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A PRACTICAL MANAGEMENT SYSTEM FOR THE EFFECTIVE USE OF OFFSHORE SOFTWARE PROJECT OPPORTUNITIES

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ABSTRACT

A qualitative, grounded theory research was conducted to explore and deepen the understanding of how middle and low level managers can initialize and manage information technology (IT) outsourcing projects. The study involved 17 managers and leaders working in Ukraine in offshore software development companies. A grounded theory was utilized to analyze data from participants to identify the interrelationship among seven core categories including: (a) project communication, (b) employee training, (c) flexible organization, (d) strategic communication, (e) team unit, (f) transparent management, and (g) vendor adaptability. The study results indicate that applying a combination of concepts in the new theory as strategies allow managers to overcome barriers and achieve the realization of opportunities beyond traditional benefits in outsourcing. Such opportunities include achieving value-added results, vendor motivation, improved software quality, efficiency and timely delivery, organizational growth potential. The study highlighted the importance of referring a practical management system with characteristics of easily understandable and imaginable management approaches. The study also raised public awareness of the specific outsourcing landscape in Ukraine formed by that country's cultural, technological, and political situation. The findings contribute to the body of knowledge on a practical management system in outsourcing although its scope was constrained by limited resources.

JEL: M11, M12, M53, M54

KEYWORDS: Offshore, Outsourcing, Software Development, Natural Approach, Opportunities, Benefits, Ukraine, Management, Motivation, Training, Project, Product, Expertise, Social Network

INTRODUCTION

There is a knowledge gap on how companies can realize opportunities beyond traditional economic benefits when outsourcing to destinations like Ukraine with a high concentration of scientists and complex expertise. Our qualitative, grounded theory research was conducted to explore and deepen the understanding of how middle and low level managers can initialize and manage information technology (IT) outsourcing projects. The study involved 17 managers and leaders working in Ukraine in offshore software development companies. The authors' findings offer insights into categories, which form the foundation of a new theory on the role of natural systematic approaches with social networking technologies in effective software outsourcing to Ukraine. The study results indicate that applying a combination of concepts in the new theory as a strategy, allows managers to overcome barriers and achieve the realization of opportunities beyond traditional benefits in outsourcing. Such opportunities include achieving value-added results, higher vendor motivation and organizational growth potential; increasing efficiency of outsourced development, improving software quality, and ensuring timely delivery. While much knowledge exists on the mutual benefits in international outsourcing engagements, outsourcing continues to be used mostly for a short-term economic advantage with advancement limiting long-term consequences

(Alexandrova, 2007; Aspray, 2010; Belcourt, 2006; Elango, 2008; Kumar, 2007). Large outsourcing markets with inexpensive labor, such as China and India, are well utilized but destinations like Ukraine with a high concentration of scientists and complex expertise remain undervalued (Aspray, 2010; Nation Master, 2002; Rosenberg, 2010). Since the first European computer was created in the city of Kiev, Ukraine has played the major role in the former Soviet Union's IT competition with the United States (Fitzpatrick, Berkovich, and Kazakova, 2006), and has continued to retain its scientific potential and complex expertise with 30,000 IT graduates for the workforce each year (Aspray, 2010; Nation Master, 2002; Rosenberg, 2010; "Ukrainian Outsourcing Market," 2007). Yet, while Ukraine has been on an independent path, it lacks a leadership model that will enable fulfillment of its IT industry potential on the global arena (Barbash, 2009; "Ukrainian Outsourcing Market," 2007).

The aim of this study was to fill the knowledge gap on how a practical management system with enabling information and communication technology can help effectively initialize and manage outsourcing to Ukraine with its unique situation in the software development industry. Initially, offshore IT outsourcing was driven mostly by cost (Patki & Patki, 2007). However, the accelerated rate of globalization and technology advancements have significantly increased the value of innovation, knowledge and process for many companies (Jung, Choi, and Songa, 2007; Perry, Candlot, and Schutte, 2010) and extended expectations in offshore IT arrangements beyond traditional benefits. Clott 2007) maintained that project and mid-level managers at a client, when entrusted with implementing offshore IT arrangements, need to operate with outsourcing vendor members in different time zones, across cultural differences, and over geographic distances. These IT project managers must face the tactical and strategic challenges of managing project members, vendors, and outsourced activities across multiple countries while possessing little diverse management experience (Clott, 2007). Theories of social networks (Vithessonthi, 2010) and the practical management system of an organic systems' analogy in organizational management (Midanek, 2008) offer needed mechanisms to effectively managing large virtual organization in broad-scope projects.

One primary research question guided the inquiry of this study: What theory might explain the influence of a practical management system with information and communication technology on the effectiveness in offshore IT outsourcing arrangements? Low-and middle-level managers in developed countries may use different practices to achieve the realization of offshore software development project opportunities like is seen in Ukraine. The data from previous research on developed countries' perspectives (Chadee & Raman, 2009; Hansen, Schaumburg-Müller, and Pottenger, 2008) and best management practices (Bowman, 2010; Kawamura & Nakamura, 2008; Pang, 2010), were triangulated with the data collected from the interview questions in this study. The depth of collected data enabled fulfillment of the secondary purpose of the study, which was developing a grounded theory on a practical management system that may lead to the effective use of offshore software project opportunities.

LITERATURE REVIEW

The field of outsourcing has emerged from transaction cost theory and has absorbed the theories of organization, resource, strategy, and knowledge management (Busi & McIvor, 2008). As the application of outsourcing remains limited, the theory does not provide full coverage of many existing practices. The growing popularity of outsourcing in the world's globalizing economy makes it one of the most rapidly changing areas of business, often with confusing concepts, conflicting practices, and controversial implications (Chadee & Raman, 2009). According to Wheatley 2001), if existing mechanistic models cannot keep up with the demands for innovation and effective leadership, a new worldview of organizations as living systems can allow leaders guiding people thought continuous change and achieving boundless creativity with them. Theories of social networks (Vithessonthi, 2010) and the practical management system of an organic systems analogy in organizational management (Midanek, 2008) offer solutions for similar challenges to effectively managing large virtual organization in broad-scope projects and realizing opportunities beyond traditional benefits. The initial transaction cost theory perspective on outsourcing

neglected the learning dynamics and quality aspects (Mahnke, 2001). Later studies identified decision-making and the knowledge-based view, in addition to transaction cost economies, as the strongest influencing factors in outsourcing (Schwarz, Jayatilaka, Hirschheim, and Goles, 2009). Another model that is very close to the body of outsourcing models is the theory of virtual organizations. Similar to a virtual organization concept, international outsourcing is characterized by the distributed organizational entities and resources that require people to use virtual space for interactions to achieve organizational objectives (Shekhar, 2006). Hwang (2008) maintained that organizations become increasingly global with the exponential increase in collaboration over distance activities, with their partners or units operating in a virtual way. This outlines a context for outsourcing as one of the dimensions of the globalization theory.
The advent of IT makes social networking systems a viable medium to maintain the dynamics in outsourcing. Ties (or connections), the core structural element in social networks, facilitate collaborative work and allow the sharing of ideas, information, and knowledge between the members of a network (Fliaster & Spiess, 2008; Vithessonthi, 2010). Dawley (2009) argued that social networks facilitate self-directed learning by the common characteristics of communication patterns with theories of constructionist, connectivist, and constructivist learning. The concept of strong and weak ties present in social networks fosters external and internal knowledge exchange in organizations (Perry et al., 2010). Individuals may create an innovation from weak ties and develop it further through explicit knowledge from other individuals connected via strong ties.

Exploration of international outsourcing in IT requires researchers to consider a combination of theories from distributed environments, outsourcing, and information technology, as well as large and complex systems. Lacity and Rottman (2009) characterized IT outsourcing work as more difficult than other areas of outsourcing. Projects in IT are very complex because of the complexity of knowledge involved. Basili et al. (2010) reported that weak management, lack of employee motivation, inadequate training, and misalignment of IT and business strategies often lead to IT project failures. Developing new organizational structures and leveraging the best management concepts (Clott, 2007) from the areas of global corporate value management (Fukukawa & Teramoto, 2009), living, and general systems theories (Wennberg, Brandt, and Révay, 2006) are necessary to overcome the boundaries and to achieve long-term competitive advantage in knowledge intensive IT industry.

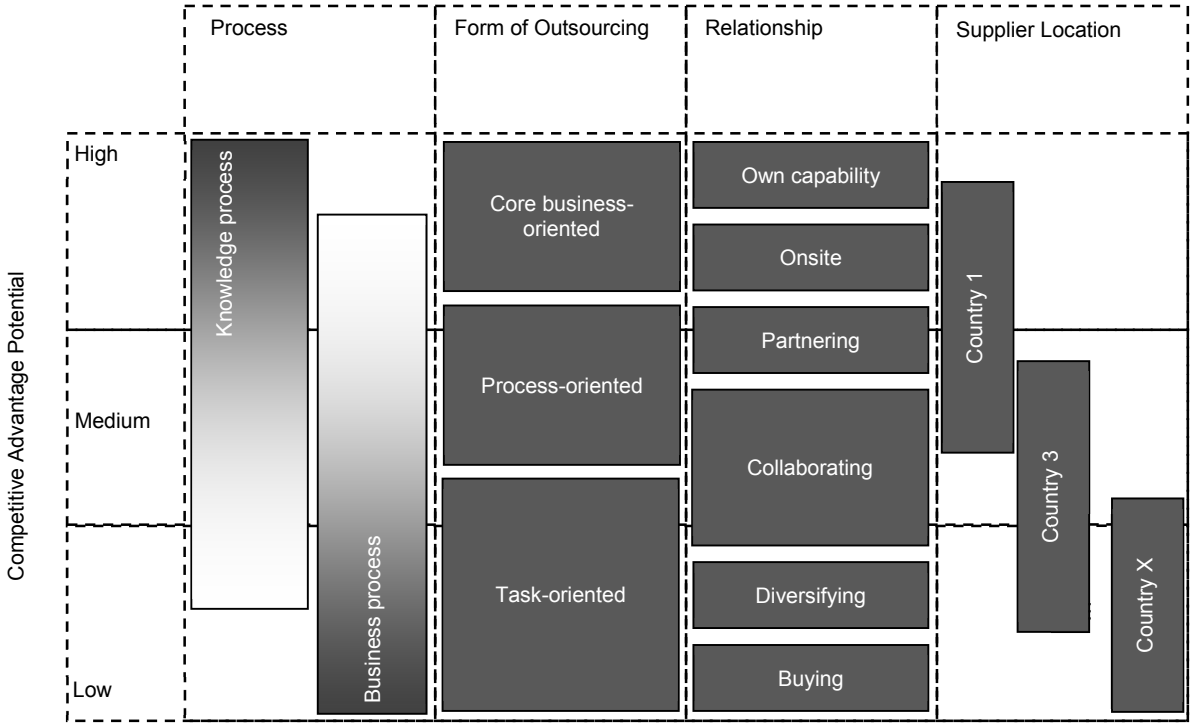
Understanding of large and complex systems is simplified by using metaphors and references to existing systems in nature (Bowman, 2010; Pang, 2010). Management approaches derived from the natural principles of harmony and synergy may positively influence efficiency of outsourcing relationships. Outsourcing as a form of buyer-vendor relationship is prone to the hierarchical partner relationship in which a dominant partner demands much more action from the weaker partner (Silva-Domingo & Canet-Giner, 2010). This undermines the efficacy of a relationship approach. Output in a relationship is greater if organizations are autonomous and compete in harmony rather than in dominance situations (Storbacka & Nenonen, 2009). Synergies in human, financial, and technological capital allow partnering organizations to capitalize better on the efficient use of resources and avoidance of duplication (Storbacka & Nenonen, 2009). Synergy and harmony in outsourcing relationships, similar to resources, lead to the efficient use of opportunities on both sides. As a result, the partnering organizations experience the advancement of various factors, such as innovation and size.

Leading Software Outsourcing

Outsourcing absorbed many mature theories and companies have been achieving significant cost and productivity improvements over many years of applying this tool (Busi & McIvor, 2008). Still many gaps and challenges exist in the IT offshoring. Sparse research exists on business and knowledge process outsourcing. International outsourcing methodology, which works for routine, well defined, and noncore activities, cannot be predictably applied to other tasks (Sen & Shiel, 2006). Deeper understanding of how to organize and manage international outsourcing seems an important topic as many organizations, pushed

by the competition, find themselves at the entry phase of outsourcing, but also recognize the moral obligation to keep domestic jobs (Aspray, 2010). By engaging in offshore software development, companies pursue gaining competitive advantage in several ways. Outsourcing reduces development costs via the substitution of higher wage employees for lower wage employees or lower skilled professionals with those with higher skills (Forbath, Brooks, and Dass, 2008). Forbath et al. (2008) also reported that companies achieve successful innovation by acquiring additional capabilities and expertise from outsourcing relationships. An organization can gain a strategic software outsourcing benefit by learning from the vendor's experience of the global competitive aspects, including market, technology, and industry knowledge (Forbath et al., 2008). A vendor may possess knowledge in intellectual property, process and technological leadership, scalability, and supply chain considerations that are valuable for the client. Gonzalez, Gasco, and Llopis (2006) proposed three essential steps to making strategic outsourcing decisions: identifying the advantages and risks of offshore outsourcing, selecting a suitable form of outsourcing relationship, and determining a country or location for acquiring a vendor. Those three steps are related, and an organization should select an outsourcing destination based on its needs and processes. One can construct a template (see Figure 1) to assess activities and to suggest the appropriate outsourcing relationship and vendor location selection.

Figure 1: Planning Template to Assess Organization's Activities and to Suggest Outsourcing Scenarios



Knowledge process has a higher competitive advantage potential but also is more challenging to outsource. Whether outsourcing an entire process, its parts, or specific functions and operations, the outsourcing decision should be a result of a thorough and systematic review of the organization's activities based on the competitive advantage potential of these activities (Insinga &Werle, 2000). Figure 1 arranges in one chart concepts of decision-making steps (Gonzalez et al. 2006), sourcing models, contractual forms, and locations (Robinson & Kalakota, 2004; Zhou & Mayhew, 2009) in relation to the levels of competitive advantage activities in offshore software development (Insinga &Werle, 2000).

The Ukrainian IT industry is characterized by a high-level expertise in complex solutions because of scientific inheritance and inventive engineers (Rosenberg, 2010). Free higher education and a strong focus on developing mathematical and engineering skills in Ukraine significantly increases the number of qualified graduates. According to World Bank statistics (Nation Master, 2002), Ukraine ranks 42nd in the world for the per capita number of scientists and engineers, with the United States and China ranking 59th and 85th respectively. In the 2007 and 2008 combined indexes of outsourcing published by the *Central and*

Eastern European IT Outsourcing Review (ITOlist Ukraine, 2010), Ukraine holds the top position among Central and Eastern European countries. According to a *Global Services 100* survey (Nair, 2010), Ukraine holds 11th place in the world in terms of the number of people involved in IT outsourcing, surpassing Russia and Belarus. Aspray (2010) stated that much work requiring high levels of mathematical ability is outsourced to former Soviet Union countries in which a legacy of highly trained mathematicians and physical scientists from the Cold War era remains.

Social and Organic Systems

Information and communication technologies still cannot replace many aspects of physical face-to-face meetings and social interactions (Nandhakumar & Baskerville, 2006). Nandhakumar and Baskerville (2006) reported that periodic face-to-face meetings enable the creation of commitment and relationships. Awareness of this risk should allow virtual teams to manage such technologies to achieve expected outcomes. The success of sustainable virtual teams, therefore, lies in the ability to nurture trust in personal and impersonal human relationships. Online social networking is a promising technology to provide a level of abstraction for users to communicate and interact with each other on the intranet and Internet (Fliaster & Spiess, 2008; Vithessonthi, 2010) and thus minimizes the need to be co-located.

The analogy of living organisms often is used in organizational management as a model for simplifying the understanding of complex systems and processes. Midanek (2008) used the biological model of companies as living, breathing organisms that respond to the owner's nurturing, to explain the nature of company growth. Malik (2002) reported that to imagine the distant future of a company, managers spontaneously seek clues in the evolution of a biological system rather than in organizational and economic theories. Anell and Wilson (2000) used the amoeba organism analogy to model changes in organization's internal structure to ensure the proper flow of resources with the change in scale and scope. Similar to biological amoeba, an organizational structure with amoeba units is amorphous; it changes, adjusting its shape to the environment (Low, 2000). Amoeba units are highly interconnected and have no clear boundaries. The growth of amoebas leads to their division, thus forming new amoebas. In contrast to bureaucratic and hierarchical organizational structures, amoeba organizations can create economic wealth by mixing and matching resources in an infinitely dynamic and ad hoc way (Cooper, 1995).

