET POTENTIAL</td>
<td>1.000</td>
<td>.58</td>
</tr>
<tr>
<td>ECONOMIC NEED</td>
<td>1.000</td>
<td>.49</td>
</tr>
<tr>
<td>PROVIDE JOBS FOR FAMILY MEMBERS</td>
<td>1.000</td>
<td>.40</td>
</tr>
<tr>
<td>AMBITION TO BECOME AN ENTREPRENEUR</td>
<td>1.000</td>
<td>.53</td>
</tr>
<tr>
<td>BUILD A BUSINESS TO PASS ON</td>
<td>1.000</td>
<td>.45</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

Total Variance Explained for Motivational Factors of Women Entrepreneurs

The next table 6 shows all the 15 motivational factors extractable from the analysis along with their eigen values, the percent of variance attributable to each factor, and the cumulative variance of the factor and the previous factors. As noticed in the table the first factor accounts for 29.72% of the variance, the second 9.68% and the third 8.34%. All the remaining factors are of little significant.

Table 6: Total variance Explained for Motivational Factors of Women Entrepreneurs

<table>
<thead>
<tr>
<th>Total Variance Explained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>
A Critical Study on Motivational Factors Influencing Development of Women Entrepreneurs in SME’s in India

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>.962</td>
<td>4.887</td>
<td>63.994</td>
</tr>
<tr>
<td>7</td>
<td>.797</td>
<td>4.779</td>
<td>68.773</td>
</tr>
<tr>
<td>8</td>
<td>.744</td>
<td>4.720</td>
<td>73.493</td>
</tr>
<tr>
<td>9</td>
<td>.697</td>
<td>4.485</td>
<td>77.978</td>
</tr>
<tr>
<td>10</td>
<td>.687</td>
<td>4.437</td>
<td>82.415</td>
</tr>
<tr>
<td>11</td>
<td>.649</td>
<td>4.243</td>
<td>86.658</td>
</tr>
<tr>
<td>12</td>
<td>.593</td>
<td>3.966</td>
<td>90.624</td>
</tr>
<tr>
<td>13</td>
<td>.536</td>
<td>3.680</td>
<td>94.304</td>
</tr>
<tr>
<td>14</td>
<td>.504</td>
<td>3.580</td>
<td>97.884</td>
</tr>
<tr>
<td>15</td>
<td>.444</td>
<td>2.116</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

Rotated Component (Factor) Matrix for Motivational Factors of Women Entrepreneurs

The SPSS output on the three factors extracted is indicated in the Rotated component Matrix Table 7.

Table 7: Rotated Component Matrix for Motivational Factors of Women Entrepreneurs

<table>
<thead>
<tr>
<th>Rotated Component Matrix*</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAMILY BACKGROUND</td>
<td>.673</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PREVIOUS EXPERIENCE</td>
<td></td>
<td>.605</td>
<td></td>
</tr>
<tr>
<td>FAMILY ENCOURAGEMENT</td>
<td></td>
<td>.685</td>
<td></td>
</tr>
<tr>
<td>GOVERNMENT SUPPORT</td>
<td></td>
<td>.761</td>
<td></td>
</tr>
<tr>
<td>BANKS &amp; OTHER FINANCIAL INSTITUTIONS SUPPORT</td>
<td></td>
<td>.699</td>
<td></td>
</tr>
<tr>
<td>AVAILABILITY OF EXPERIENCED PERSON IN FAMILY</td>
<td></td>
<td>.622</td>
<td></td>
</tr>
<tr>
<td>SUPPORT FROM WOMEN ASSOCIATIONS ENGAGED IN ENTREPRENEURSHIP</td>
<td></td>
<td>.544</td>
<td></td>
</tr>
<tr>
<td>EASY ACCESS TO CAPITAL</td>
<td></td>
<td>.502</td>
<td></td>
</tr>
<tr>
<td>JOB SECURITY</td>
<td>.638</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERSONAL AUTONOMY</td>
<td></td>
<td>.646</td>
<td></td>
</tr>
<tr>
<td>GOOD MARKET POTENTIAL</td>
<td>.670</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECONOMIC NEED</td>
<td>.566</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROVIDE JOBS FOR FAMILY MEMBERS</td>
<td></td>
<td>.472</td>
<td></td>
</tr>
<tr>
<td>AMBITION TO BECOME AN ENTREPRENEUR</td>
<td></td>
<td>.625</td>
<td></td>
</tr>
<tr>
<td>BUILD A BUSINESS TO PASS ON</td>
<td></td>
<td>.872</td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

The factors extracted with their specific variables loading on them have been translated and described below.
Factor 1: This factor was represented by five items, was labeled Personal Motivations accounted for the amount of variance 29.72%.