The amoeba management system (AMS) used in Kyocera (Kawamura & Nakamura, 2008) may provide valuable insight in how to realize maximum outsourcing benefits given the AMS's characteristics of internal, structural, and conceptual flexibility (Anell & Wilson, 2000; Cooper, 1995). The AMS uniqueness is in enabling the company to manage effectiveness at the level of small business units – amoebas (Trunecek, 2007). Small firms are recognized from many studies to be more effective than large firms in terms of entrepreneurship, innovation, performance, and finances (Ha-Brookshire, 2009; Ozenbas, and Portes, 2011). According to Cooper (1995), AMS facilitates an environment in which individuals enjoy their work and influence the way in which it is performed. The members of independent organizational units (amoebas) are expected to act as managers who devote their attention and creativity to the operation of the amoeba. This ensures improved trust and motivation among the members who can also help overcome challenges present in outsourcing, such as discontinuities caused by geographic distance, time zones, and cultural differences; knowledge coordination; and managing dispersed members (Espinosa et al., 2006; Lacity & Rottman, 2009).

METHOD

Design

For this research study, the constructivist grounded theory approach was the optimum choice because of the theoretical implications of outsourcing vendor managers' vast experience of in working on multiple

projects ("Ukrainian Outsourcing Market," 2007). The study was designed to generate meaningful categories within the offshore software development project management domain based on professional beliefs, practices, values of the effective achievement of the outsourcing outcomes (including direct and indirect economic advantages), globalization aspects, capacity (Alexandrova, 2007; Nordin, 2005; Pai & Basu, 2007), the efficient use of core competencies, technologies, and specialized expertise, as well as improvement of accountability (Alexandrova, 2007; Belcourt, 2006; Kumar, 2007). The constructivist grounded theory design provides the opportunity to generate new theoretical explanation (Bryant & Charmaz, 2010) regarding how natural approaches with social networking technology can effectively lead international outsourcing. In this study, the grounded theory design focused on the critical interpretive process by analyzing the meanings and concepts used by managers of outsourcing vendor organizations. The sample consisted of 17 randomly selected managers in outsourcing vendor companies who have managed or led a group of people in offshore software development projects. To meet study guidelines, participants were required to have been in a leadership role for at least two of the last five years, have at least five years of software development work experience, and be at least 18 years old. The participants were coded P1-P17 to ensure anonymity. Table 1 illustrates the participants' demographic background in terms of gender, age group, position, and experience.

Table 1: Aggregated Demographic Data

Demographic Category	**Total Respondents N=17**
Age	
25-34 years	10
35-44 years	7
Gender	
Female	2
Male	15
Manager position	
Manager	8
Project manager	3
Team leader	5
Senior engineer	1
Experience in software offshoring	
5-9 years	8
10-19 years	9
Experience in software development	
5-9 years	4
10-19 years	13

This table summarizes participants by demographic categories. The majority of the participants (ten respondents), identified themselves in the 25-34 years old category. Other seven participants were 35 and older. Of the 17 participants, only two were females and others were males. The software outsourcing industry in Ukraine remains male-dominated. All participants work in the offshore software development outsourcing industry in leadership positions and had five and more years of experience in software outsourcing industry.

Data Collection and Analysis

The data primarily was collected from interviews transcribed by the researcher and verified by the participants as well as the messaging logs of other interview formats convenient for the participants. Interviews fit Stancanelli's (2010) condition of participants possessing experience in the area of interest necessary to produce and research initial ideas and information. Open-ended interviews were used to illuminate expected and unexpected perceptions of a practical management system and IT in the context of offshore software development. The interviews were designed to last approximately 70 minutes and consisted of 11 questions. The 11 open-ended interview questions aimed to capture software development related practices, general outsourcing practices, and reflection on the client's leadership and management practices. Three questions concerned offshore software development practices, four addressed practices for outsourcing opportunities, and the remaining four related to the client perspective. The study used a grounded theory research design and constructivist approach to data analysis. The constructivist approach fulfilled the purpose of developing substantive theories through the identification of analytical categories

and their relationships with further development of those into social theories of actions. The approach employed text searches, linking ideas, coding data, and drawing models while ensuring instant access to the original data behind the concepts (Bryant & Charmaz, 2010). The interviews in this study were translated from Russian or Ukrainian into English and then transcribed.

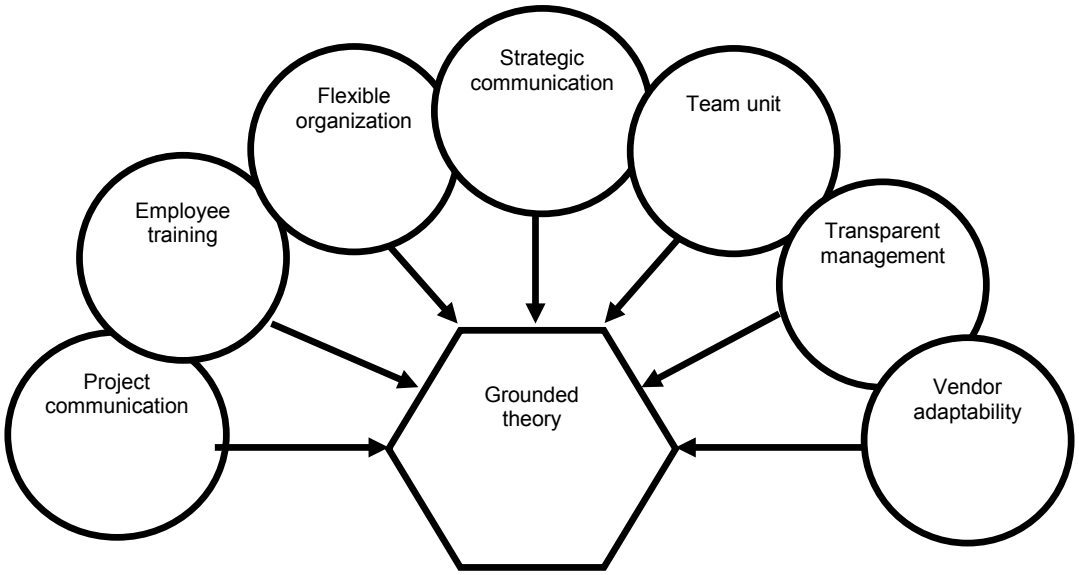
Analysis was conducted using NVivo® 10 qualitative analysis software to define categories that emerge from the data (Leech & Onwuegbuzie, 2011). The process of coding involved three steps of open, axial and selective coding. Parallel with coding, the constant comparison technique was used to identify similarities, differences, and refine concepts (Bryant & Charmaz, 2010). Each new code was compared to an existing code in the same category to determine each code's properties including opposites, variation, or continua. In addition to defined codes, categories from the outside such as literature or personal experiences were used for a comparison. The condition of theoretical saturation was achieved when gathering fresh data no longer sparked new theoretical insight nor revealed new properties of the core categories (Bryant & Charmaz, 2010).

RESULTS AND DISCUSSION

7 Core Categories

Analysis of the interviews of the 17 study participants led to identification of seven categories: (a) project communication, (b) employee training, (c) flexible organization, (d) strategic communication, (e) team unit, (f) transparent management, and (g) vendor adaptability. Figure 2 shows the identified thematic categories.

Figure 2: Core Categories in Grounded Theory

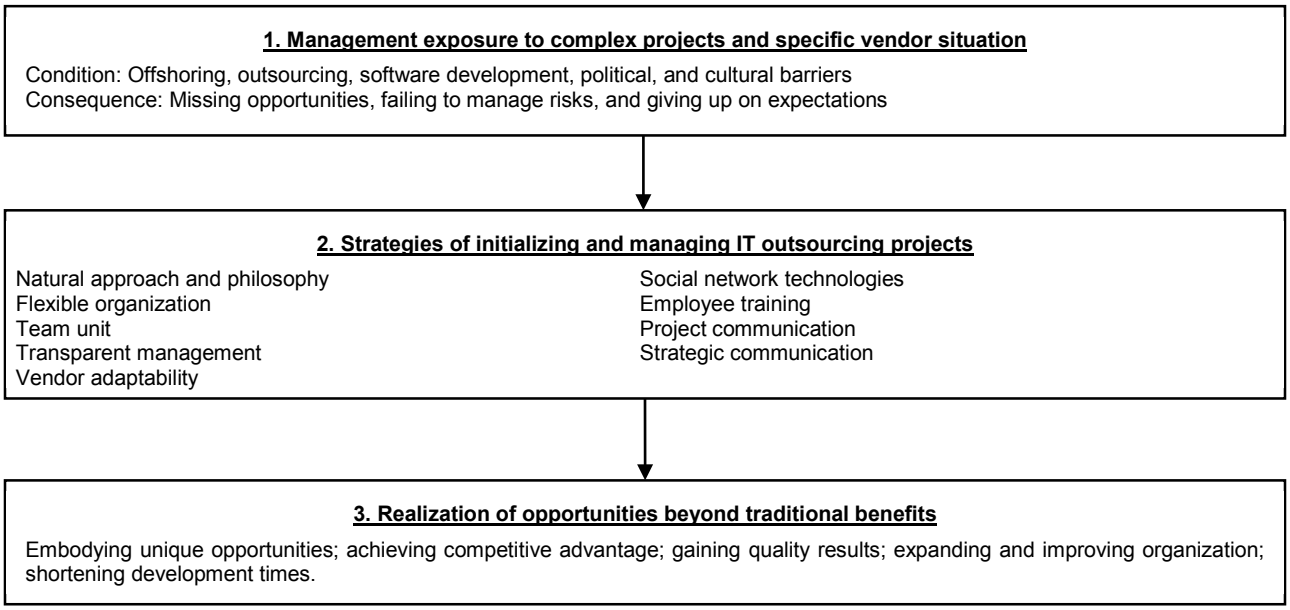


This figure shows 7 core categories constituting the grounded theory in this study.

The findings of the current grounded theory indicate that the managers in outsourcing vendor companies within the sampled population appeared to be using and experiencing combinations of management theories that were coded under seven emergent categories depicted on the Figure 2, including project communication, employee training, flexible organization, strategic communication, team unit, transparent management, and vendor adaptability practices. Development and relation of the categories resulted in the

theoretical model that portrays the general meaning (Creswell, 2007). Figure 3 illustrates a model of the grounded theory with related concepts of the general situation, strategies in applying management practices, and achievement of special benefits in the theoretical model of initializing and managing IT outsourcing projects to Ukraine.

Figure 3: Theoretical Model of Initializing and Managing IT Outsourcing Projects to Ukraine



This figure shows three steps of the problem-solution model of initializing and managing IT outsourcing projects to Ukraine. Step one is an acknowledgement of the problematic situation with offshore outsourcing. Step two lists strategies to apply in order to improve the situation. Finally, step three shows which opportunities beyond traditional benefits should be monitored in order to evaluate the successful implementation of the strategies.

All of the participants and literature (Chadee & Raman, 2009; Chou, 2009; Horwitz, Bravington, and Silvis, 2006; Jayatilaka & Hirschheim, 2009; Malik & Majeed, 2010) addressed the importance of project communication as enabling and challenging for offshore IT outsourcing. The participants indicated that to facilitate value-added results and vendor motivation, a client should communicate clear goals and expectations, be actively involved, provide feedback, and just in time directions to vendor. According to Chadee and Raman (2009), active participation and better communication lead to an improved client-vendor relationship. Horwitz, et al. (2006) stated that clearly defined objectives, roles, and responsibilities ensure effective coordination over distance, whereas appreciation for the virtual team achievements and efforts is crucial to motivate remote members and compensate for the lack of interaction in a virtual environment. Malik and Majeed (2010) reported the factors of project type and size, development strategy, communication approach, and cultural and geographical differences contribute to the success or failure of offshore software projects. Participants distinguished agile methodology in particular to help mitigating issues with distance communication in offshore engagements. Also the majority of the participants (P3, P5, P6, P7, P8, P9, P10, P12, P13, P15) indicated that to communicate project and company organizational principles, a client and vendor should use common language and tools including documents, e-mails, presentations, Skype®, chat rooms, Wiki pages on Confluence®, and Campfire® chat. Similar features and purposes can be found in social networking systems (Bennett et al. 2010).

Under the employee-training category, all of the participants discussed essential characteristics of Ukrainian IT professionals, which involves a high level of technical expertise and life-long-learning attitude. The participants suggested clients assign research tasks in Ukrainian IT outsourcing and direct the energy of developers by tasking them with technical challenges. A high concentration of scientists and engineers, as

well as technical skill and learning attitude characteristics are due to the availability of free higher education and a strong focus on developing mathematical and engineering skills in Ukraine. According to participants, this created advantageous conditions for IT outsourcing in Ukraine (Nation Master, 2002). Practices of leveraging new technologies, training by superiors and an exchange of visitations were noted by a majority of the participants as reasons that lead client companies to successful innovation, competitive technology, and new industry knowledge by acquiring additional capabilities and expertise from outsourcing relationships (Forbath et al., 2008). Consistent with the literature (Rosenberg, 2010), participants stated that despite the higher cost compared to China and India, Ukraine offers better efficiency and quality of the software development services. Competitive environments require learning dynamics in adaptability and capability development, aspects (Mahnke, 2001), which may not be measurable.

Yakhlef (2009) stated that IT outsourcing became a significant organizational restructuring force since its emergence in 1990s. Participants identified flexible organization structure as a major response to the variations of interactions in offshore IT outsourcing engagements. Most of the participants indicated (53% of the participants) that it is important to group people by projects and functions to effectively set up teams and ensure competence where needed. A resource pool manager who interacts with client and vendor managers, and central project technology repository simplify search of the expertise in the organization. Having two managers for each developer as in matrix organizations allows organizations to focus on long and short term objectives, as well as influence company's culture via vertical links. As suggested in the literature, participants emphasized that outsourcing offers resource flexibility (Chou, 2009). Vendors maintain dynamic structure to offer transitions from senior to junior level developers, temporary increases in work force, scaling up, and downsizing the team. Common philosophy and strategy between client and vendor serve guiding function towards collaborative flat organization (Insinga & Werle, 2000; Ketchen et al. 2008).The majority of the participants (71% of the participants) described strategic communication via concepts of sharing business information, connecting with horizontal teams, aligning general guidelines, and socializing with managers and employees, conferencing face-to-face; and sharing information across teams. The participants indicated that to achieve vendor motivation, align directions, and stimulate vendor input, client must share background business information with the vendor.

By sharing business information proactively, client and vendor minimize the need of communication during the project execution, which in turn reduces the risks of distance communication. Barr (2009) acknowledged that the international characteristics of distance communication and cultural differences deem for improved process efficiency in outsourcing. The participants also emphasized the importance of sharing business and project information among internal teams to enable faster knowledge transfer when assignments change. Desouza, Awazu, and Baloh (2006) identified the efficiency of knowledge exchange across the functions of an organization and between organizations is critical for organizational operation, and should be achieved through the optimization of software services and products. Participants indicated that to develop common organization principles, managers and employees need to socialize. The connections or ties in social networks facilitate collaborative work and allow the sharing of ideas, information, and knowledge between members (Fliaster & Spiess, 2008; Vithessonthi, 2010).

Under the category of team unit, all of the participants discussed the importance of autonomous team units in organization. This perspective is in alignment with the literature, which indicates that outsourcing should be considered in the context of organizational units in addition to the organization as a whole to identify in-house expertise, competitive technology, depth and risk-diversification at a finer level (Barr, 2009; Insinga & Werle, 2000). The participants indicated that accounting for complete components facilitates greater motivation, exploration of opportunities, and expansion of outsourcing teams. Clients should assign tasks in complete features for vendors to develop and stay with those features for longer period in contrast to the flow of non-related tasks as in discipline-oriented approach. With preliminary level of trust client can delegate component and high-level design creation to vendor, and can leave tasks open-ended for vendor to detail. Vendor teams work autonomously as independent organization unit for two employers. Similarly,

the literature describes the work of highly independent pseudo-firms in AMS, where units are responsible for selling products, both internally and externally (Cooper, 1995). Managers lead the teams and have the flexibility of making local decisions. The participants stated that managers feel responsible for the team and results, for which they pass client expectation to the team, set examples of organization principles, ensure local team culture, and act as the buffer against demotivating client behavior or changes. Cooper (1995) described the greatest strengths of the Kyocera's AMS as being opportunistic for individuals to become leaders of independent amoebas to realize themselves as company owners.

All of the participants addressed the importance of transparent management. To achieve client appreciation, the participants provide periodic results by developing the product in short iterations. Short iterations ensure a balance between clients desire to see the product as soon as possible and vendor developers' interest to research the technical side. Similar practice of periodical reviews for effective delivery is found in the literature. Kyocera Corporation conducts objective and transparent audits of management performance on a regular basis (Kyocera Corporation, 2006). Midanek (2008) determined that company grows its values by focusing continuously on cash and its movements; moving beyond periodic reports to qualitative assessment of the internal and external situation; and fostering a culture of valuing people with associated risks, mistakes, retrospection, and rehabilitation. To survive through challenges and deliver positive outcomes, company leaders should create a culture of innovation and collective spirit in addition to formal processes and material benefits (Weatherhead, 2008). Along with periodical results delivery, the participants identified the concept of early problem reporting as important to avoid damage to client. Consistently, Morali and Wieringa (2010) stated the importance of controlling risks in outsourcing to prevent excessive project costs. Social networking systems provide effective environment for more efficient collaboration, increased communication around a problem, higher transparency of communication, and better value innovation (Burrus, 2010).

Finally, under the vendor adaptability category the majority of the participants (88%) indicated that the ability of vendor to adapt to processes and scope changes is important for effective result delivery. By the nature of contractual outsourcing relationship, a vendor is interested in successful collaboration (Silva-Domingo & Canet-Giner, 2010). The participants indicated among practices in their companies the need to clarify vague requirements by interviewing and questioning the client. According to the study participants, during political conflicts in client, vendor engineers keep neutrality. To improve further collaboration, vendor strives to apply the best development process and recommend it to the client. The client should have understanding for these characteristics. Kumar (2007) described improvement of productivity and expertise access in organizations in outsourcing relationships. Forbath et al. (2008) reported that an organization could learn from the vendor's experience involving global competitive aspects, including market, technology, and industry knowledge, as a strategic software outsourcing benefit. The participants identified that Ukrainian developers are flexible to methodology and type of project including agile methodology for iterative and continuous development, RUP for fixed price projects, discipline-oriented tasks for firmer control over the results, as well as feature-oriented tasks for better motivation.

Jayatilaka and Hirschheim (2009) stated that the significance of costs involved and outcomes from the outsourcing depends from how effectively managers in charge can implement changes in IT sourcing arrangements. Plugge and Janssen (2009) suggested that vendors also need to improve their capabilities to adapt to meet customer demands. New Grounded Theory – Natural Systematic Approaches for Effective Outsourcing The seven categories identified through analyzing the data are interrelated and form the foundation of a new theory regarding the influence of managerial approaches within a practical management system with IT technology on effective initialization and management of the offshore software outsourcing. The effective initialization and management include realization of unique opportunities, achieving competitive advantage, gaining quality results, shortening development times, expanding, and improving organization. The concepts in participant responses, literature, and researchers' personal insights are related to each of the seven categories in the theory of Natural Systematic Approaches for Effective

Outsourcing. The management practices identified in different categories lead to positive outcomes in effectiveoutsourcing. Achieving value-added results and vendor motivation requires active goal and feedback communication; possibility to learn from challenges; experienced business, and architecture members in client's organization; appreciation of vendor ideas and results; alignment of client and vendor missions; and realistic plans. An aspect of improved software quality was referred by the participants in context of applying agile practices, which allowed keeping developers on goal and helped to overcome distance communication issues. Other quality prerequisites include reviewing and consulting by peers; synergizing from common education and cultural backgrounds; controlling quality by client; empowering vendor manager for decisions and responsibilities; reporting and addressing problems promptly; and acquiring sufficient resources.

Further, efficiency of outsourced development and timely delivery depend on applying practices of client involvement for effective decision making; sharing organizational principles; utilizing online tools; frequent meetings and responding to e-mails within a day; possessing lifelong-learning attitudes; online project and resource management; distributed decision making; and small self-organized teams in vendor. The final outcome described by the study participants is the organizational growth potential, which can be achieved by fostering horizontal communication by vertical links; defining contractual relationships, roles, and responsibilities between client and vendor; client knowledge accumulation in vendor; recognizing outsourcing contribution to business success; assigning high-level and open-ended tasks in outsourcing; balancing teams by workload, expertise, and gender; and nurturing long and trusted relationship.

CONCLUDING COMMENTS

Despite the practice of outsourcing increasingly gaining importance in the globalizing economy, effective collaboration across national borders remains one of the problematic areas. This qualitative, grounded theory study sought to address the general problem of the mutual benefits in international outsourcing engagements beyond a short-term economic advantage with advancement limiting long-term consequences. Large outsourcing markets with inexpensive labor, such as China and India, are well known, but destinations like Ukraine with a high concentration of scientists and complex expertise remain undervalued. The specific problem this study sought to address is the lack of clarity about how a practical management system with enabling information and communication technology can help effectively initialize and manage outsourcing to Ukraine with its unique situation in the software development industry.

Perspectives of the 17 managers and leaders included in this study were generalized through triangulation and analysis, which led to the construction of a new grounded theory: Natural systematic approaches for effective outsourcing. The theory constitutes seven principles of project communication, employee training, flexible organization, strategic communication, team unit, transparent management, and vendor adaptability. Strategies of combining those principles represent the perceptions and beliefs of low- and middle- managers on initialization and management of IT outsourcing projects. The findings of the current study indicate the application of management practices lead to realization of opportunities beyond traditional benefits in offshore software outsourcing.

Leaders of the client and vendor companies engaged in outsourcing relations must not underestimate the importance of managers and management practices in place. This study resulted in a grounded theory, a model and a practical management system, which represent the knowledge of the perceptions, and beliefs of outsourcing managers and leaders on how to realize unique opportunities, achieve competitive advantage, gain quality results, shorten development times, expand, and improve organization. Future research can focus on generalizing the grounded theory developed in this study as well as on testing the theory in other countries-destinations for outsourcing. The governments of countries with similar IT outsourcing may strengthen their positions in the world service offering market. An easy to understand and

imagine practical management system applied with the IT will lead to effective initialization and management of outsourcing process in the respective areas of country's expertise.

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PUBLIC POLICY FOR VENTURE CAPITAL: A COMPARATIVE STUDY OF EMIRATES, SAUDI ARABIA AND EGYPT

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ABSTRACT

This study presents an integrated public policy framework for supporting the emergence of a venture capital industry, from both supply and demand perspectives. The framework is applied to the case of venture capital evolution in three Arab countries, namely United Arab Emirates, Saudi Arabia and Egypt. In each country case study, five public policy mechanisms are analyzed using both primary and secondary information. Comparative analysis of the country case studies shows that the three countries have made varying levels of progress on company registration procedures and development of an entrepreneurial ecosystem. More work is needed to simplify bankruptcy and other regulatory obstacles to venture capital funds, such as the limited partnership structure and the use of convertible stock. The three countries have limited venture capital supply from a few government and private venture capital funds, primarily due to demand side weaknesses and a meager flow of investible enterprises. Strengthening the demand side should form the primary focus of government reforms in the near future, in addition to demonstrating successful and profitable venture capital investment. The latter is a key step in putting together the pre-conditions for the emergence of active venture capital industries in the three countries.

JEL: K2, O17, O250

KEYWORDS: Venture Capital, Arab Countries, Dubai, Egypt, Saudi Arabia, Public Policy

INTRODUCTION

Megginson (2004) defines modern venture capital (VC) as '… a professionally managed pool of money raised for the sole purpose of making actively-managed direct equity investments in rapidly-growing private companies, and with a well-defined exit strategy.' Venture capital is equity capital that commands above market returns and is typically invested in young companies that have high growth potential but are nevertheless highly risky (Gompers 1997; Florida and Kenney 1988; Manigart et al. 2002). A venture capitalist will typically become deeply involved in the invested company beyond the provision of equity capital, giving strategic advice as well as access to a rich network of technical marketing, financial and operations support (Botazzi and Da Rin 2002; Klonowski 2010). Venture capitalists are there for the long haul, with a typical investment lasting from five to seven or ten years, working diligently with the entrepreneurs and the management team to grow the company (Dossani and Kenney 2002; Klonowski 2010). To monetize the return on investment, exit through IPO or trade sale is as important to the venture capitalist as growing the company. With these unique characteristics, venture capital is poised to support the growth of highly innovative and promising young companies in new industries, which other forms of financing would find too risky to invest in (Koh and Koh 2002). Thus, VC plays a vital role in pushing the frontiers of innovation and its commercialization (Kortum and Lerner 2000), having been the driving force behind the creation of whole new industries, such as biotechnology and information technology. For these reasons, governments of both developed and emerging economies have

adopted various policy mechanisms to foster the evolution of vibrant VC industries, hoping to replicate the spectacular success of the U.S., which is the exemplar in this respect.

This study offers an overview of a comprehensive policy framework to foster VC then proceeds to explore how the policy mechanisms apply in three Arab countries, namely the United Arab Emirates (UAE), the Kingdom of Saudi Arabia (KSA) and Egypt. A conceptual lens that combines both systems and evolutionary perspectives is employed in a comparative analysis of public policy for VC in the three countries. Conclusions and policy implications are drawn. This study addresses an important gap in the literature, as there is a paucity of studies on VC in Arab countries.

The next section provides a brief review of the literature on public policy for VC, from which the public policy framework is derived. Next, the country case studies are presented. For each country, the level of venture capital activity is described, followed by an analysis of the major public policy mechanisms adopted to support the emergence of venture capital. These include the entrepreneurship ecosystem, investment laws, tax incentives, second tier stock markets and government venture capital funding. Finally, the study offers a comparative analysis of the three countries from which conclusions and recommendations are drawn.

LITERATURE REVIEW

Most of the literature published on the topic of VC policy handles one or two policy elements and there is to date no single framework that collects both supply and demand side policies for VC. The policy framework adopted here is developed in detail in Seoudi (2014), and is illustrated in Figure (1) below. The framework takes a systemic view that integrates and connects both demand and supply side policies, as well as an evolutionary perspective that looks at initial conditions, pre-emergence and emergence stages in the development of a VC industry (Avnimelech & Teubal 2004).

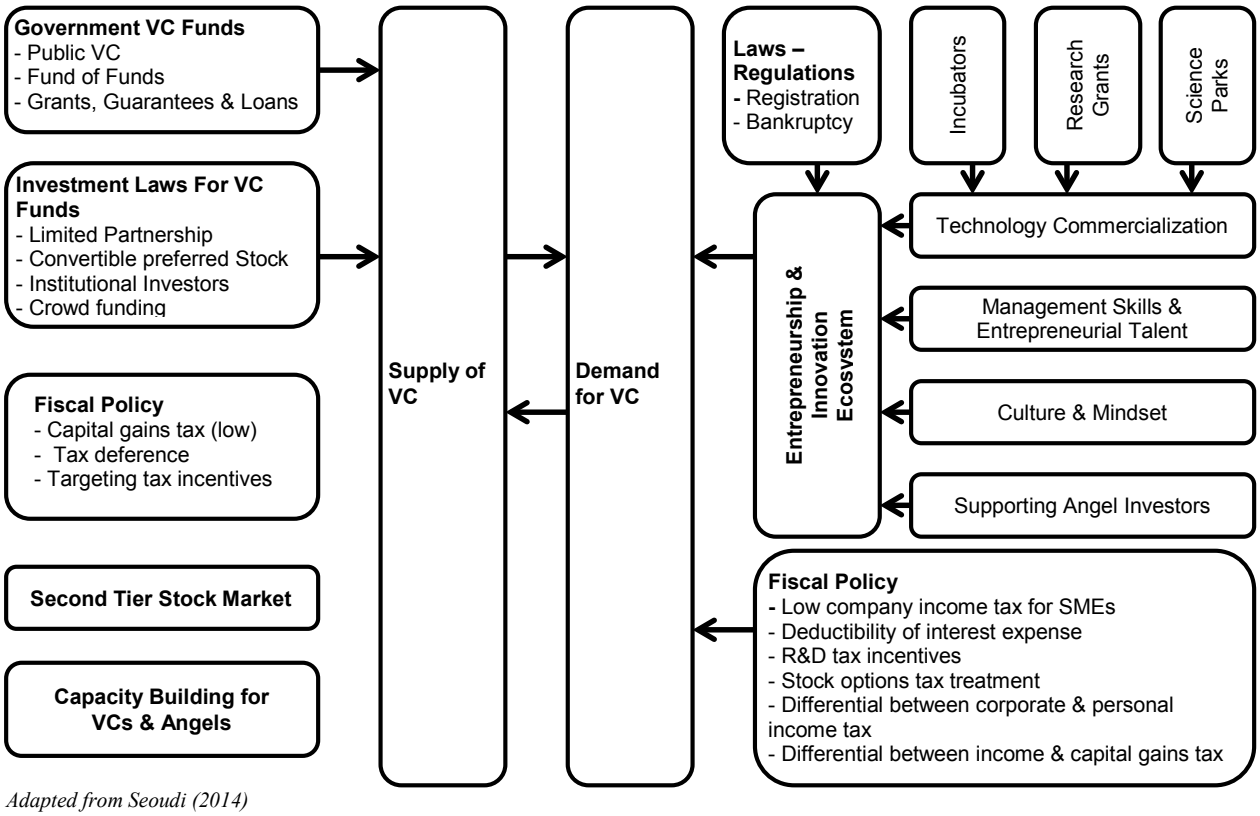
In order for venture capitalists to be drawn to invest in a particular country, in other words, for VC supply to emerge, there must be demand for this form of financing. To generate demand for VC, a vibrant entrepreneurial and innovation ecosystem with a wealthy supply of investment ready start-ups and high potential enterprises that will attract VCs is required. To develop such an ecosystem, governments have dedicated grant funds to support scientific research and created science parks and incubators for commercialization of new technologies (Romain and van Pottelsberghe 2004; Lerner 2009, 2010). Cultivation of an entrepreneurial mindset and a culture that accepts risk and failure as well as development of entrepreneurial and managerial talent are objectives of many government programs around the world (Mason and Harrison 2001; Harding 2002; Mason 2009). Investment laws and regulations should facilitate the creation and registration of new companies and ameliorate the punitive implications of bankruptcy so that failed entrepreneurs can pick themselves up and start over. The entrepreneurship literature has documented the importance of failure as experiential learning to sharpen entrepreneurs' business acumen.

Government support of local Business Angel Networks (BANs) is key to building the ecosystem as angels play a unique role in entrepreneurial finance. Angel investors provide equity capital in the stage where the entrepreneur has depleted all personal sources of funds, yet is not big enough to warrant VC investment (Politis 2008; Mason and Harrison 2001). Lastly, tax incentives play an important role in aiding the development of the entrepreneurship and innovation ecosystem. Examples of such tax incentives include tax breaks for small and medium size enterprises, deductibility of interest as well as research and development expenses, and loss carry forward provisions. Moreover, it has been argued in the literature that differentials between personal income taxes and personal capital gains taxes (assuming the latter is the lower of the two) may encourage individuals to take risk and become self employed (Poterba 1989). It is also shown that keeping capital gains taxes low in comparison with personal income taxes may influence

the incentives of entrepreneurs and VCs alike to put forth their best effort to make the entrepreneurial venture a success (Keuschnigg and Nielson 2004).

A second set of public policy mechanisms works on augmenting the supply of VC by influencing the incentives of investors to invest in young promising companies, setting a favorable regulatory environment and in some cases availing public funds for VC investment. A basic element of public policy to foster VC is to build the local investor talent among both angels and VCs (Avnimelech and Teubal 2004; Baygan 2004). Favorable regulatory provisions are important for mobilizing large investment funds of institutional investors such as insurance companies, pension funds and university endowments. Allowing these large institutional investors to invest in young risky companies is a step that has been taken in the United States and in other OECD countries that have successfully emerged an active VC sector (Romain and Pottelsberghe 2004; Lerner, Moore, and Shepherd 2005). The limited partnership legal structure has emerged as a best practice in global VC and removing regulatory impediments to this practice would encourage foreign venture capitalists to invest domestically (Carvalho, Netto, and Sampaio 2012). Another common practice in VC is the use of convertible preferred stock, which is said to optimize the allocation of control rights between the entrepreneur and the VC (Trester 1998; Gilson and Schizer 2003).

Figure 1: A Public Policy Framework for Venture Capital



Adapted from Seoudi (2014)

Besides the regulatory infrastructure, venture capitalists require an exit strategy, which is often done through initial public offering (IPO) in the stock market. The existence of a second-tier stock market for small high-growth companies, like the exemplary NASDAQ, is an important policy mechanism to allow an exit mechanism that encourages the supply of VC (Jeng and Wells 2000; Botazzi and Da Rin 2005; Rebeiro and de Carvalho 2008). Often, governments not only set the regulatory infrastructure for VC investors, but go further to directly supply VC, in the form of public VC funds which invest directly in

portfolio companies (Beuselinck and Manigart 2007; Nightengale et. al. 2009). Since governments VC funds have in some cases failed to perform as expected, public capital is sometimes channeled indirectly in the form of a government fund-of-funds, which invests in VC funds rather than young companies (Pierrakis and Westlake 2009; Lerner and Watson 2008). Detailed theoretical justification and review of empirical evidence regarding the elements of public policy on the demand and supply sides is explicated in Seoudi (2014). In what follows, this policy framework is applied to assess the development of the VC industries in United Arab Emirates (UAE), Kingdom of Saudi Arabia (KSA) and Egypt.

Case (1): the United Arab Emirates

Categorized by the World Bank as a high-income country, the UAE's GDP reached USD 348.6 billion in 2011 and a total population of 9.206 million in 2012 (The World Bank, 2013). The UAE is the only Arab country included in the "Global Economics driven by Innovation", the most advanced competitiveness stage in the 2012-2013 Competitiveness Report issued by the World Economic Forum (WEF) (Schwab, 2012). The country has been working on decreasing its reliance on oil revenues (Morris, 2006) and on improving some of its revenue generating sectors such as tourism, telecommunications, and finance (Morris, 2006). The UAE has set its 2021 vision to become one of the leading knowledge-based economies and has accordingly established a number of initiatives and developed a set of policies to maximize innovation and perfect its business environment to support the transition of its economy (MENA Private Equity Association, 2013). In the UAE, the VC industry relies heavily on expatriate entrepreneurs, beside the participation of the Emirati nationals, a fact that makes the model of the UAE VC industry unique (Monger, Rawashdeh, & Al Azzam, 2008). Most VC firms in the UAE target investment opportunities in the whole Arabian Gulf region. UAE investors do not favor VC firms as compared to private equity (PE) and buy-out firms. This is attributed to the small-sized funds versus the huge amount of work that needs to be invested in the ventures in order to achieve satisfactory financial returns.