Factor 2: This factor was represented by four items, was labeled Financial Motivations accounted for the amount of variance 9.68%.

Factor 3: This factor was represented by six items, was named external Motivations accounted for the amount of variance 8.34%.

Reliability Test for Motivational Factors of Women Entrepreneurs

<table>
<thead>
<tr>
<th>Motivational Factors of Women Entrepreneurs</th>
<th>No. of variables</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Cronbach Alpha Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1: Personal Motivations</td>
<td>5</td>
<td>4.1</td>
<td>.55</td>
<td>.769</td>
</tr>
<tr>
<td>Factor 2: Financial Motivations</td>
<td>4</td>
<td>4.2</td>
<td>.64</td>
<td>.728</td>
</tr>
<tr>
<td>Factor 3: External Motivations</td>
<td>6</td>
<td>4.0</td>
<td>.81</td>
<td>.710</td>
</tr>
</tbody>
</table>

The factor analysis of the dependent variables has reduced the data to three major factors. The Cronbach alpha coefficients of the variables on each of the three factor scales proved reliable and showed a strong internal consistency among the variables: .769 (factor 1); .728 (factor 2); and .710 (factor 3). Thus, the factor analysis of the independent variables in hypothesis has reduced the data and scales were constructed which were proved to be reliable by their respective Cronbach alpha coefficients and were therefore appropriate for the testing of the hypothesis.

Table 9: Model Summary of Entrepreneurial Success in Terms of Motivational Factors of Women Entrepreneurs

| Model Summaryb | | | | |
|----------------|----------------|----------------|----------------|
| Model          | R              | R Square       | Adjusted R Square | Std. Error of the Estimate |
| 1              | .832a          | .726           | .689            | .28352                     |

a. Predictors: (Constant), PERSONALMOTIVATIONS,FINANCIAL MOTIVATIONS EXTERNAL MOTIVATIONS
b. Dependent Variable: WOMEN ENTREPRENEURS DEVELOPMENT

This suggests that the independent variable predicted 73 percent of the dependent variable – Women Entrepreneurs Development.

Table 10: ANOVA in Terms of Motivational Factors of Women Entrepreneurs

| ANOVAa | | | | |
|--------|----------------|----------------|----------------|
| Model  | Sum of Squares | df | Mean Square | F | Sig. |
| 1      | Regression     | 43.406 | 3 | 14.46 | 32.71 | .000b |
|        | Residual       | 42.904 | 97 | .442 | |
| Total  | 86.31          | 100 | | | |

a. Dependent Variable: WOMEN ENTREPRENEURS DEVELOPMENT
b. Predictors: (Constant), PERSONAL MOTIVATIONS,FINANCIAL MOTIVATIONS,EXTERNAL MOTIVATIONS
The above result has also been confirmed as statistically significant from the ANOVA results: \( F (3, 172) = 32.71, p < 0.001 \) depicted in the table 4.7.8. A significant linear relationship exists between motivational factors and women entrepreneurs development, providing support for the hypothesis. **Thus \( H_0 \) is rejected and \( H_1 \) is accepted which implies that there is a significant impact of motivational factors on the development of women entrepreneurs.**

**CONCLUSION**

This study on motivational factors influencing women entrepreneurs throws light on some of the factors responsible for the development of women entrepreneurship. The major motivational factors which contributed for establishment and development of an enterprise were self confidence, cooperation from family, support from government and other associations. The solution to India’s challenges lies in fostering the creation of wealth by women entrepreneurs across the nation.

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Ruecha Upadhyay : Women’s Empowerment in India : An Analytical Overview


Knowledge Sharing and the Level of Innovation – A Field Study for Managers at the Palestinian Ministries in the Gaza Strip

Keywords: Innovation, Level of Innovation, Knowledge Sharing

INTRODUCTION

In an era of globalization, deregulation, increasing competition, new technologies and e-commerce, organizations are finding it harder to compete. In this dynamic and changing environment, one way to achieve growth and sustain performance is to innovate (Higgins, 1996).

Human activity is inconceivable without knowledge. The scope of knowing and types of knowledge are as wide and varied as all the varieties of human pursuits. Without creating, accumulating, sharing, and applying knowledge, no human civilization could have existed. (Chimay et al., 2005: p10).

The global business environment has amplified the importance of the unique knowledge that organizations possess (Singh et al., 2006). This has established knowledge management as the foundation to competitive advantages and is viewed as a primary competitive success factor (Ritter and Choi, 2000) to enhance competitiveness and meet their goals; organizations need to ensure that their employees share their knowledge. Increased sharing of knowledge raises the likelihood of new knowledge being created, tending to support valuable innovation (Nonaka and Takeuchi, 1995). In order to remain on top and maintain a competitive edge, companies must have a good strategy to retain, develop, organize, transfer, and utilize their resources. This requires systematic knowledge management, which has a significant influence on a firm’s strategy formulation and implementation. (Grant, 1996).