It is believed that the VC industry will not get more mature until the current financial players focusing on private equity and buy-out assets show more interest in VC. Abraaj Capital is one successful example; whereas the company has been investing in sizeable private equity deals, it has recently launched a new fund that targets the growth of regional SMEs (MENA Private Equity Association, 2011). In a recent study to find out the determinants of the VC industry in the UAE, PE fund managers judged the level of VC and entrepreneurship to be very low. They also emphasized the scarcity of local VC expertise in the UAE. Most of them admittedly rely on unsolicited submission, as well as informal networking to identify investment opportunities. The study concluded that, to strengthen the VC industry, expert VCs as well as a vigorous entrepreneurial population should exist with sufficient numbers. Hence, policies must target the strengthening, expansion, and diversification of the VC industry in terms of VCs and entrepreneurs (Monger, Rawashdeh, & Al Azzam, 2008).

Currently, there are two business angel networks operating in Dubai, the busiest and most prominent of the Emirati provinces: Envestors Dubai and ABAN. *Envestors Dubai*, part of *Envestors MENA*, is a franchise of the best investment networks in the UK "*Business Angel Network*". It works on connecting entrepreneurs with interested investors while assisting entrepreneurs in finding the best way to present their companies to the investors (Envestors, n.d.). ABAN or *Arab Business Angel Network* targets all early stage ventures or start-ups in the MENA region seeking seed funds between $100K and $500K. Though a non-sector specific network, it gives preference to media, ICT, and retail services and avoids businesses that involve alcohol or gambling (Gust, 2014).

Entrepreneurship & Innovation Ecosystem

Given the ease of doing business and the highly developed infrastructure, more entrepreneurs are encouraged to start their businesses in the UAE, especially technology-related ones (MENA Private Equity

Association, 2011). According to the National UAE GEM Report (2013), the rate of Total Entrepreneurial Activity (TEA) in the UAE was 7.8% in 2011, which is higher than the rate of other innovation-driven economies. It is worth mentioning that the percentage of Emiratis having positive perception of entrepreneurship as a career choice and perceiving UAE as a suitable environment for starting a business is much higher than the percentage of Emiratis who actually start-up their businesses. (El-Sokari et al. 2013). There are huge opportunities for entrepreneurs in the UAE that remain underutilized due to a set of hurdles, the most important of which are culture, funding gap, excess liquidity, bankruptcy laws, lack of qualified caliber, and high costs (El-Sokari et al., 2013).The Emirati culture discourages risk-taking and encourages secure jobs (Bharadwaj, 2012; Kargwell & Inguva, 2012). The low risk appetite is attributed to the bankruptcy stigma and the complex insolvency laws (El-Sokari et al., 2013; Bharadwaj, 2012). It is ironic that in a high-income country, small businesses are shutting down due to limited access to funds (MENA Private Equity Association 2013; El-Sokari et al., 2013). Emirati and other GCC investors seek to invest huge sums, a case that makes it hard for entrepreneurs to find investors matching their needs for smaller magnitudes of investment (Monger, Rawashdeh, & Al Azzam, 2008). Besides, acquiring bank loans in the UAE is associated with problems such as timeliness issues, high interest rates, and concealed charges (Dun & Bradstreet, 2008). In response, the UAE government has founded several loan programs for start-ups such as Dubai SME and Khalifa Fund. Crowd funding and microfinance also work better for SMEs as alternative solutions to bank lending. However, there still exists a gap that could potentially be covered through equity financing (El-Sokari et al., 2013). The lack of qualified personnel, especially engineers, is a serious problem in the UAE (Kargwell & Inguva, 2012). Accordingly, foreign entrepreneurs tend to establish the operations in their home countries and run only the sales and marketing activities in the UAE (MENA Private Equity Association, 2011).

Investment Laws & Regulations

The UAE government has been taking steady steps to ease the process of starting a company. In 2010, the UAE abolished the minimum capital requirements for starting a business and simplified the registration documents (Dubai SME, 2011;World Bank Group, 2015). The procedures for approving foreign investments have also been eased and investors were granted the privilege of applying for their businesses online and following up on the application status by phone (Dubai FDI, 2013). Moreover, Dubai's Chamber of Commerce and Industry (Dubai Chamber) plays an effective role in enhancing the business environment (Government Of Dubai, 2014) and promoting Dubai as an international business hub (Dubai Chamber, 2014). While several UAE policies encourage foreign investments (KPMG, 2006), yet the legal framework for investment still favors nationals over foreign investors (U.S. Department Of State, 2012; Latham & Watkins, 2012). This has been clearly demonstrated in the restricted foreign ownership of stocks and land, as well as the sponsorship, agency, and distributorship requirements that apply to foreign companies established outside the free zones (U.S. Department Of State, 2012).

Recently, the UAE government has taken serious steps to attract more foreign investors by creating a favorable environment for them. By the end of 2011, the Federal Cabinet announced its approval of a new Company Law, which raises the foreign ownership ceiling over 49% for some types of businesses and gives more protection to the shareholders (U.S. Department Of State, 2012; Dubai FDI, 2013). Another important channel that supports investment in the UAE is found in the 36 free zones spread over the seven emirates (UAE Free Zones, n.d.). These include, but are not restricted to, industrial, educational, logistics, financial, IT, and Media clusters (Dubai Free Zone Council, n.d.). The zones provide huge incentives to foreign and local businesses including 100% tax exemption, 100% full capital and profit repatriation, 100% foreign ownership, generous supply of energy at inexpensive rates, and speedy approval procedures (PKF, 2009; Horovitz and Ohlsson, 2005; KPMG, 2006). Moreover, free zones provide access to an impressive range of facilities and robust infrastructure that strongly aids businesses (Horovitz and Ohlsson, 2005; KPMG, 2006; PKF, 2009), not to mention their excellent geographical location (KPMG, 2006).

By attracting foreign investors, free zones have facilitated the transfer of technology to the country and created a huge number of jobs (PKF, 2009). Many of these free zones offer special services and opportunities to entrepreneurs starting up their businesses. Regarding the intellectual property rights and protection, the UAE government is perceived as the regional leader in this regard. It continuously works on enhancing the trademark, patent, and copyright laws. Software piracy rate in the UAE is also considered among the lowest in the Middle East region, with Dubai as the highest performer (Dubai FDI, 2013). Bankruptcy laws represent a serious impediment for entrepreneurship engendering fear of the stigma and other consequences of failure (El-Sokari et al., 2013). It takes three years, starting the end of the liquidation process to free the bankruptcy of its debts because the insolvency laws are unclear and highly complex (Reuters, 2012; El-Sokari et al., 2013). As judged by legal experts in the west, the bankruptcy laws in the UAE regulate the procedures of bankruptcy and its consequences. However, they do not define a clear process for the evaluation of the bankrupt's assets nor its distribution (U.S. Department Of State, 2012). Recently, the UAE government has started reconsidering the insolvency laws and simplifying them (U.S. Department of State, 2012; Dubai SME, 2011).

Tax Incentives and Second-Tier Stock Market

At the federal level, there is no tax legislation applied to all the emirates in the UAE and each emirate issues its own tax decrees, which are similar to each other (KPMG, 2006). In principle, income taxes are imposed on all corporate entities. Practically, taxes only apply to foreign bank branches and foreign oil companies. Hence, there is no formal exemption for corporate entities and accordingly, they have to continuously seek tax advice to be aware of any changes in the ongoing practice or legislation (KPMG, 2006). Companies operating in the free zones of the UAE enjoy additional tax incentives like exemption from corporate taxes for a minimum of 15 renewable years (Embassy of U.A.E. in London, 2014). In some emirates, like Dubai, the exemption period may reach 50 renewable years (Dubai FDI, 2013). Imports and exports are tax-exempt in the free zones (Sagerklint & Porntepcharoen, 2009; U.S. Department Of State, 2012).

There is currently no second-tier stock market for SMEs' listing in the UAE. However, there are ongoing plans for establishing one and an advisory board has already been established by NASDAQ Dubai to study the establishment of such a market (Taylorwessing.com, 2013). On the positive side, though, the Dubai Financial Services Authority (DFSA), which regulates NASDAQ Dubai, brought down the IPO minimum market capitalization from $ 50M to $ 10M to increase chances for IPOs and raise the market liquidity (Taylorwessing.com, 2013). On the other hand, the absence of the second-tier market is not believed to significantly affect start-up rates nor restrict VC activity. At any rate, other exit strategies like trade sales are possible (Monger, Rawashdeh, & Al Azzam, 2008).

Government Venture Capital Funding

To achieve its 2021 vision of building a competitive knowledge-based economy, the UAE government has been fiercely promoting entrepreneurship. Government efforts include the development of public policies, institutions and programs to support SME start-up, growth, and expansion both financially and non-financially (El-Sokari et al., 2013). Table (1) below presents the various funding projects initiated by the Emirati government to finance entrepreneurship and innovation, including the government VC funds. It is noteworthy that the majority of government initiatives support UAE nationals and not foreigners (MENA Private Equity Association, 2013).

Table 1: Emirati Government Venture Capital Funding

Government Funded Incubators, Science Parks & Research Funding	
Dubai Internet City (DIC) 2000	Aim: Become MENA's leading ICT spot. - Creating a knowledge-based economy (Dubai Internet City, 2014). - Hosts several Fortune 500 companies, multinationals, and ICT start-ups (Dubai Internet City, 2014). - Support services for start-ups include office spaces and IT infrastructure (Dubai FDI, 2013, 5).
Dubai Silicon Oasis Authority (DSOA) http://www.dsoa.ae 2005	Aim: Established with a focus on technology-based industries. - High technology ecosystem: SMEs, VCs, universities, incubators, large businesses, government & business services
Dubiotech http://www.dubiotech.ae/about-dubiotech/about-tecom-investments 2005	Aim: World's first free-zone devoted to life sciences with the aim of becoming the Middle East's premier life sciences hub. - Hosts academic, industrial, commercial, and residential projects. - Create alliances and affiliations with other research parks, hospitals, universities, & regulatory bodies worldwide. - Provides an attractive business environment through state of the art infrastructure, support services, tax-free income, non-restricted capital movement, and support for access to various markets. - Offers a one-stop shop for businesses including government services, registration & licensing, regulatory affairs management, and leasing services.
ICT Fund http://www.ictfund.gov.ae/About-Us.html 2005 (linkedin.com, n.d.)	Aim: Fostering an entrepreneurial culture in the ICT sector and advancing the ICT industry in UAE. - Creating linkages between academia and industry and boosting the development of technology in the UAE by involving UAE Nationals - Financial and non-financial support for businesses, academic institutes, and individuals - Access to networks of investors and experts in the ICT industry.
Silicon Oasis Founders (SOF) 2011 (linkedin.com n.d.)	- Targets seed phase start-ups related to the field of mobile applications and technologies - Aids businesses in fine-tuning their business proposals, growing and expanding (Silicon Oasis Founders, 2014).
In5 http://infive.ae 2013	Aim: Fostering the development of digital media and ICT start-ups. - Providing a strong infrastructure and supporting services to entrepreneurs from the idea creation stage and throughout the commercial launching of their services and products. - Services include access to funds, networking, consulting services, and set up assistance.
Public Venture Capital Funds	
Mohammed Bin Rashid Establishment for Small & Medium Enterprises (Dubai SME) 2002 (Dubai SME, 2013)	Aim: Turning Dubai into a leading center for SMEs characterized by innovation - Support for UAE Nationals from the business idea stage until registering the company and starting operations - Provides capital funds for early stage enterprises (MENA Private Equity Association, 2013) and facilitates access of SMEs to bank loans. (Dubai FDI, 2013). - Dubai SME 100 is a ranking of the finest SMEs
Khalifa Fund 2007 (Khalifa Fund, 2014)	Aim: Promotes investments among Emiratis and supports small to medium size businesses - Capital investment on establishment: AED 2 Billion. - Supports Abu Dhabi's local enterprises through financing SMEs, offering training and advisory services for entrepreneurs, establishing networks between investors and entrepreneurs .

This table shows the most prominent Emirati government initiatives in support of technological innovation and entrepreneurship along with details on targeted beneficiaries and services offered. Government venture capital and private equity funds are also shown.

Table (1) shows that Khalifa Fund is among the prominent VC funds in UAE is, which was established in 2007 (Khalifa Fund, 2014) as an independent entity, not under the Abu Dhabi Government Authority (MENA Private Equity Association, 2013). The fund is part of the long term vision of the UAE president and ruler of Abu Dhabi, Sheikh Khalifa Bin Zayed Al Nahyan, to turn Abu Dhabi into one of the biggest investment hubs and to contribute to the transformation of the UAE economy (MENA Private Equity Association, 2013). The capital investment of the fund, on establishment, was AED 2 Billion (MENA Private Equity Association, 2013; Khalifa Fund, 2014). The fund provides support for Abu Dhabi's local enterprises through financing the establishment and expansion of SMEs, offering training and advisory services for entrepreneurs, establishing communication networks between investors and entrepreneurs, and generally nurturing the entrepreneurship culture (Dun & Bradstreet, 2008; MENA Private Equity Association, 2013; Khalifa Fund, 2014). The fund has also introduced some specialized social funding programs that aim at assisting specific segments of the population such as special needs, widows, and retirees (MENA Private Equity Association, 2013; Khalifa Fund, 2014).

Case (2): the Kingdom of Saudi Arabia

The Kingdom of Saudi Arabia is the birthplace of the Islamic religion, which pervades most aspects of life including economic, political, and educational affairs (Al Mosallam, 2008). According to the World Bank (2012), KSA is a high-income country with a total GDP of $711 billion in 2012 (The World Bank, 2014). It has been the world's largest producer of oil (Alshumaimri , Aldridge, & Audretsch, 2010) and it owns around one quarter of the proven oil reserves in the globe, equivalent to 260 billion barrels (The Royal Embassy of KSA In Washington DC, 2014). Over the past decade, the country has relied on its oil production to achieve rapid economic growth. With concerns about the sustainability of this economic strategy, the country has recently moved toward building a solid knowledge-based sustainable economy by creating effective human resources and productive assets. These efforts paid off in 2009 when the country's economy was described as being in a transition state from a 'factor driven' to an 'efficiency driven' economy (Schwab, 2010), increasing employing more Saudi nationals who are becoming more educated and qualified (Al Mosallam, 2008). The focus for the coming years will be on developing the science and technology fields, developing and empowering the SME sector, and nurturing innovation. On this front, the government has adopted science and technology policies to create knowledge spillovers, particularly through the creation of science parks (Alshumaimri, Aldridge, & Audretsch, 2010).

Although the concept of VC has many similarities to the deeply rooted practice of 'mudarabah' in Islamic finance, modern VC was nonexistent in KSA until the end of 2011. With heavy investments in the country's infrastructure and establishment of technology and science parks, experts believe that VC can boost the rate of high-tech start-up activity in the Kingdom (MENA Private Equity Association, 2011). Accordingly, the government has strongly promoted for entrepreneurial activity and created several incubators, VC funds, loan programs for SMEs, and entrepreneurial support programs. Moreover, the increase in the paid-up capital of the Saudi Credit & Savings Bank (to SAR 36 Billion) has been a strong catalyst for SME growth and entrepreneurial development initiatives, especially that this government bank provides interest free loans (MENA Private Equity Association, 2013).

There are two angel networks in KSA, namely: Oqal and SIRB. The first is a private network, established in 2009 by Al Rashid, an investor and businessman, to finance and support innovative start-ups. This happens through frequent gatherings that bring entrepreneurs, investors, and experts together to share knowledge and experience, as well as make new connections (Oqal, 2014). The SIRB network was officially established by KACST with the aim of building a knowledge-based economy. The SIRB network focuses on establishing and maintaining interaction and communication between very early stage entrepreneurs and investors. Besides, it works on providing entrepreneurs with consulting services to ensure success of their projects (SIRB, 2014).

Entrepreneurship & Innovation Ecosystem

Since 2009, the Saudi government has been working on raising entrepreneurial activity through establishing technology parks in its major cities, fostering its educational capabilities and infrastructure across all educational levels and stages, and empowering its technology incubators and research centers (MENA Private Equity Association, 2011). This started paying back in 2010, when KSA's TEA rate reached 9.45%, marking a significant leap from the previous year (4.7 %) and placing the country in the 24th position compared to the 59 countries participating in the GEM Report (GEM, 2010). However, the initiation of new ventures in KSA was still limited and despite the existence of successful start-ups, almost none of them benefited from the kingdom's support services (MENA Private Equity Association, 2011). In the same year, 2011, Silatech and Gallup's report showed that government regulations were the biggest obstacles for those planning to start a new business in KSA. It wasn't until 2013 that the rate of start-ups started accelerating significantly (Bharadwaj, 2012).

Entrepreneurs in KSA are mostly young males who are well educated and wealthier relative to their counterparts in the Saudi population (Ramady, 2012). Family businesses have grown over the years to dominate several Saudi markets, where foreign companies found it hard to enter due to regulatory obstacles. Family businesses continue to form the majority of the entrepreneurial initiatives (Al Mosallam, 2008). When it comes to the perception of entrepreneurship, 76% of the Saudi population could see good opportunities in starting their own businesses, of which 69% believe they have the required skills and knowledge to do so. However, this contradicts with the mere 1% of population (excluding current entrepreneurs) who expressed intentions of starting a business in a 3-year time span. This also contradicts with the 39% of Saudi population who, despite perceiving positive opportunities, confess that fear of failure would prevent them from starting their own businesses (GEM, 2010).

Major impediments to the growth of entrepreneurial activity in KSA include culture, access to finance, education, human capital and infrastructure. The Saudi culture looks highly upon entrepreneurs and views entrepreneurship as a favorable career, but does not foster the entrepreneurial traits required for success, such as risk taking, independence, innovativeness, and personal initiative (Ramady, 2012). The majority of Saudi SMEs are dissatisfied with financial services as loan procedures are highly complicated, meeting the requirements for personal guarantee is very hard, and the terms are very rigid (Looney, 2004). The Saudi government has accordingly taken several initiatives to solve the problem, including the Saudi Industrial Development Fund (SIDF) and the Saudi Credit Bank (SCB) as elaborated in Table (2). Low levels of higher education among Saudis are attributed to the preference of work and income generation to education (Al Mosallam, 2008). National education policy does not pay much attention to encouraging entrepreneurship and making sure students graduate with the required skills, characteristics and technical efficiency for starting a new business (Ramady, 2012). The establishment of science and technology focused institutions such as KAUST and KACST are a step to fill the gap (KACST, 2012). Despite these efforts, there remains a lack of qualified human capital capable of starting, managing and growing a new venture, and entrepreneurs depend on their own personal capabilities and social relationships in running their businesses (Looney, 2004; Al Mosallam, 2008, Ramady, 2012). The IT infrastructure in KSA is underdeveloped, and acquiring a high-standard technological network is highly expensive for an SME and almost unreachable (Looney, 2004).

Investment Laws & Regulations

To foster entrepreneurship, regulations for starting up and registering new companies and bankruptcy laws are key determinants of the entrepreneurial ecosystem, which forms the demand for VC. Over the past decade, the Saudi government has succeeded in simplifying the set up and registration process of new SMEs easier and less bureaucratic (Al Mosallam, 2008; World Bank Group, 2015). The kingdom came in second place among MENA countries in the 2010-2011 Global Competitiveness Report, and ranked 21st in Global Competitiveness worldwide. To reach this position, the country has taken serious actions to strengthen its institutional framework, increase its market efficiency, and enhance the country's infrastructure (Schwab, 2010). More work is needed to make government regulations more supportive for entrepreneurs, specifically with regards to prioritizing SMEs in public procurement, tax regimens for SMEs, and ease of licensing. The establishment of the Saudi Arabia General Investment Authority (SAGIA) in 2000 (Zuhur, 2011) and the National Competitiveness Center (NCC) in 2006 has contributed to enhancing the business environment in several ways including the enhancement of shareholder protection (NCC 2010; Dr. M. Al Amri & Co., 2011; SAGIA, 2014). Minimum start-up capital requirements were eliminated in 2008 and by 2012, a one-stop-shop for business start-up and registration greatly simplified and speeded up the start-up process (World Bank Group, 2015). The country also made significant progress in enhancing access to credit. Besides, the bankruptcy process was made faster and more efficient in 2010 where time limits were set for the process to motivate creditors to participate. Also, earlier access to friendly settlements was provided (Saudi Gazette, 2012).

KSA adopts a liberal trade policy; there are neither quantity nor price restrictions on imported goods and customs duties are kept low, or eliminated for imports originating in Arab Countries with which the kingdom has trade agreements (Dr. M. Al Amri & Co., 2011). With regards to intellectual property rights protection, KSA is still lagging behind (Ramady, 2012) and regulations in this regard are not strictly applied (Al Mosallam, 2008). Patent regulations, in specific, are well developed in KSA and cover all the aspects of issuing, registering, cancellation, and duration of a patents. The only party authorized to issue patents is King Abdul Aziz City for Science and Technology (KACST) (Dr. M. Al Amri & Co., 2011). The Kingdom generally encourages foreign direct investment and no restrictions are imposed on money flow into or out of the country (Dr. M. Al Amri & Co., 2011). It also provides foreign investors in most sectors, with the same incentives, support, and guarantees provided to KSA nationals (IC, 2012). Investors from GCC countries are the only foreigners entitled for land ownership, as well as trading and distribution in the Kingdom (ICDT).

Tax Incentives

Two types of taxes are imposed in KSA: Zakat and Taxes. Zakat is a form of religious tax defined by the Islamic law 'Sharia' and imposed on wealth that exceeds the family's essential financial needs. The Kingdom applies this form of tax on Saudi nationals, shares of Saudi shareholders in partially foreign-owned firms, and on fully Saudi-owned firms. Gulf Cooperation Council (GCC) nationals are also treated the exact same way as Saudi nationals (Dr. M. Al Amri & Co., 2011). On the other hand, regular income taxes are levied on a foreigners' business income at a rate of 20% whether the foreigner is a resident in KSA, a non-resident with a permanent established business in KSA, or a non-resident gaining income from a registered company in KSA (Deloitte, 2012). When it comes to dividends, these are subject to withholding taxes, where companies withhold 5% of the gross dividend amount and pay the rest to the foreign shareholders (Dr. M. Al Amri & Co., 2011). Capital gains tax is applicable only in case of the transfer or sales of a foreigner's shares (Gerard Associates Ltd, 2012).

Speaking of tax incentives, Saudi Nationals, GCC Nationals, as well as foreigners, are all exempt from income, sales, value-added, land, and property taxes (IC, 2012) that is because they already pay Zakat. However, for foreigners, the tax incentives are different. The kingdom's government offers a 10-year exemption from taxes for foreign companies with a minimum of 25% Saudi ownership operating in the industrial field, as well as a 5-year exemption for non-industrial joint stock companies (ICDT). Moreover, on investing in any of the six underdeveloped provinces in KSA (Northern Border, Al-Jouf, Hail, Abha, Jizan, Najran), investors are granted 10-year tax incentives in the form of employment tax allowances (Deloitte, 2012; IC, 2012).

Second-Tier Stock Market and Government Venture Capital Funding

The Saudi Stock Exchange 'Tadawul' is the main avenue for Saudi companies to go public and access large amounts of capital. The infrastructure of the market is well developed in terms of listing requirements, ongoing supervision, as well as settlement and custody arrangements. IPOs and capital raisings by local companies have been gaining pace, and this has positive implications for corporate governance and operational efficiency (Saudi Credit Bureau, 2014). However, KSA does not have a second-tier stock market for small and medium enterprises to go public through IPO.

Table 2: KSA Government Venture Capital Funding

Government Funded Incubators, Science Parks & Research Funding	
King Abdul Aziz City of Science and Technology (KACST) 1977 (Alabdula'aly, 2004)	Aim: To act as the KSA's national research hub and science agency - Sets national science and technology policies and is the Kingdom's patent office - Promotes technology transfer by creating links between industry and research institutes - Created "BADIR Technology Incubators" to support early stage technology-related start-ups in ICT, Biotechnology, and Advanced Manufacturing
Technology Transfer, Innovation & Entrepreneurship (TTIE) 2006 http://ttie.kfupm.edu.sa/site/	Aim: Established by King Fahd University of Petroleum & Minerals to develop R&D infrastructure - Incubates promising academic research for commercialization
Centennial Fund 2004 (Hertog, 2010)	Aim: Decrease unemployment through supporting SMEs (Hertog, 2010). - Offers entrepreneurs mentoring services (Hertog, 2010). - Grants loans with a ceiling of SAR 200,000 (Shalaby, 2004)
Riyadh Techno Valley (RTV) (riyadhstechnovalley.blogspot.com, 2013)	Aim: Achieving a knowledge-based economy in the kingdom (Riyadh Valley Co, 2014) - A science park established by King Saud University. - Commercializes outcomes of research & offers start up services
King Abdullah University of Science and Technology (KAUST) 2009 http://www.kaust.edu.sa	Aims: Diversify KSA economy through innovation and entrepreneurship - Hosts an incubator & research park - Seed fund for technology start ups up to USD 250000 upon due diligence, both cash and in-kind.
Dhahran Techno-Valley (DTV) 2001 http://www.dtvc.com.sa/	Aim: Establish a knowledge-based ecosystem to foster technical innovation & commercialization. - King Abdullah Bin Abdulaziz Science Park (KASP) - Innovation Center - Business Incubator
Public Venture Capital Funds	
Saudi Industrial Development Fund (SIDF) 1973 (Almosallam, 2008)	Aim: Supports the development and sustainable growth of the private industrial sector - Started with a capital of SR 500 million and reached SR 20 Billion by 2005 - Grants medium and long-term loans to industrial projects - Offers equity participation with-up-to- 50% of the total project financing (ICDT).
TAQNIYA http://www.taqnia.com/overview.htm 2011	Aim: Promotes knowledge and technology transfer to build an industrial innovation ecosystem - An investment corporation established by the Public Investment Fund (PIF) of KSA. - Builds partnerships with industry, academic, and VC leaders to bring the maximum value while making good returns. - Invests in technology-related projects at different stages - Will create several investment vehicles both locally and internationally.

This table shows the most prominent Saudi government initiatives in support of technological innovation and entrepreneurship along with details on targeted beneficiaries and services offered. Government venture capital and private equity funds are also shown.

Several technology parks have been established across different regions in the Kingdom to support entrepreneurs and ease the process of setting up a company. Besides, a great number of research facilities and incubators have also been established and are strongly supported by the government. Many funds were created to support start up projects including university funds set up to support graduates' projects. Most of these programs are government funded. Currently, there are only six private VC funds in KSA. These private VC funds are supported by major Saudi corporations and target Saudi national projects. The main reason behind the poor contribution of the private sector is high and guaranteed returns on investment coming from the Saudi stock market and the real estate sector (MENA Private Equity Association, 2011, 2013). Table (2) above aggregates the most significant funding programs initiated to encourage and support entrepreneurial activity in KSA. However, of all the public funds, only those by King Abdullah University of Science and Technology (KAUST) and King Saud University (KSU) are currently active (MENA Private Equity Association, 2013). Table (2) above also shows the venture capital funds established by the Saudi government.

Case (3): the Arab Republic of Egypt

Egypt is the most populated country in the Middle East and its economy is based on a variety of sectors due to its wealth of agricultural and natural resources (MENA Private Equity Association, 2013). In 2012, the country's GDP was USD 262.8 billion (The World Bank, 2014). The country is perceived as a distinguished center of education producing an average of 330,000 university graduates annually and creating a rich pool

of talented well-educated youth. Egypt's youthful population promises a potentially prosperous entrepreneurial environment (MENA Private Equity Association, 2011). The outbreak of the revolution in 2011 has been a remarkable turning point for Egypt on several fronts. However, since then, the country's economy has been very unstable causing deterioration in the business environment. Ironically, this was coupled with the rising hopes of youth and investors that resulted in countless efforts for promoting innovation, nurturing the entrepreneurial environment, and creating jobs (MENA Private Equity Association, 2013). Such efforts are demonstrated in the increased access to financing tools, the establishment of more incubators, the creation of angel networks, and the development of SMEs banking, among others. All these efforts have left the country with an even greater potential for VC investments (MENA Private Equity Association, 2013) and a more conducive business environment from the entrepreneurs' viewpoint (Hattab, 2012).

Despite these efforts, in the 2012 GEM report, Egypt was ranked last among the factor-driven economies with regard to its TEA rate, while it came 3rd amongst the MENA countries participating in the same cycle of the report (Hattab, 2012). Hence, Egypt still has a long journey to develop a vigorous entrepreneurial ecosystem and grow its VC funds (MENA Private Equity Association, 2013). The VC industry is relatively new in Egypt. In 2012 there were only 16 VC corporations in Egypt. While few of these companies actually carry on VC activities, only 9 out of the 16 are listed in the stock market and are basically securities companies listing "venture capital" as one of their activities to take advantage of the tax exemption privileges (Kenawy & Abd-el Ghany, 2012). Recently, Egypt has seen progress in the VC industry including the rise of more active VCs, incubators, an angel investment network, and the Egyptian Private Equity Association (EPEA). Egypt has also ranked higher in the "Global Venture Capital and Private Equity Country attractiveness Index Report" reaching the 57th position in 2013 (Groh, Lieschtenstein, & Lieser, 2013), up 10 positions from 2008 (MENA Private Equity Association, 2013). However, there has been a decline in the investment size and a focus on a very few target enterprises. So, there is still a lot of work ahead before the emergence of a viable VC industry in Egypt (Kenawy & Abd-el Ghany, 2012).

The literature identifies several stumbling blocks for the Egyptian VC industry, including lack of expertise, few promising early stage ventures, limiting entrepreneur and investor behavior and low levels of research and technological innovation. One of the big problems facing VCs in Egypt is the shortage of experienced investors with the required technology and industry expertise to professionally screen deals and pick promising enterprises. VCs find it challenging to get a steady deal flow with attractive ideas and well thought business plans, especially in the technology based areas (Kenawy & Abd-el Ghany, 2012, MENA Private Equity Association, 2013). In terms of behavior, entrepreneurs are usually reluctant to disclose their financial information to VCs and prefer to take loans rather than relinquish equity, which points to the need for raising awareness of entrepreneurs in this regard. As for investors, they prefer projects with low risk, quick profits and minimal involvement. The volatility of the political and economic situation and the subsequent stock market reactions do not provide support for smooth exit of VCs (Kenawy & Abd-el Ghany, 2012, MENA Private Equity Association, 2013).

Before 2012, angel investments in Egypt were pervasive; however, they took the form of personal investments largely relying on personal contacts (MENA Private Equity Association, 2011). In 2012, Cairo Angels was established to act as the first and only formal Egyptian entity connecting angel investors with entrepreneurs. Member investors collaborate in the due diligence process, but eventually, investment is an individual decision. Collective investments for an accepted project range from EGP 250,000 to EGP 1 Million, with a few exceptions that go above these amounts. The network is more than a source of funding as investors not only provide the financial support, but also offer some advisory services. To date, the network has invested a little over EGP 5 Million in eight new businesses, which are mostly technology-related, though the network welcomes projects in other various fields of business (Cairo Angels, 2013).

Entrepreneurship & Innovation Ecosystem

In 2009 and 2010, a number of promising start-ups were founded in Egypt, especially in the internet and mobile sectors. This was a natural consequence of the rising number of internet and mobile users in Egypt, as well as the enhanced technology infrastructure in terms of broad-band connectivity of both mobile and wired networks (MENA Private Equity Association, 2011). During the same period, Egypt also witnessed a significant trend of establishing cross-border start ups which have an operating base in Egypt beside a client-facing base in a well-established target market, mostly the U.S. (MENA Private Equity Association, 2011). After the 2011 revolution, Egyptians were highly concerned about the economic and security situations of the country, while most early stage entrepreneurs perceived the business environment as more conducive to starting and growing a business. Particularly, they felt more positive about the government's performance, conditions for creating start-ups, the developmental levels of the Egyptian cities, and even the economic situation. When it came to the factors directly affecting the entrepreneurial activity, satisfaction of the adult population, in general, was slightly higher after the revolution than before it. These factors included education, training, intellectual property rights, financing instruments, social image of entrepreneurs, as well as social and cultural norms. On the other hand, they felt more negative about the support of the infrastructure and market openness to the entrepreneurial activity, compared to the pre-revolution era (Hattab, 2012). The TEA rate was 7.8% of the population in 2012, of which 3.1% were in the process of starting a business, while 4.8 % were owners/managers of a start up. This TEA rate was the least among the factor-driven economies included in the 2012 GEM report (Hattab, 2012).

The majority of the adult population forming the 7.8% TEA rate was males, aging between 25 and 34 years, and earning an income between EGP 8001 and 10,000. They mostly lived in Egypt and had completed a post-secondary study. In 2012 around 85% of the Egyptian population perceived entrepreneurship as an appealing career. However, only 60% believed they possessed the required knowledge and skills to start their businesses, while a mere 42% had intentions of starting their businesses in the future. Fear of failure was a concern for 33% of the population. On a positive note, Egypt has the least business discontinuation rate among the factor-driven economies where it reached 5.28%, with around 40% quitting due to the unprofitability of their businesses (Hattab, 2012).