Palestinian ministries in the Gaza Strip face significant challenges, as result to the political, social and security situation. These ministries were divided into two parts; (Gaza government) and (Ramallah government). This situation has increased the burden on managers in the ministries of the Gaza strip. As a result, to these challenges, the need for innovation increased. Therefore, the innovation capability of these ministries depends very closely on its manager’s knowledge, as well as on its ability to share this knowledge.

However, innovation and knowledge management are complementary and lie in the heart of any organization. Furthermore, without innovative managers competitive advantage could not be achieved, also any good idea could not be disseminated without knowledge sharing. Therefore, knowledge sharing is essential for creativity and innovation.

LITERATURE REVIEW

Knowledge Management
Knowledge management has become an emerging discipline that has gained enormous popularity among academics, consultants and practitioners. It has been argued that it is no longer the traditional industrial
technologies or craft skills that drive competitive performance but instead knowledge that has become the key asset to drive organizational survival and success (Jashapara, 2004).

**Knowledge management definition**

Many knowledge management definitions exist. For the purpose of this study, only selected definitions will be focused on. Gloet and Terziovski (2004) describe knowledge management as the formalization of and access to experience, knowledge, and expertise that create new capabilities, enable superior performance, encourage innovation, and enhance customer value. The authors also describe knowledge management as an umbrella term for a variety of interlocking terms, such as knowledge creation, knowledge valuation and metrics, knowledge mapping and indexing, knowledge transport, storage and distribution and knowledge sharing (Plessis, 2007). Knowledge management has been also defined as the "effective learning processes associated with exploration, exploitation and sharing of human knowledge (tacit and explicit) that use appropriate technology and cultural environments to enhance an organizations intellectual capital and performance" (Jashapara, 2004 p. 12). But Xerox corporation illustrates "knowledge management is the discipline of creating a thriving work and learning environment that fosters the continuous creation, aggregation, use and re-use of both organizational and personal knowledge in the pursuit of new business value" (Cross, 1998, pp.).

From the above definitions, it can be said that knowledge management concerned with the exploration and exploitation of existing knowledge in order to create new knowledge by the activities of gathering, storage, distribution and applying of knowledge.

**Fundamental Elements of Knowledge Management**

The existing knowledge management literature identifies the essential ingredients of knowledge management as people, processes and IT. People are a foundation element as they are responsible for actually creating, sharing and applying knowledge within the organization. The processes associated with knowledge management serve to obtain, create, organize, and distribute knowledge. Moreover, the IT or technology segment warehouses and makes the knowledge available to users. Each element discussed below is dependent upon the other for effectiveness (Fong and Cao, 2004).

**People**

People are responsible for selecting others to share with, deciding the topic, choosing the method, and finally utilizing the knowledge. So, the ultimate success of any knowledge management program rests on the individual’s acceptance and willingness to share with others. Sharing knowledge can create a positive environment of reciprocity where the giver can anticipate receiving equal knowledge in the future, gain respect as an expert and personal fulfillment and satisfaction (Davenport and Prusak, 1998). However, obstacles to sharing may include a fear of collaborating with the wrong people and simply being used without recognition or reward. The foundation for establishing a knowledge sharing culture is trust at both the personal and organizational levels coupled with an environment that encourages and compensates sharing while rejecting and even punishing non-participants (Empson, 2000).

**Processes**

Uncovering, obtaining, interpreting, organizing, and sharing knowledge with the Right parties, then motivating people to utilize it is a continuous journey (Fong and Cao, 2004). Nonaka and Takeuchi (1995) feel knowledge and its management is dynamic and a constant process of accumulation and exploitation of undiscovered knowledge.

**Technology**

Although technology has little connection to knowledge, its data warehousing and communication enable individuals, irrespective of their geographical, location, to quickly and easily share knowledge using communication methods such as e-mail, groupware, internet, videoconferencing, and intranets.
Technology enable firms to distribute knowledge quickly and smoothly throughout the organization (Alavi and Leidner, 1999).

**Knowledge Sharing**

Knowledge sharing has become a key concern to organizations, not only because of the growing importance of the value of knowledge work, but also because of the increasing recognition that tacit “knowledge is of more value than explicit codified” knowledge to the innovation process (Marouf, L. 2007). The exchange of knowledge and the development of a collective knowledge management system enhance organizational learning, which in turn leads to innovation and creative imitation (Kim and Lee 2006). One area where organizations may be able to increase their innovative performance is knowledge sharing created through interactions among individuals. The value of knowledge sharing is also related to the fact that organizational knowledge is a unique asset difficult to imitate (Sapienza and Lombardino, 2006). Knowledge sharing is therefore believed to enhance the creation of knowledge, potentially enabling new innovative products to be developed at greater speed.