There are three major barriers holding Egyptian entrepreneurs back from starting or growing their businesses, namely, culture, education and training and access to finance. The Egyptian culture does not encourage creativity, innovation, or risk taking. It does not promote attitudes of self-sufficiency, personal initiative, and achieving success through independent personal efforts (Hattab, 2012). Moreover, the Egyptian public education system does not contribute to the development of an entrepreneurial mindset nor does it help students acquire skills such as innovative thinking, business development, or risk taking (Sherif, 2014). Several private universities, training houses and non-profit organizations in Egypt offer entrepreneurial education and training (Sherif, 2014). However, most of these initiatives are only accessible to a restricted segment of youth who are English literate and have received a good education (Sherif, 2014). Egypt ranked 68thin technology transfer activities among the 69 countries included in the 2012 GEM report (Hattab, 2012).Access to finance for start-ups is poor despite banking sector reform in 2004 and a number of efforts to make small loans accessible to youth. Nevertheless, access to credit from banks remained a privilege for the larger enterprises due to the risk-averse attitude of banks, as well as the high transaction costs associated with granting credit to start- ups (Hattab, 2012; El-Said, Al-Said, & Zaki, 2012). On the bright side, a number of private-sector financing options have become available, but mostly to those well-educated English literate entrepreneurs who are starting technology-related businesses. Such options include private equity and VC corporations such as Ideavelopers and Sawari Ventures, which not only provide access to finance, but rather provide support through incubators and accelerators where they host entrepreneurs with promising ideas (Sherif, 2014).

Investment Laws & Regulations

Investors used to establish their companies under one of the two laws regulating Egyptian business: Investment Law No. 8 of 1997 and Companies Law No. 159 for 1981.An amendment was passed in 2005 (Law No. 94 for 2005) to link the two laws and create a unified law, which simplified procedures for establishing a company. All companies are provided guarantee against nationalization or expropriation, repatriation of capital, dividends, and other profits as well as freedom in setting prices and margins (GAFI, 2005; GAFI 2014). The Investment Law also offers some attractive incentives to foreigner investors and companies operating in Egypt's Free Zones and those in Special Economic Zones (SEZ). The law established a One-Stop-Shop for investors in GAFI (General Authority for Investment), which housed representatives from all the entities responsible for business registration in one place and shortened the registration time to 3 days (GAFI, 2014).

In 2008, the minimum capital requirement for establishing a business was dropped from EGP 50,000 down to EGP 1000, to be completely abolished in 2010 (World Bank Group, 2015). Despite these efforts, entrepreneurs still had negative perceptions of the licensing and registration procedures. Ghanem (2013) attributes the ineffectiveness of the changes to two possible reasons. He explains that either such changes were not well communicated to entrepreneurs so they are not aware of them, or it could be that the changes were not effectively put to action due to some bureaucracy. On the other hand, establishing businesses in Egypt is a much easier process for the influential/well-connected citizens, though they still face barriers in trying to grow their businesses. Consequently, this leaves the socially less fortunate with minimal chances of accessing the market and escaping poverty (Sherif, 2014). Regarding the Intellectual Property Rights (IPR), a law has been passed in 2002 to align the Egyptian IPR regulations with the WTO Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement. Following the agreement obligations is believed to stimulate FDI and boost creativity through a better business environment (GAFI, 2014). However, it should be noted that law enforcement is weak in Egypt while piracy and corruption are very high.

Tax Incentives, Second-Tier Stock Market and Government Venture Capital

In 2005, the Egyptian Authorities passed the Income Tax Law No. 91 of 2005, which has cut personal and corporate income taxes by 50% bringing tax rates from 40% down to 20% for all except the oil and gas companies. In return, the law has phased-out many other tax exemptions stated in the Investment Law, while keeping the tax exemptions on dividends and capital gains from securities/bonds listed in the Egyptian stock market. The same applies to gains from investment funds that comply with the Egyptian stock exchange law and dividends from the Egyptian Central Bank securities (GAFI, 2009). Despite these incentives, taxes are still among the top challenges for doing business in Egypt. A significant percentage of small enterprises do not comply with tax regulations indicating a serious problem with the tax policies concerning small companies (Ghanem 2013). Hence, Egyptian authorities are called upon to seriously consider easing tax regulations and providing more incentives to encourage small businesses and VCs alike (MENA Private Equity Association, 2013).

In 2007, the Nile Stock Exchange (NILEX) was established as a second-tier stock market to provide an alternative source of capital for Egyptian SMEs besides bank loans (Daily News Egypt, 2009). NILEX offers a favorable regulatory framework SMEs' listing and trading that serves investors and SMEs alike with convenience, flexibility and security. It allows SMEs from all sectors and countries the opportunity to access long-term capital to grow their businesses and offers additional services such as company valuation, promotion to customers, suppliers, and stakeholders, in addition to supporting merger and acquisition processes. With regards to investors, NILEX protects their rights and provides them with a variety of fast growing companies to diversify their investment portfolio. On a more strategic scale, NILEX contributes to the economy by promoting job creation and entrepreneurship as a concept, attracting local and foreign

investments for fast growing SMEs, and offering an exit mechanism to VCs (NILEX, 2007). The total volume traded in NILEX for the past five years was 198,911,806 Egyptian pounds.

The Egyptian government has undoubtedly taken steps to improve SME access to finance, enhance entrepreneurs' skills, and provide incubators for promising ideas. Among the most active governmental bodies supporting these initiatives are the Ministry of Communication and Information Technology (MCIT), which established the Technology Incubation Program (TIP) and Technological Innovation and Entrepreneurship Center (TIEC) (MENA Private Equity Association, 2011). GAFI is also a prominent sponsor of entrepreneurship in the country, creating the first sovereign fund for SMEs "Bedaya" (MENA Private Equity Association, 2013) as shown in Table (3) below.

Table (3) aggregates the most prominent Egyptian government initiatives in support of entrepreneurs along with details on targeted beneficiaries and services offered. However, in a survey by Egypt's GEM study (2012) where experts were asked to assess the "extent and quality of government support programs", answers indicated dissatisfaction with government policies and programs. Government programs were deemed ineffective and unsupportive of the establishment and growth of start-ups (Hattab, 2012). Interviews with former executives of the Bedaya government fund point to troubles in raising the targeted investment funds, as well as poor and slow performance. The anonymous experts also informed the researchers that the general quality of the entrepreneurs making use of the Bedaya funds were of the traditional SME types, rather than the high growth entrepreneurial 'hits' that are typically sought after by VCs.

RESULTS AND DISCUSSION

The UAE, KSA and Egypt are the three largest Arab economies in terms of GDP and were chosen for the study because they are among the most active in the area of entrepreneurship, which attracts venture capitalists in search of investment opportunities. Other active countries in the field are Jordan and Morocco. Egypt is also the most populated Arab country, prominent as a hub for culture and education, with a majority of its 82 million population in poverty. The UAE is the most progressive among the Arab countries in terms of developing its business climate and attracting foreign entrepreneurs and investors. Moreover, it sets an example of a small oil rich country that has taken remarkable steps in diversifying its economic base and attracting an expatriate population five times the size of its indigenous population.

KSA is largest Arab economy and relatively highly populated country that is largely dependent on oil and needs to start diversifying its economy. The three country case studies are to a great extent exemplars of the status of the VC sector in other Arab countries and many developing countries outside the Arab region striving to ignite their economic engine with fuel from entrepreneurship and innovation. Comparing the public policies of the three countries that are relevant to the development of VC yields some interesting insights on the pre-emergence conditions of the three countries, the gaps that need to be tackled and the required policy support. The comparative analysis follows the elements of the VC public policy framework presented at the beginning of the paper and elaborated in each of the three country case studies. First, the entrepreneurial ecosystem is most developed in the UAE, followed by Egypt and then KSA. The business friendly climate in the UAE has gone a long way in making the country a destination for business people, while there are efforts underway in Egypt and Saudi to improve on that front. Culture continues to be a barrier toward entrepreneurial activity as the three countries share an inclination away from risk taking and individual initiative, and a marked fear and stigma attached with failure. Egypt is at a unique moment in its history as opposing forces play out in the political and economic arenas. The unstable political situation and the consequent volatility of the economy is an obstacle for Egypt's progress in attracting entrepreneurs and investors.

Table 3: Egyptian Government Venture Capital Funding

Government Funded Incubators, Science Parks, Research Funding	
The Technology Innovation and Entrepreneurship Center (TIEC) http://www.tiec.gov.eg/Pages/VariationRoot.aspx 2010	Aim: To become a prominent regional hub for innovation and entrepreneurship in the field of ICT and to drive the country towards an innovation-based economy. - Commercialize innovations, issue IP licenses, and generate revenues - Entrepreneurship Support through the Technology Entrepreneurship Accelerator (TEA) and the Startup Support program - Incubation: Start IT Business Plan competition and Start IT Virtual Incubation Program both allow startups to benefit from incubation services offered by TIEC including workspace & consultancy services - Innovation Support through its Egypt Innovate ICT Award and TIEC Capacity Building Program " Innov Egypt-Industry" - Technology Management: providing technology labs that fulfill the needs of developers in terms of training, certifications, and testing in the areas of mobile, electronics, and cloud computing.
Science & Technology Development Fund (STDF) http://www.stdf.org.eg 2007	Aim: Catalyzes the scientific field in Egypt through funding research - Technology Incubators Program: Seeks commercializing R&D outcomes by supporting fresh start-ups and guiding them towards the required know-how of building their businesses. - Centers of Scientific Excellence: Aims to build scientific centers that enhance the quality of research in Egypt and boost top-level research. - Development & Innovation: Provides innovation grants, supports building networks of research centers, and offers joint funds together with the Egyptian International Modernization Center (IMC).
Social Fund for Development (SFD) http://www.sfdegypt.org/web/sfd/aboutus 1991	Aim: Achieve socio-economic development through reducing unemployment, poverty, and raising living standards. Offers administrative services & provides loans through its 31 one-stop-shop offices Promotes entrepreneurship, facilitates networking, training, incubation, and technical support. Financing SMEs through direct loans, Shariah-compliant tools, links to banks
Public Venture Capital Funds	
Bedaya Centre for Entrepreneurship and SMEs Development 2010 https://www.linkedin.com/company/bedaya-center-for-entrepreneurship-and-sme-development	Aim: Foster economic development through supporting the development and growth of SMEs. With an initial total capital of around EGP 134 Million Bedaya works in three directions: - Bedaya SMEs Clinics Program - Funding through private equity or loan guarantees - Bedaya StartUp Academy
The Technology Development Fund (TDF) http://www.mcit.gov.eg/Media_Center/Press_Room/Press_Releases/1079 2004	Aim: Invests VC funds in Egyptian start-ups to support potential ICT projects. - Operates as a public-private partnership where the MCIT provides incubation services and facilities at Smart Village (the ICT premier zone in Egypt), EFG Hermes (one of the top private equity companies) is the private sector arm that manages the funds, and IDEAVELOPERS (the VC subsidiary of EFG Hermes) provides advisory services to the fund managers, as well as the incubated companies. - The first round fund was EGP 50 Million and was raised from several leading Egyptian organizations.

This table shows the most prominent Egyptian government initiatives in support of technological innovation and entrepreneurship along with details on targeted beneficiaries and services offered. Government venture capital and private equity funds are also shown.

At the same time, the social dynamic that has been unleashed since January 2011 shows that the massive numbers of young, educated and passionate Egyptians are gradually starting to take matters in their own hands as skepticism rises toward the various political regimes. Entrepreneurial initiatives are on the rise and the entrepreneurial spirit is taking hold, at least among a segment of well educated youth, who may hold promise and build momentum toward a tipping point for wider social and cultural reform, in which risk taking and individual initiative are applauded and fear of failure recedes. Entrepreneurship education and business training are areas where significant work needs to be done, especially in Egypt and KSA. Public universities in Egypt are fertile grounds for entrepreneurial education. Access to finance for SMEs also points to a gap that needs to be tackled and where further efforts are needed in the three countries. Furthermore, technological innovation and scientific research and development are quite weak in the three countries, and commercialization activity is scant.

Mobile and web applications are areas of high technology entrepreneurship that may bear lower hanging fruit for the Arab region. Second, we compare reforms in investment laws and regulations to encourage entrepreneurship and to provide the legal infrastructure for the operation of VC. The three countries have made significant progress with respect to the registration process for new companies, making it simple, quick and accessible for any person to set up a legal business, though the UAE is at the lead. The bankruptcy process is still problematic, lengthy and threatening to entrepreneurs and further reform is needed on that front in the three countries. Also important are laws and regulations to facilitate the mobilization of large institutional investors toward VC, the setting up of limited partnerships and investor ownership of convertible preferred stock, which are specific to VC operation and thus foster the supply of VC. On this front, there is a lot of regulatory reform needed, especially in Egypt where VCs still prefer to set up their offshore funds to bypass the complications of Egyptian regulation.

The third policy mechanism relates to fiscal policy and tax incentives. The UAE has the least tax levels and offers businesses many opportunities for tax exemptions. KSA comes next with no sales and value added taxes, 20% personal and corporate income taxes for foreigners and Islamic zakat rates for nationals. Egypt also sets its personal and corporate incomes taxes at 20%, which is a marked improvement. All three countries offer significant exemptions to companies operating in free zones. Moreover, Egypt offers exemptions on capital gains taxes for securities of companies traded on the Egyptian stock market. Egypt is the country with the most problems in tax collection and enforcement, as well the highest government budget deficit. Therefore, future policy reform may better target streamlining and simplification of taxation evaluation and payment processes rather then offering further tax exemptions to VCs.

Fourth, the second-tier stock market is an essential ingredient to strengthen the supply of VC as it represents the outlet for viable exit strategies, a necessary stage in the VC investment process. Egypt is the only country among the three that has established its second-tier market, NILEX, since 2007, which is a significant achievement. The trading volume and the number of listed companies are relatively low. Since the entrepreneurial ecosystems of many Arab countries are still nascent, positioning NILEX as the 'NASDAQ' of the Arab region may be a fruitful strategy for the near future. Policies to attract more companies from the region need to be explored and gaining critical mass in the already established market should take precedence, from a regional perspective, over creating other second-tier exchanges that will also suffer from weak activity. However, to achieve this, huge regulatory reforms are needed to remove obstacles in the face of local and foreign investors and entrepreneurs.

Finally, government provision of VC is the last supply side policy that is explored in the current study. The analysis shows that Dubai is the country with the largest government VC funds, followed by Saudi Arabia. Egypt has only one government fund, Bedaya, which is understandable given the financial shortages the government has experienced, especially in the years following the 2011 revolution and the ensuing political unrest and economic stagnation. The weak level of government VC funding is not seen as the primary deficiency; on the contrary it is adequate for the current level of development of the pre-conditions that are required for the emergence of an active VC sector. High amounts of government VC funds would be more destructive than helpful at this stage. Government funds would better be targeted at enhancing the demand side, to create a steady flow of investible start-ups and demonstrate profitable VC investment that would attract VC funds. Only then will it make sense for the governments to direct more public VC funds to the sector.

CONCLUSION

This study has examined the current state of public policies that the governments of the United Arab Emirates, the Kingdom of Saudi Arabia and the Arab Republic of Egypt have adopted to facilitate the mergence of a venture capital industry. The study has used a comparative case study methodology based on a conceptual framework on public policy for venture capital, drawn from the extensive literature on the

topic. In this concluding section, we highlight the main recommendations that arise from the analysis and the possibilities for future research. The analysis presented above points to the need for more demand side policy work to be accomplished for the supply side policies to have a greater impact. Without generating a flow of entrepreneurial start-ups to attract VC, supply side policies and infrastructure will remain limited. The focus of the governments in the coming years should be on igniting the entrepreneurial spirit and removing obstacles for newly established enterprises, with special focus on high growth potential enterprise. The highest priorities in this respect are in building skills and talent through training and education of entrepreneurs and investors, and improving their access to finance while augmenting the supply of risk capital for young companies with public funds. Although the current level of government VC funds is quite low in the three countries under study, this level of supply of government VC is adequate for the stage of development of the entrepreneurial ecosystems.

Higher supply of government VC funds would be harmful as the three countries are yet to develop an adequate flow of promising and investible start-ups. When the latter exist, they will attract foreign and regional VC funds, which can then be matched and augmented by government VC funds. Taking the evolutionary perspective, the pre-conditions for the emergence of the VC sector are still under development. Extensive regulatory reforms, especially in Egypt, are badly needed to remove current obstacles facing entrepreneurs and VCs. Future research on public policy for VC in the Arab region specifically, and in developing countries more generally, may usefully tackle each of the five policy mechanisms in detail. For each policy mechanism, country idiosyncrasies may be compared to successful patterns in countries with highly evolved VC industries, to point to areas for further reform and improvement. Furthermore, research on the performance of the early movers, the venture capital funds currently operating in the Arab countries will illuminate areas for policy research and action.

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EMPLOYEE PARTICIPATION IN THE HOSPITALITY SECTOR: A CASE STUDY OF TRINIDAD VERSUS TOBAGO

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ABSTRACT

The aim of this paper is to provide an understanding of employee participation in the hospitality industry of Trinidad and Tobago. It will also seek to compare/contrast levels of employee participation on both islands. This paper discusses the concept of employee participation and captures the impact of employee engagement in the hospitality sector. It examines the viability of engaging employees as it relates to decision making in Trinidad versus Tobago, and makes recommendations, which includes policy propositions for the future. Additionally, an examination of global participation strategies in the hospitality sector are presented to determine whether Trinidad or Tobago can espouse these and embrace sustainable employee engagement in the future of its hospitality sector. From this qualitative study utilizing a thematic analysis, it was determined, that employee participation was beneficial to employee morale, and played a key role in employee output. It also justified in some cases where employee participation can be used to create and stimulate creativity in organizations. The findings also revealed that there was a conceptual difference between employee participation in Trinidad versus Tobago, and the extent of employee participation in these two islands differ culturally. It also embraces the notion of sustainable employee participation as the way forward and proposes an employee engagement model for the way forward.

JEL: M1

KEYWORDS: Hospitality Sector, Employee Participation, Sustainability, Trinidad, Tobago, Levels of Employee Engagement, Global Participation Strategies, Employee Engagement Model

INTRODUCTION

Tourism which also encompasses *hospitality* is one of the fastest growing sectors in the world and it contributes to economic, socio-cultural and environmental benefits to many countries (WTTC 2014; WTO 2015; Cooper *et al* 2005; Swarbrooke and Horner 2001; and Ritchie and Crouch 2003). The hospitality industry provides employment opportunities for both skilled and non-skilled individuals in the areas of accommodation, food and beverage, transportation, attractions and events subsectors (WTTC 2009). It is an industry that contributes heavily to labour and jobs; providing opportunities where employees play a critical role in the delivery of service. Due to the importance of being able to deliver good service, employees at times have direct contact with customers. They can also be empowered to participate in decision making. This study will explore the concept of employee participation on both islands. Trinidad and Tobago is a twin island Republic in the southern Caribbean and the culture existing on the islands are totally different due to different colonial masters and histories. Trinidad is fast paced and caters to business tourism, while Tobago is much more laid-back and caters to the leisure market. The aim of this paper is to get exploratory data on employee participation levels on both islands.

According to the literature (Bratton and Gold 2007; Sagie and Koslowski (2007), employee participation differs from culture to culture, and country to country. This case study examines the organizational culture

existing within the same country, that is, the practices in Tobago versus that of Trinidad as it relates to employee participation.

Boxall and Purcell (2008: 142) quote participation as "*... a process that allows employees to exercise some influence over their work and the conditions under which they work*". This definition of participation suggests that employees have some degree of power in the workplace and can have weight; it demonstrates a situation where employees are not as they were seen a few decades ago—as slaves of the organisation. But today are valuable assets capable of contributing and taking organisations forward. The concept and evidence of employee participation has certainly grown over the years, especially since the 1980s across the industrialised world. Boxall and Purcell (2008), in the UK forms of communication between management and employees are widely used with 91 percent of workplaces having face to face meetings. Ten years ago this was not the case. Firms are realizing that the environment today is much more competitive and intensive, and the solution is to engage employees in participative roles if they are to gain a competitive advantage.

Bratton and Gold (2007: 442) assert that the employee voice has been growing over the years especially in Europe and North America. Bratton and Gold (2007) lists three reasons why employee participation is important: *It forms a contribution to decision making*. In other words, tacit knowledge can be harnessed and used by the organisation in decision making. *It articulates individuals' satisfaction or dissatisfaction in the workplace.* It can let the company know if the employees are happy or not. Many data collection methods would include surveys. In the United States for example, it is not uncommon to find companies having assembly meetings or with today's information technology and globalizing world; information or views of the employees can reach managers at the click of a button. *It is a demonstration of a collective organisation* (one hand cannot clap). When employees participate, it gives management added strength. It shows that everyone is working together for a common good.

The concept of employee participation is not static, and there are different reasons for participation in different countries. Sagie and Koslowski (2007) cites a few examples of countries and the reason for fostering employee participation. In North America, the main reason was for maximizing profits; in Western Europe, legal requirements tugged towards employee participation like the German law which requires that an equal number of employee and stockholder representatives be on the board.; In Traditional societies, it was due to imitation; and in Japan- the reason cited for participation was mutual identification of employees and management. Many companies around the world are using their employees and human resources to gain a competitive advantage. Some companies are using a top-down approach to management where employees are told what to do. While other companies empower their employees in decision making, and this in turn makes the employee feel a sense of self-worth and part of an organization. Both of these strategies work depending on the culture of the organization.

In the proceeding sections, this paper will examine the literature on the subject matter of employee participation; it outlines what methodology was used to gather exploratory data; followed by the results and discussion section which discusses the findings in light of the literature review and proposes recommendations for the future. The conclusion at the end of the document summarises the key findings in this paper.

LITERATURE REVIEW

This section examines the various views and studies in the area of employee participation, the hospitality sector of Trinidad and Tobago and strategies employed by successful organizations globally.

Concept of Employee Participation

Bratton and Gold (2007: 451) gives a distinction between the terms "*employee participation* and *employee involvement*".

> *"...employee participation involves workers exerting a countervailing and upward pressure on management control, which need not imply unity of purpose between managers and non-managers. Employee involvement is, in contrast, perceived to be a softer form of participation, implying a commonality of interest between employees and management, and stressing that involvement should be directed at the workforce as a whole rather than being restricted to trade union channels.*"

Sagie and Koslowski (2007: 3) claim that the term *employee participation* has diverse meanings. And can mean a number of things: it can mean that employees participate on the company board; hold shares or stocks of the firm; or participate from gain-sharing and other activities. One of the most common forms of participation in the literature is employee participation in decision making, and this paper will lean slightly in that direction. The boundaries between the terms (*employee participation* and *employee involvement*) are a bit fuzzy and hazy and many writers use the terms interchangeably. One of the main reasons companies exist is to make profit, and in order to become profitable, some organisations have looked at the external environment and developed strategies to move forward. Some strategies may entail new processes, and changing the way things were done. Edward E. Lawler III (1986: 3) states:

> "*Both company-wide programs of change and such specific programs as quality circles and attitude surveys share important common elements. These different programs all move one or more of the following further down in the organization: information, knowledge, rewards and power. This has the effect of allowing more people to participate in important decisions and activities, and because of this, these programs are often collectively referred to as participative approaches to management*"

Because power, knowledge, information and rewards are moving downwards towards lower levels, it changes the very nature of what work is and means to these employees at the lower levels as well as the higher levels of the organisation. And this can affect the jobs of everyone and can have a profound impact on the effectiveness of work in organisations. Tonnessen (2005) supports this point made by Lawler and says that organizations need to be innovative and by encouraging employee participation they can strengthen the workplace in terms of enhancing employee loyalty. On the theoretical side, employee participation can be looked at from two approaches, according to Joensson (2008); participation can be looked at as an instrument to enhance employee's attachment and loyalty to organizations, this is the *management approach*. The second approach is called the *humanistic approach*, and views participation as beneficial to human growth and satisfaction of social needs.

What are the Different Kinds of Participation?

Employees can participate in different ways and to different extents. Participation does not only refer to decision making. Although it may be the first thing which comes to mind; other forms of participation existed or were more prevalent like financial participation and feedback surveys but in recent times due to regulation and legislation—emphasis is on the right of employees to have a say and input in certain situations and also decision making power. Some forms of participation may bring more worker satisfaction than other forms depending on the employee and what appeals to them. Some forms of *Participation* identified by Sagie and Koslowski (2007) are:

Formal employee participation in work decisions, for example, voting. *Informal participation* in work decisions, where employees- although not part of the formal decision making process are able to influence the decision makers, and through them the final decisions. *Employee ownership*, in which the employees/workers influence is achieved by granting them shares of stock in the company. Morris et al (2006: 328) says that employee financial participation makes employees feel that they are part of the company and to create a feeling of involvement and interest in the company's future. *Consultation*, in which case employees have formal consultation roles through various mechanisms like quality circles in which bonuses are offered for improvements in labour productivity. *Representative participation* in decision making, where they are allowed to participate in the process of decision making through unions. Although Sagie and Koslowski (2007) in their book identified different kinds of participation utilized in the workplace by the organization and are listed above. Redman and Wilkinson (2009) classified participation into five broad segments.

The first classification is communication. This is a weak form of participation and implies a top-down approach where employees get information from management via emails, written memos, internal newsletters, company intranet and so forth. The disadvantage of this categorisation of participation is that it lacks objectivity, and a strong bias towards the ideologies and views of management exist. Sagie and Koslowski (2007) did not lay a category for communication.

The second classification is upward problem-solving. And this takes communication one step further by tapping into the ideas of employees for improvements as well as encourage a more cooperative industrial relations climate. Some examples include quality circles, focus groups, and employee suggestion schemes to name a few. The disadvantage is skewed toward management, since this classification is criticized as being 'unitarist' in nature. This is actually quite similar to the 'consultation' point identified by Sagie and Koslowski (2007).

The third classification is called task-based participation. And this category's focus is on the actual job rather than management's processes for participation. This category of participation is noted in the literature (Redman and Wilkinson 2009) as '*celebrated as a root to sustained organisational performance via employee commitment and motivation'*. Practices would include things like job enlargement and job enrichment. The disadvantage is that it often leads to work becoming more stressful and harder than job enrichment.

The forth category is team-working. This entails having self-managed teams within the organisation work towards achieving better organisational performance through people. Team-working is quite popular today in many organisations and forms part of the curriculum in many university courses. Working in teams prepares students for the world of work. The down side of team-working is that it puts pressure on members to conform to group norms.

The final category is representative participation. And the most appropriate example is via trade union representation. The literature says that this form of participation has been declining in recent years particularly in Europe. However, in a Caribbean context, it has intensified. Take for example, in Trinidad, trade unions are quite vocal and they ask employees to stay away from work or strike on certain days. Many immigration officers heeded that call in early 2014 when the main office was open on a half-day basis. There was also another instance where Caribbean airlines employees called in "sick" resulting in more than forty (40) flight cancellations (Trinidad and Tobago Newsday Newspaper 2014). Unions indeed still have strength and power in the employment relationship and can influence its members who they represent.
There are different degrees of employee participation as well. Bar-Haim Aviad (2002: 16) outlines three: *Pseudo-participation*. Mere feelings of workers that they participate in decision making, while in actuality no substantial changes are made in their roles or in the power structure of the workplace.

Partial-participation. A real state of workers' participation in decisions. However their participation is confined to minor issues in their immediate work situation or work group, and no structural changes are made to equalize workers' responsibilities and rewards versus managers.

Full-participation. A full entry of workers and their delegates to all levels of decision making at the workplace.

While pseudo-participation in the literature is quite scarce, it plays politics with the employees. Since it projects an image that they are doing something beneficial for the organisation and themselves, but in reality it does not take employee participation into consideration. Everything has been predetermined by those on top of the organisation. Examples of partial participation and full participation are more prevalent in the literature. The types of decisions that organizations need to make would also require different degrees of involvement. Boxall et al (2008: 149), "*…decisions on health and safety will often (and, in many countries, must by law) involve employee representatives in the evaluation of risks and their avoidance in current operations and in the purchase of new technology*." Therefore, the scale of employee involvement varies by the type of decision the organisation needs to make.

Joensson (2008: 596) "*…different forms of participation may imply varying degree of influence, termed* 'intensity of participation'*; participation may encompass the single employee, work groups or all the employees as a group, and participative decision may concern different issues*". This quotation drives the point that the intensity or amount of participation depend on the issue at hand. The difference between the types of participation and degrees of participation is, that the degree of participation gives an indication of the level of power which comes with participation, whereas the different kinds of participation talks about the different means by which employees are incorporated in the organisation and given a voice.

Trinidad and Tobago's Hospitality Sector

According to Invest TT (2015) both islands boast of natural attractions, historical sites, uniquely appealing food and warm hospitable people. The population of Trinidad and Tobago combined is approximately 1.3 million people. Trinidad is much larger and its main tourism product is geared towards the business tourism market because of its strong oil economy. It is very fast-paced and lively. Unlike Tobago, which is smaller and its main market is leisure tourism and eco-tourism. Because the markets are different for both islands, the hospitality establishments existing on both islands are tailored to their specific clients. Business type hotels like Hyatt, Marriott, Hilton and others will be found in Trinidad. While Tobago has the smaller leisure type properties with a few seaside resorts. The hotels in Trinidad for example are much larger in size than the ones in Tobago. Trinidad also offers a wider selection of dining and cultural diversity.

Historically, the colonial masters of both islands were different at one point in time, and this had an impact on the way things were done on both islands respectively (Nalis 2015). Tobago was more of a slavery island than Trinidad. Slavery was more intense and concentrated in Tobago, there were more slaves in a smaller geographic area and the top-down approach to management was used back then. Plantation owners would tell the slaves what to do and how to do it. In Trinidad, slavery was the same as Tobago, but it was dispersed over a larger area and the Spanish Government had a strategy in 1783 called the "*Cedula of Population*" which sought to encourage population growth by encouraging migration of French Planters to settle in Trinidad. This migration had cultural implications for the population of slaves in Trinidad. And many slaves in the 1820s understood plantation commands in different languages. There was also a mulatto race following the 1783 *Cedula* mushrooming. Mulattoes were the children of white plantation owners and black slave mothers (Spartacus Educational 2015). These mulattoes were in charge of some plantations in Trinidad and many of them were to an extent less harsh in terms of managing slaves on the plantation than the whites.

By the year 1838, slavery was totally abolished on both islands and while Tobago remained with a significantly black population. The population of Trinidad changed and there were small groups of French, Spanish, English, mulattoes, Amerindian and other groups; by the 1850s, there were Indian immigrants and small Chinese shopkeepers as well.

Today, no more plantation societies exist in Trinidad or Tobago. The economy has changed and while Tobago is focused on tourism. Trinidad's main products are oil, natural gas, manufacturing, and a strong business tourism sector. Statistically, the hospitality and tourism sector accounts for about 10.6% of the Gross Domestic Product (WTTC, 2014) and this figure is projected to rise given the government's current diversification developmental plan. This sector provides the best opportunities for inter-sector linkages to curb many problems such as revenue leakages via high spending on imports, and high food prices in society. In fact, tourism has been articulated as a strategy for diversification in the National Tourism Policy document of Trinidad and Tobago. A major success factor with Tourism—is the fact that it is a service industry—one that requires manual people skills. Employees and people are at the heart of success for the hospitality industry.

Organizations in Trinidad & Tobago have also proactively responded by adopting voluntary initiatives to manage their employees and ensure that they get the most out of them while meeting and surpassing targets and objectives. Specifically, multinational companies that have subsidiary operations in Trinidad, such as Marriott, Hilton and Hyatt are protecting their global customer image and value by ensuring that their Human Resource strategy initiatives are adopted by their subsidiaries to give them a competitive advantage. The employees in Trinidad are encouraged to use their initiative and be part of the decision making process. In Tobago, the strategy seems to be a top-down approach where the owners/managers like to have control and ensure a certain standard, so employees are not really given a lot of room in decision making.

Advantages and Disadvantages of Employee Participation in Organisations

Lawler III (1986) outlines some pros and cons associated with employee participation. Participative management offers some advantages:

1. It can create organisations where people at all levels think for themselves and manage their own work, (less direct supervision may be needed).
2. When people work and use both their hands and minds, they usually take more care about how they do their work, and this leads to higher quality products that are internationally competitive.
3. Being internationally competitive suggests that they are contributing and belong to a productive society in which work positively contributes to the quality of people's lives.
4. When people take pride in their work and they are more productive, this can assist firms in being competitive in international markets and be admired for their management skills. As in the case outlined by Lawler III (1986), where in the 1960s a book on the dominance and effectiveness of American management was a best-seller in Europe (*The American Challenge*, Servan- Schreiber, 1968), just as in the early 1980s a book about Japanese management was a best-seller in the United States (*Theory Z*, Ouchi, 1981).
5. By pushing information, power, knowledge and rewards down the organisation, this can affect the way people are treated down the organisation; with respect, democratic rights, dignity etc. And not treated like robots as suggested in scientific management practices. Scientific management was coined by Frederick Taylor in 1911 and his focus was that the work of lower level participants in organisations should be specialized, standardised and simplified. While this was appropriate at a point in time and ensured efficiency and productivity in organisations (it was a best practice) because it suited the environment then (both the company's and the external). But it did not encourage employees to use discretion, be flexible or foster any sort of motivation or be

empowered. It was top-down in nature and thinking, coordinating and controlling were left to top management.
6. Knowledge is very important and can prevent major mistakes from happening if it is allowed to move down to lower-level members.
7. By pushing and encouraging participation by lower level employees, it can lead to innovations when it comes to problem-solving, and can lead to the development of skills which the employees did not have before.

The literature points that scientific management worked for a period of time until the external and internal environments had different requirements. Take for example, legislations and regulations today act as a guide and framework for companies to operate and not put any undue pressure on workers or take advantage of them. Today, people are treated with respect and individual rights are enshrined in constitution. Although there may be laws and regulations, some companies continue to treat workers in an unfair manner and propagate slavery conditions. Many companies around the world continue to use a top-down approach because this works for them and gives them an advantage. But there are other companies who choose to empower their employees by allowing participation to flow downwards and upwards (organic structure organisations) and this works as an advantage for them. Change happens when there is a compelling reason to change. Laws force companies to change their ways and promote fairness, sometimes best practices can be adopted by companies and made to fit with their environmental conditions and that would work for them. Some negative impacts of employee participation in organisations are:

1. It is not guaranteed to work, some employees are happy just coming to work doing what they have to do and going home.
2. Employee participation places new demands on everyone in the organisation. Employees now have to do things which they were not doing before; this can be a "black-box" for organizations.
3. Non-participative work structures gave employees the opportunities the opportunity to think about off-the-job activities and have an exciting personal and social life (Lawler 1986).
4. Employee participation may not be the right thing to do in some organisations which have a culture of being top-down/bureaucratic. In North Korea for example the ideology of *Juche* permeates the citizens and they are accustomed with being told what to do. Almost every aspect of their lives is determined by the government and this determines almost all aspects of political, economic and social life in North Korea (Kim et al 2007). This has been working for generations in North Korea and to change this ideology and culture right away is not the best strategy, since the employees will be asked to do something which they never did before.
5. Developing new skills and responsibilities for lower level participants might mean increasing their salaries. When people are trained or have new abilities, they can accomplish more and are more of an asset; therefore they should be compensated accordingly.
6. Participation takes time and can slow down decision making because a number of people have to understand and accept the decision.
7. Lawler (1986) says that if training and new experiences are part of the program expectations for personal growth and are not realized, frustration and dissatisfaction may result.