However, knowledge sharing does not come about easily. Knowledge sharing is strongly dependent on the setting, various personal beliefs, and the actions and practices among the individuals involved (Lilleoere and Hansen 2010). Knowledge sharing is a practice that has become increasingly important to organizations, as most organizations are now believed to operate in a knowledge economy “(Drucker, 1993 it is important for organization to consider the conditions and environments that facilitate new knowledge creation. If an organization wants to increase performance of knowledge creation and leverage knowledge, then knowledge transfer is necessary (Hansen et al., 2005). Knowledge sharing was characterized by activities of transferring or disseminating knowledge from one person, group or organization to another”(Lee, 2001). Knowledge sharing practices coordinate organizational knowledge bases with knowledge workers and vice versa (Nonaka and Konno, 1998). Knowledge sharing takes place when organizational members share organization-related information, ideas, suggestions and expertise with each other (Bartol and Srivastava, 2002).

**Knowledge Sharing Definition**

Knowledge Sharing has been defined and described in many ways, Kamasak and Bulutlar defined Knowledge sharing as “a process where individuals mutually exchange their implicit (tacit) and explicit knowledge to create new knowledge” (Kamasak and Bulutlar, 2009). Knowledge Sharing has also been defined as “The dissemination of information and knowledge throughout the organization (Ling et al., 2009). It has been described as “the act of disseminating and making available knowledge that is already known, and knowledge utilization is where learning is integrated into the organization (Tiwana, 2002). Senge (1998) suggested that Knowledge Sharing is “a transfer process where individual competencies are developed through sharing and learning from others” He, however, argues that Knowledge sharing occurs when an individual is willing to assist as well as to learn from others in the development of new competencies. To learn “means to digest”, to absorb”, and to apply“(Senge, 1998). Christensen (2007) says that Knowledge sharing is defined as “ Being about identifying existing and accessible knowledge, in order to transfer and apply this knowledge to solve specific tasks better, faster and cheaper than they would otherwise have been solved (Christensen, 2007). Davenport and Prusak (1998) emphasized that Knowledge transfer is “The process in which a unit of an organization is impacted by the experience or the know-how of another unit. It is described as the activities that are concerned with the generation, use, application and exploitation of knowledge, and other capabilities outside the organization environments (Davenport and Prusak, 1998). Furthermore, knowledge sharing is "The process through which one unit is affected by the knowledge and expertise of another unit" (Friesl et al, 2011). Knowledge transfer refers to the process of communicating knowledge from one agent to another. This takes place between individuals and/or groups and within the organization in general (Fiddler, 2000). Knowledge sharing can be conceptualized in various ways ranging from the exploration of new knowledge through renewed combinations of existing knowledge to the exploitation of existing knowledge (Szulanski, 1996), (Uzzi and Lancaster, 2003). Knowledge sharing can also be seen as a process of knowledge exchange. It
has been argued that the motivation for these different exchanges is related to the expectation of receiving something in return (Fiske, 1991). Grant (1996) also argues that knowledge sharing is about ensuring that existing knowledge is distributed within or across Organizational boundaries.

The above definitions of knowledge sharing imply that it is necessary for organizations:
- To be able to explore and exploited their knowledge assets.
- To create new knowledge through utilization of existing knowledge.
- To develop individual competences through learning from others.
- To re-use their knowledge for differing applications and differing users; this implies making knowledge available where it is needed within the organization;
- To create a culture that encourages knowledge sharing and re-use.
- To making knowledge accessible when it is needed to solve specific tasks.
- To distribute the existing knowledge within the organization in order to apply it and create new knowledge.

Key Factors for Knowledge Sharing
If organizations aim to enjoy knowledge sharing advantages, they will have to consider a number of key factors. Information technology (IT) is considered as one of the decisive factors in knowledge sharing. A number of reasons count for this such as the growing recognition of knowledge work, the ever-increasing complexity of jobs and the speed of changes occurring around us (Huysman and Wulf, 2006). Another factor that seems to have a considerable impact on knowledge sharing is organizational climate. To some practitioners, creating a knowledge sharing culture is one of the main concerns when devising a knowledge management program (Reid, 2003). Without a proper atmosphere in organizations, other attempts to share knowledge might be pointless. A meager social climate in an organization might lessen the level of engagement in knowledge sharing (Tohidinia, 2009). In addition, the lack of an aspiring culture to communicate and explore new ideas may become a major barrier to knowledge sharing (Sun and Scott, 2005). Concerned about these kinds of setbacks, managers try to provide favorable climate for knowledge sharing. In addition, managers play some other important roles: they grant extrinsic rewards, provide IT facilities and involve in knowledge auditing (Tsui, 2005). However, even when organizations provide technological facilities and demand employees to share their knowledge, in most cases, employees are the ones who finally decide whether to share their knowledge or not (Constant et al., 1994). Although motivation and expertise might account for individual participation in knowledge sharing (Wang and Lai, 2006) it is not always easy to predict when and why employees share their knowledge (Duguid, 2005). Thus, individual factors are also among those key elements that need to be considered while studying knowledge sharing behavior (Tohidinia, 2009).

Formal and informal knowledge sharing
In this study, the concept of knowledge sharing will be described as a continuum with, at the two extremes: formal knowledge sharing; and informal knowledge sharing.

Formal knowledge sharing
Formal knowledge sharing comprises all the forms of knowledge sharing that are institutionalized by management. These are resources, services and activities, which are designed by the company or organized with the aim of knowledge sharing or of learning from each other "organizational learning" (Taminiau, and et al., 2009). According to Nonaka (1994) formal exchange mechanisms, such as procedure, formal language, and the exchange of handbooks will ensure that people will exchange and combine their explicit knowledge. Other examples of formal knowledge sharing are meetings and organized brainstorm sessions. A culture, which makes sure that explicit knowledge is shared, does not preclude the sharing of implicit knowledge. An example is an in-house training with an emphasis on observation.
Informal knowledge sharing
With regard to informal knowledge, sharing the literature often refers to informal networks and informal communication (Awazu, 2004). (Argote et al. 2003) claim that business relations between colleagues, and friendship relationships (close ties) between the members, will enlarge the possibility of knowledge exchange. (Von Krogh et al. 2000) state that trust and openness in the business culture are preconditions for knowledge exchange. (Sturdy et al., 2006) describe the importance of informal settings such as lunches, drinks and dinners. These informal meetings have proven to facilitate smooth knowledge exchange between consultants and their clients. Informal knowledge sharing will be defined as all forms of knowledge sharing which exist alongside all the institutionalized forms of knowledge sharing. It relates to resources, services and activities, which are used to facilitate knowledge exchange, but are not necessary, designed for that purpose. Examples of knowledge sharing are the conversations and exchange of ideas at the coffee machine, dinners, lunches, and when commuting together to work or to a client (Taminiau, and et al., 2009).

CONCEPTUAL FRAMEWORK

The framework integrates multiple perspectives of knowledge sharing and innovation from both researchers and practitioners. The framework, which the researcher label Knowledge Sharing and the Level of Innovation, is presented as an organizational learning cycle, which encompasses sub-processes for knowledge acquisition and formation, embodiment of knowledge, entrepreneurial application of technologies, and assessment of knowledge-in-use. In addition, a survey questionnaire of middle management and the seniors in the local government in Gaza strip will employed. Formally, validated measures of thinking style and innovation will replicated in this project. In addition, the Analytic Hierarchy Process is then proposed as one method to apply the framework for managerial decision making in an operational context.
RESEARCH METHODOLOGY

Sampling Design
The sample used in this research is a stratified random sample. For the purpose of the study, the target population was stratified into four strata, as shown in the following table.

<table>
<thead>
<tr>
<th>grade</th>
<th>the size of target population</th>
<th>sample/population</th>
<th>sample size</th>
<th>actual sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>general director</td>
<td>71</td>
<td>0.091</td>
<td>24</td>
<td>34</td>
</tr>
<tr>
<td>deputy director A</td>
<td>66</td>
<td>0.085</td>
<td>22</td>
<td>24</td>
</tr>
<tr>
<td>unit manager B</td>
<td>69</td>
<td>0.088</td>
<td>23</td>
<td>32</td>
</tr>
<tr>
<td>unit manager C</td>
<td>571</td>
<td>0.73</td>
<td>188</td>
<td>180</td>
</tr>
<tr>
<td>total</td>
<td>777</td>
<td>1</td>
<td>257*</td>
<td>270</td>
</tr>
</tbody>
</table>

Research Procedure
This paper followed the analytical descriptive method, as it is considered the most used in business and social studies. This section presents the method used to carry out the study and answer the research questions. Primary and secondary data were used to perform this study.
A structured questionnaire including close-ended questions was specially designed for this study. The questionnaire consists of three sections:
I- The first section covered socio-demographic details
II- The second section included 38 questions designed to measure innovation.
III- The third section included 25 questions designed to measure knowledge sharing.

The questions covered four dimensions:
1- knowledge availability
2- knowledge accessibility
3- knowledge applicability
4- "ICTs" Information and Communication Technologies

DATA ANALYSIS

T-test shows that knowledge is available in the ministries of the Gaza strip for managers to use in performing their tasks and developing their skills, knowledge accessible in these ministries, which mean that managers can reach easily to the stock of knowledge available in their ministries, mangers also can apply any new ideas, or new knowledge in their work.

In addition, CITs is available for managers to use. Particularly, it can be said that managers at the ministries of the Gaza strip practice the concept of knowledge sharing within their ministries. This result not supported to EL-Harbi (2011) which showed that the conditions for knowledge sharing might not yet be in place in technology firms in Tunisia. Ahmed (2010) indicated that the concept of knowledge management is still not well received in companies in the UAE. On the other hand, Xue (2011) suggested that in order to promote knowledge sharing, managers need to cultivate a nurturing team environment. Further, Taminiau (2009) claimed that in consultancy firms, the most fruitful route to innovation is informal knowledge sharing. Finally, MerxCherin (2005) suggested that knowledge sharing seems to be one of the most important factors in the creation of new knowledge. He also showed that the rotation of valuable employees seems to be one of the most effective strategies for knowledge sharing.
Table 2: t-Test Analysis Result

<table>
<thead>
<tr>
<th>Field</th>
<th>mean</th>
<th>Proportional mean (%)</th>
<th>T-Test value</th>
<th>P-value (Sig.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Availability</td>
<td>6.51</td>
<td>65.1</td>
<td>5.64</td>
<td>0.000*</td>
</tr>
<tr>
<td>Knowledge Accessibility</td>
<td>6.78</td>
<td>67.8</td>
<td>8.97</td>
<td>0.000*</td>
</tr>
<tr>
<td>Knowledge Applicability</td>
<td>7.77</td>
<td>77.7</td>
<td>23.98</td>
<td>0.000*</td>
</tr>
<tr>
<td>CITs (Communication and Information Technologies)</td>
<td>7.28</td>
<td>72.8</td>
<td>11.48</td>
<td>0.000*</td>
</tr>
<tr>
<td>All paragraphs of the fields of Knowledge sharing</td>
<td>7.06</td>
<td>70.6</td>
<td>13.97</td>
<td>0.000*</td>
</tr>
</tbody>
</table>

CONCLUSION AND DISCUSSION

In light of the findings that were presented in chapter six the following conclusions can be drawn:

- The Palestinian ministries in the Gaza strip have innovative features and practices that show an overall success in "Directing their staff and business toward innovation", "Developing a creative capabilities", "Building a creative culture", "Managing learning for new ideas", "Organizing for creativity" and "Taking wise decisions". Which means that these ministries enjoy a satisfactory level of innovation.
- The Palestinian ministries don’t have a fair and efficient reward system to encourage innovation and knowledge sharing practices. Its organizational structure does not encourage innovation and promotion of work.
- The stock of knowledge at the Palestinian ministries is available and accessible which means that managers can use and reach the knowledge owned by others easily.
- Managers at the Palestinian ministries seem satisfied with the practices of knowledge sharing.
- There is a significant relationship between CITs and the level of innovation. In addition, In the Palestinian ministries there are modern equipment and CITs tools needed for manager to benefit them in performing their tasks.

REFERENCES

Knowledge Sharing and the Level of Innovation – A Field Study for Managers at the Palestinian Ministries in the Gaza Strip


Social Media Impact on Marketers

Keywords: Social Media, Social Media Marketing Sites, Organization

INTRODUCTION

Social media is the means of communications among people in which they create, share, and exchange information and ideas in networks. It introduces substantial and pervasive changes to communication between organizations, communities, and individuals. It differentiates from traditional media in many aspects such as quality, frequency, usability, immediacy, and permanence. In the modern business world every organization wants to stand an established mark, for that they participate in various social media to improve their immense business activities and broad reach. Entrepreneurs have changed the corridors of trade, commerce, and markets, through new goods, services and with the help of social media marketing websites they provide ways to modernization and creativeness.

Social media marketing refers to the process of gaining website traffic or attention through social media sites. Indian marketers are moving at a fast speed to tap the “new normal” opportunity. Social media has gone mainstream. In addition, for businesses it represents an unprecedented marketing opportunity that transcends traditional middlemen and connects companies directly with customers. Customer acquisitions remain to be the prime goal of Indian marketers (59%). According to leading marketers of India, the top three online investment channels for 2011 are social media, Email marketing and Search marketing. 52% of the top marketers said that it is extremely important to integrate email marketing and social media. This is why nearly every business on the planet is exploring social media marketing initiatives The focus of marketers is shifting from “sending the message out” to ”start engaging with customers”. In this context, the role of a marketer is changing from “batch and blast” processing to creating “listening posts” and “dialogue hubs” in customer communities. A shift from isolated pure play traditional platforms to an integrated multi-channel approach is helping the marketers address the challenge of new consumers’ expectations across many devices and channels.

OBJECTIVES OF STUDY

- To analyze the various factors to motivate to start their business through social media.
- To identify the best social media for the business successfully.
- To find out legal problems faced by the organization in the social media.
- To examine whether the profit percentage is increased or not.

Social Media integrates technology, social interaction, and content creation to collaboratively connect online information. Through social media, people or groups can create, organize, edit, comment on, combine, and share content, in the process helping agencies had better achieve their mission goals. Here are the most commonly used types of social media in government.

LITERATURE REVIEW

Social media are a game changing technology with a major impact on business. Early adopters who integrated social media into their strategy and operations are well placed to capture new opportunities.
Based on a survey of more than 3000 senior executives across industries, geographies, and functions, a recent McKinsey report indicated that companies qualified as Networked (those that used collaborative Web2.0 technologies intensively to connect the internal efforts of employees and extend the organization’s reach to customers, partners, and suppliers) outperformed other companies in terms of market share, profitability, and market leadership (Bughin and Chui, 2010; Shearman, 2011).

“Social Media” is described as Media for social interaction, using highly accessible and scalable publishing techniques. Social media use Web-based technologies to turn communication into interactive dialogues. Although this definition is informative, it offers no practical help to companies wanting to capitalize in a meaningful and systematic way on the opportunities that social media provide. Companies need to make a distinction between three types of social media activities:

- **Type 1**: Induced and encouraged— but not paid for— by brand owners
- **Type 2**: Produced by consumers for brand owners at the brand owners’ request; and
- **Type 3**: Generated by consumers or communities that are neither paid for nor induced by brand owners.

As example of the first type of social media activity, the “evolution” video is used by Unilever to advertise the Dove brand on YouTube. Unilever did not pay for ad space and time; it initiated a dialogue between consumers about Dove and what it stood for.

The second category often consists of social media grounded in “user-generate of comments that are subsequently shared in a variety of media, traditional, and/or social. The production process is different from traditional communication approaches, but the advertisements that result from UGC are shown in paid—for media.

Social media activities are unique in that they are initiated, developed, and produced by consumers rather than brand owners. Examples stretch from consumer feedback on a restaurant experience through Twitter to comments on a publication on the Amazon Web site all the way to a consumer-generated video on YouTube accusing Unilever of destroying palm forest in Indonesia to produce the plant oil used in the production of its soap brands.

As we all know that social media is “the relationship that exist between network of people” (Walter & Riviera, 2004). As social media sites continue to grow in popularity it is our belief that technology is a vital part of today’s organization success equation. Many researcher have been diving into a considerable amount of research on how social media influences entrepreneur’s strategic marketing. Our research ascertains the relationship between the social media and organizational growth.

**METHODOLOGY**

The methodology adopted in this paper is the case study method. We have used SAP-LAP method of analysis. The methodology adopted in this paper is the case study method. We have used SAP-LAP method of analysis.

**ANALYSIS**

**Relationship Between Social Media and Advertising**

Social media and advertising are both parts of integrated marketing communication. Social media provide avenues for broad reach, allow for interactivity, and often come with little cost (Kahle and Valette-Florence 2012). In addition, social media are beneficial for advertisers because consumers self-select into lifestyle groups that make targeted marketing much easier. In this sense organizations have easy access to
consumers interested in a lifestyle incorporating sustainability by looking to sustainability-related feeds, and creating ads that display when sustainability related post are made. These reasons and others have contributed to the rapid rise of using social media for advertising and marketing communications. Furthermore, social have the potential to be a more credible advertising tool due to their personal characteristics (e.g., interactions, networking, interpersonal relations); therefore, social media could be a more appropriate platform for advertising and social campaigns via these electronic word of mouth (eWOM) modes of indirect communication rather than commercial advertising and marketing (Hung, Li, and Tse 2011)

Advertisers must respond to consumers’ shift to online communication and embrace social media as new advertising media. Organization target social media tool for effective advertising media through maintaining customer relationships, to improve customer service, inform customer about company benefits, promote a brand or related special offer, develop a new product marketing strategy or influence brand attitudes. Traditional advertising focus on one-way communication with control (i.e. controlling all content that the consumer receives), whereas social media advertising focuses on two-way communication with contributions (i.e. what can the advertiser contribute to the advertiser).

When initiating an organization’s social media initiative, the following are essential:

1. Engage in a network in which professional norms and rules can be established.
2. Look for networks that have your target audience.
3. Find a solution that facilitates both external and internal social media campaigns.

All organizations strive to meet objectives to ensure both immediate and future success. Improvements to communication and collaboration efforts within an organization will enhance the overall performance of that organization.

To accomplish this, operational efficiency, member engagement, and innovation are vital. As a result, leaders should embrace the opportunity to make social media a vital and integrated part of their organizations.

It is the ideal solution to streamline the time, capital, and resources required to communicate and collaborate with members and can make it seamless for them to contribute to the success of the organization. Ultimately, it can lead to increased contributions, donations, and/or membership dues. The more efficient the communication strategy, the more success the organization is likely to have. As a result, the ROI for a social media initiative can be measured through the enhanced efficiency the organization achieves. This is the reason that optimizing an organization’s communication strategy through social media is vital. It will lead to a more effective operational strategy for the organization both now and in the future and will ultimately save the organization time, money, and resources.

It is important to remember that social media is not just about marketing and getting “fans”, rather it is about enhancing the overall mission of the organization. Engaging a social initiative can provide an organization with a connected network that can effectively, safely, and quickly reach members at any point of the day.

The Power of a Connected Organization
As organization leaders, collaboration with others to achieve common goals is key. In the digital age, efficient and effective outcomes are expected and organizations must stay ahead of the curve if they are to remain their industry’s voice. Creating a private networking platform specifically for an organization will enhance its mission by streamlining member input to pressing issues, and results. Because social media can be tracked, analyzed, and evaluated through both qualitative and quantitative analytics, the
discussions, feedback, and collaboration among members can provide vital information and direction for the organization. The right social media initiative can provide this data by allowing collaboration on networking tools such as virtual whiteboards, message boards, forums and video conferences that can be securely accessed at all times. Tools such as these can provide connectivity to past, current and future membership.

To ensure success for any social media initiative, companies must establish an internal strategy and work with a social media company that can integrate and streamline current organization tools and resources to make adoption seamless. One key objective is to use the internal social network as a “one-stop” shop for members, thus decreasing the time needed to find information, documents, and resources. Buy-in from organization leaders and board members are key. With buy-in, organization initiatives will become more streamlined and more positive outcomes will result. Leaders who are willing to lead by example will enhance chances of success for their organization.

The Power of Social Media Marketing within Niche Networks
If you were offered the opportunity to promote your organization to a random group of individuals or to your direct-targeted audience, which one would you choose? It sounds like the choice would be obvious, but this point is made to clarify the power of social media marketing within niche networks. We all know social media is efficient in getting information out quickly, but we also know that, without security and regulation, not only may the target audience never be reached, but the information may get to individuals who should not have received it in the first place. This is why niche networks play a significant role.

The following is a case study conducted by the niche social networking provider, Skipta. Skipta’s verified network for Pharmacists, called “Pharmacist Society,” has approximately 60,000 verified pharmacists and student pharmacists actively participating in the network and provides this audience with a web-based, mobile-connected solution to connect, engage, and collaborate with like-minded professionals. Within this network, pharmacy organizations, companies, schools, and manufacturers can establish a “Group” area in which they can also connect, engage, and collaborate with this target audience. Unlike traditional “open” social media sites, organizations have participated in very targeted member drives and advertising campaigns within this closed-loop verified network. The efficiency of sharing information, news, videos, and messages, while maintaining control of who receives the content, has been significantly enhanced. A study that Skipta conducted showed that, within Skipta’s Pharmacist Society, pharmacy organizations that participate have seen, on average, an increase of over 150% in active reach to their intended audience and have been able to actively and successfully integrate social media into their organizations by incorporating social media into their email campaigns, membership drives, and member polling. With this increased reach, the organizations participating in Skipta’s Pharmacist Society, on average, have also seen an increase in over 30% of active involvement from their members within the site and now can both qualitatively and quantitatively evaluate feedback and initiatives using the analytics that are provided.

Social media marketing is powerful, but for organizations to get the most cost-effective, time-efficient, and safe use from this valuable marketing engine, niche networks is key. Engagement with a target audience in an environment that both the organization and the audience feel secure will produce results both in overall reach and impact factors that will speak for itself. The ROI of social media is the opportunity to significantly improve communication, collaboration, and performance for the organization. This can be realized by streamlining efforts and going to the target audience directly by leveraging niche networks.

CONCLUSION
Social media has become a global phenomenon and is quickly becoming the major form of communication and advertisement mode for organization. Leaders everywhere should embrace the opportunity to make social media a vital and integrated part of their organizations. Organizations that work to connect their members and allow them to communicate collaborate, and share information effectively is more likely to succeed; organizations that do not are likely to be replaced by others that do. When initiating a social media initiative for an organization, it is important to streamline efforts, engage directly with the target audience, and incorporate a holistic approach involving both external and internal organization objectives. With this approach, a social media initiative is likely to be a success.

REFERENCES

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