Global Employee Participation Strategies

The concept and evidence of employee participation has certainly grown over the years, especially since the 1980s across the industrialised world. Boxall and Purcell (2008), in the UK forms of communication between management and employees are widely used with 91 percent of workplaces having face to face meetings. Ten years ago this was not the case. Firms are realizing that the environment today is much more competitive and intensive, and the solution is to engage employees in participative roles if they are to gain a competitive advantage.

General Electric (GE) **(**www.ge.com) General Electric has been one of the premiere companies reported by *Fortune Magazine* in March 2009. GE seeks to lead in the workplace and marketplace integrity by respecting the human rights of everyone touched by their business, and by enforcing legal and financial compliance.

These commitments are detailed in their integrity policy, *The Spirit & The Letter*, which every employee supports with a signed pledge. They are further enabled by their ombudsperson process, which encourages any employee to report integrity concerns without fear of reprisal. Because of strategies like these, and engaging employees to participate, General Electric has been on the top ten companies list worldwide. According to their website, "*GE regularly engages with employees to understand their opinions on their relationship with the company and to tap into their unique perspectives in their fields of work*". They are using the tacit knowledge of their employees to gain a competitive advantage.

*Wal-Mar*t (www.walmartstores.com), Wal-Mart stores have been one of the top companies in the USA, and have continued to grow and appeal to many shoppers even in times of recession. There is the annual Associate Opinion Survey which is done by the company and this give a good indication of how employees are feeling and it gives the company an avenue to implement some suggestions of the employee. Since the company set up an office of diversity in 2004, their associates- at all levels and from all backgrounds- have access to additional opportunities to be engaged within the company. "Mentor Me" programmes, inclusion training, and different resource groups within the company all contribute their ideas and learning. Their feedback and involvement help create a better environment in making Wal-Mart better. Each month, the company hosts town hall meetings for people to learn more about what's going on as well as ask questions and give feedback. After each meeting associates can give feedback and suggestions through the Wal-Mart intranet site. Wal-Mart has an open door policy; this means that any associate can share views, feedback, concerns or ideas with any manager or any executive at any time. Wal-Mart appreciates and values employee involvement and their organic structure is testament to that. There is a chain of command but information and communication flow freely upwards, downwards and across.

IBM (www.ibm.com) "*As companies struggle to keep costs down and streamline operations, they can find themselves losing ground in the equally important battle to hold the loyalty of customers and employees. Virtual workplaces—online "spaces" where people can find each other, communicate, collaborate and share documents—provide ways for organizations to gain ground on both fronts. By connecting employees and integrating them into the flow of on demand business, they allow businesses to save money, while benefiting from the responsiveness and intelligence that only human interaction can provide*." According to the IBM website, the company has built its foundation in sync with the quotation above and included employee participation as the strategy that is required to assist businesses to compete in a turbulent environment. Their strategy is maps itself on '*bringing employees together is what virtual workplaces are all about. Along with process integration and data integration, people integration is one of the pillars of on demand business. When employees can find each other, communicate and pass along experience, regardless of departmental, functional or geographic boundaries, organizations as a whole can realize huge gains in productivity and responsiveness. And when employees can gather into online communities centred around their areas of expertise (like SCM, CRM, and HR), they can focus on solving business problems, rather than chasing each other down through phone calls, e-mails and other isolated communication methods'*. (www.ibm.com)

Where the Hospitality sector is concerned, some employee participation strategies used are: Hyatt. According to Bemporad (2012), companies need to take inspiration from Hyatt: the hospitality company's corporate responsibility platform, Hyatt Thrive, leverages the power of peer-to-peer influence and social networking to connect and empower 300 Green Teams worldwide. Employees use a Facebook-like interface to post photos, questions, and even presentations about their local sustainability efforts. By providing employees with a virtual workplace, and providing them with information, it actually equips their

employees to fit into their strategy which is tied into company productivity and efficiency. To support employees' involvement online Hyatt teams with its employees to support organisations and causes in the community where the employees live and work. In other words they are rewarded for their involvement in the company's work culture. Mc Donald's Restaurants. Ayupp and Chung (2010) reports that McDonald's Restaurants, has suggestion schemes; autonomous work groups and they have also removed some levels of management to make decision making faster and to empower employees. Hilton and Marriott Hotels also follow similar strategies to McDonalds. Where they empower employees to make decisions and encourage their employees to feel valued and part of the organization.

DATA AND METHODOLOGY

Qualitative research offers empirical information (Neuman 2006, Willis 2007, and Punch 2005), deep insight and richness of detail (Neuman 2006; Minichiello and Kottler 2009; Willis 2007; Hesse-Biber and Leavy 2006; Anfara and Mertz 2006; Punch 2005; and Outhwaite and Turner 2007). A qualitative research methodology was primarily selected to gather exploratory data in the area of employee participation in the hospitality sector in Trinidad and Tobago. This was necessary to get rich detail and probe the topic. A thematic analysis was then used for collating similar themes that emerged in the interview process. The data collected from a structured questionnaire was administered to seven key industry professionals who are located in the areas of: Ministry of Tourism (MOT); THA Division of Transport and Tourism (Tobago); Bureau of Standards; Trinidad Hilton; Trinidad Hyatt; Magdalena Hotel in Tobago, and TTHTI (Trinidad and Tobago Hospitality and Tourism Institute). Interviews were done with seven stakeholders representing the key institutions identified, and interviews ranged from 30 minutes to seventy-one minutes. Snowball sampling was used. All stakeholders were keen to be part of the process and share their knowledge as it related to employee participation in their organization.During the course of the interviews several variables emerged that were linked to the employee participation concept. These variables include: employee experience; educational qualifications of the employee; and shifting organizational procedures due to globalization.

The formulation of the questionnaire entailed adapting relevant questions found in the literature (Redman and Wilkinson 2009; Bratton and Gold 2007; Boxall and Purcell 2008) with a view to addressing and exploring the area of employee participation. The questionnaire comprised of three sections with all open-ended questions. The first section asked questions pertaining to employee participation and its importance. The second section raised questions relating to the pros and cons of it. Finally, the third section solicited responses on issues pertaining to strategies and recommendations regarding the way forward for hospitality organizations in Trinidad and Tobago.

During the interview process, triangulation was employed to ensure data was reliable and valid. According to Neuman (2006), triangulation can take the form of simply rephrasing a question from the semi structured list and asking the interviewees the same question phrased in different way. Once the answers to the triangulated one, as well as the original question was the same, it means that the data can be considered accurate. The paper will also shed light on the various strategies employed by global organizations and discuss whether these could be applied to the industry in Trinidad or Tobago.

RESULTS AND DISCUSSIONS

Employee Participation

Trinidad and Tobago is one country but the organizational dynamics existing on both islands are quite different. All stakeholders that were interviewed mentioned that the organizational culture as it relates to employee participation were different. Five stakeholders specifically used the phrase "*top-down*" when talking about employee participation in Tobago. In a Trinidad context, employee participation was viewed

as very participative and "*engaging*" by all seven stakeholders. Does it mean that Trinidad will always be more successful and effective?

Sagie and Koslowski (2007) argue that in some organisations employee participation can make a difference to organisational effectiveness but that depends on the culture of the organisation which determines if employee participation is a feasible option. Different societies may attribute different meanings to participation, and the meanings in one country would be different to what it would mean in another country. The point here is that employee participation can create opposite effects in different countries. An organisation within a country that has a history of being told what to do and being conditioned cannot shed that culture easily as in the case of Tobago. Take for example if an organisation has to perform a highly repetitive simple task, participative management may not fit or be a "best fit" in that circumstance. Lawler III (1986) gives an example; "*...most banks have individuals who encode checks at the rate of over a thousand an hour. Again, effectiveness depends on non-thinking repetition*."

However participation as outlined earlier can assist in empowering employees as well (Ivancevich 2007). It gives employees a feeling of well being and a sense of achievement when they get things done. Ivancevich (2007: 125) gave a case study example of Southwest Airlines and how they were competing through its people:

> *"...the passenger on an Oklahoma City flight headed to an important business meeting with no necktie. Flight attendant Jennifer Smith manages to find him a tie before the flight has even landed. Southwest Airlines is an organisation that has built its business and corporate culture around the tenants of total quality management and customer service. Focus on the customer, employee involvement and empowerment and continuous improvement are the company's strategic focus."*

By fostering a culture of employee involvement and customer service, Southwest Airlines has developed some of the best employee-management relations in the industry. The company has never had a labour strike. So this is another benefit of employee participation in the literature- it can foster better relations with employees and management.

Four of the stakeholders that were interviewed said that they were rewarded by their company when they participate, and make the organisation more effective; as in the case of service industries like hospitality, when employees are more willing and able to use discretion. This discretion can create a favourable image and lead to return business especially if the employee gets it right, just like the case example of Southwest Airlines earlier. But at the same time, power without knowledge, information and rewards will lead to poor decisions. And maybe this is why in Tobago, decision making is not pushed down the channel.

Participation motivates employees and the literature backs this up by propagating the ideologies and theory of Maslow. Maslow points out that individuals have multiple needs, some of which can be satisfied by rewards like pay, recognition, promotion and other things. Motivation theory is important but individuals must see connections between their performance and rewards. Boon et al (2007: 940) agrees with this point and adds "*employee participation is linked to empowerment and team working, but also focuses on the self esteem an employee has and how they rank their own skill levels and success within an organisation. If all these are managed to produce positive results, this should yield positive job involvement for individuals*". But the counter side of that argument is identified by Lawler III (1986) " *...an organisation may clearly tie a number of very positive rewards to a particular level of performance and still find that the individuals are not motivated to perform at that level simply because they do not perceive that they can achieve the performance*." And as a result, you do not have employee participation to the fullest degree by members or to no degree in organisations.

Manolopous (2008: 15) did a study on employee motivation, and it was established that in the Greek public sector, extrinsic rewards such as salary and job security were more motivating than intrinsic rewards, like the opportunity to be creative and "make a difference". This shows that in some cultures and organisations, employees are motivated by different things. Employee participation has been affiliated with the notion that it has very important implications for the effectiveness of participative management approaches because these approaches change at least part of the formal structure in organisations. Participation and employee involvement as stated before can be good for organisations, and it can have instances where it would not work. Pseudo participation was seen as being ubiquitous in Tobago, and due to the hustle and bustle of Trinidad's busy climate- partial participation was seen as prevalent there. Five stakeholders also mentioned that participation depends on the issue at hand, the type of task, the type of employees, and the level of education.

Is Employee Participation in the Workplace the Way Forward?

All seven stakeholders pointed out that because of globalization, the working culture in Tobago will change. Globalization has been referred to as the collapse of time, space and boarders which make countries seem even closer, issues which affect one country have a ripple effect and can impact on other countries as well. Information technology has been one of the factors which bridged the gap between countries and fostered a 'global village'. Because of globalization, movement of people and goods is easier today than it was ten years ago; information flow is at the click of a button. And as a result, organisation's best practices are converging and being applied in different countries where it did not exist before. The stakeholder from the THA (Tobago House of Assembly) Division of Transport and Tourism stated that some organizations (four in particular) in Tobago are putting "*participation strategies*" on the front burner in their organizations hoping it would lead to higher levels of efficiency. This recent trend is due to the impact of globalization in Tobago. Sagie and Koslowski (2007) exclaim that the power of the American economy and its advantages in communication capabilities gives its view of participation an advantage over alternatives. Many companies from traditional societies imitate the American form of participation without ever internalizing it.

The Caribbean context is a good example of what Sagie and Koslowski (2007) were trying to say. In the Caribbean, many of the developing nations follow the practices of those from the developed world. So it is not uncommon to see islands like Barbados, Trinidad, Antigua and other countries following and mapping themselves along the lines of the developed countries like USA, Canada, and UK. What might also assist and act as a catalyst, is the fact that people in the Caribbean have strong ties to those in the developed countries. A cultural Diaspora exists, and if one were to ask a Trinidadian if he/she has a friend or relative in the USA for example…the answer would be 'yes'. The point here is that having ties to developed countries enhances the ability to acquire information about what's happening there and how that information can be used to gain a competitive advantage.

Law and regulation in some countries will influence how things are done there. And in recent times laws have certainly influenced and paid attention to the workplace (OSHA) and the employee voice. Some companies have to conform to new ways of operation, while others have been practicing it for a while. Eamets et al (2008: 223), "*Despite the lack of specific legislation on employee financial participation, research how that individual Estonian enterprises use various financial participation scheme-employee share and profit sharing*."

Joensson (2008) and Tonnenson (2005) have agreed that employee participation is important and signals inclusion and status in the organization for employees. Tonnenson (2005: 196) in particular asserts and gives the example that Scandinavian countries have a long tradition of promoting employee participation and workplace democracy. Research is being carried out in a ten-year research programme (on employee participation) called "Value Creation 2010" and aspires to contribute to improvement in that direction.

Bhatnagar (2007: 17) "*Employee engagement can contribute to employee retention since it involves giving your workforce a sense of participation, freedom and trust*." This can motivate employees by giving them a feeling of self worth, and they can stay longer at the company. Problems associated with employee turnover and costs to train new employees are ameliorated if employees are allowed to participate. Townsend et al (2008: 24) supports this point and goes further to explain that employees can in fact be the source of competitive advantage. "*The employees of virtually every organisation in the world refer to their place of work as "my company" when they are at home. Taking advantage of that natural feeling of ownership by extending trust and empowerment to all employees and giving them a means to be engaged in the continual improvement of everything the organisation does is in the best interest of the employer, the employees, and their customers*."

Morris et al (2006: 338), says that companies are trying to keep employees in their company for long periods of time, since they realize that employees hold the key to success of the organisation and the performance of the organisation to achieving its targets and goals. Management has used many types of incentives to keep employees from leaving and to ensure that employees are satisfied. "*The use of specific forms of incentive-based pay represents quite simply, managerial efforts to secure if not compliance, at least tacit consent, with the emphasis on the maximisation of shareholder value.*" This means that shareholders (including employees holding shares) will be encouraged to remain with the firm to maximize their shareholdings.

Employee participation has certainly grown over the years in some countries and is continuing to grow. Alison Ward (2008: 12) explains that employee participation has been growing, "*During the previous three years HR has facilitated an increase in pan-European employee engagement levels by an average of five percent each year*". The article goes on to explain that there is a direct correlation between employee engagement levels and business performance in Europe.

In other countries like North Korea, participation in the workplace does not fit into their culture and how they do things. Cultures change over time to adapt to the environment and while one cannot predict the future. Based on the research and literature, one would maintain the view that some organizations would not benefit from employee participation, and would support the counter side of the argument as well- where participation is a way forward and can bring many benefits if managed properly.

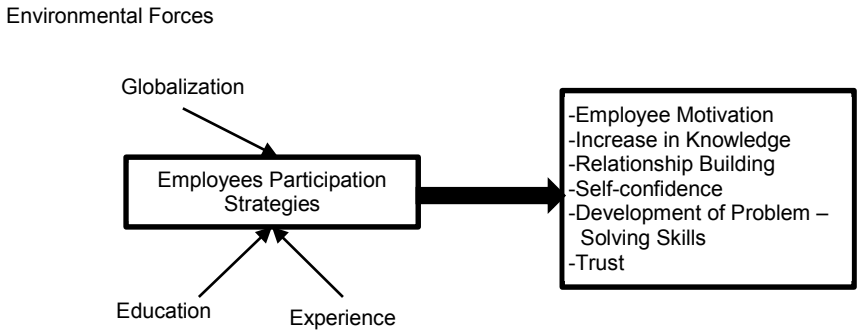
Future Strategy and Recommendations

All stakeholders agreed that the *employee participation* trend is one that is growing rapidly in Trinidad, and it is slowly making its way into the human resource practices in Tobago. Once it is seen as something beneficial and managers in Tobago start seeing the benefits of trickling power down to employees, it will certainly grow. One recommendation proposed was to have management workshops in Tobago that deals with the different aspects of employee participation, and showcase how it can be beneficial. Six stakeholders agreed that employee participation is linked to the following outcomes: employee motivation, increase in knowledge, relationship building, self-confidence, development of problem solving skills and trust. This is displayed in Figure 1.

All stakeholders felt that globalization, education and experience would have an impact on employee participation strategies used in hospitality entities. It was felt that with experience, and as employee experience grows with time- employees can be encouraged to participate more in decision making. Education and increased knowledge can also lead to more engagement by employees. Globalization and the increase in multinational companies such as Hyatt, Hilton and other brands and their best-practices can certainly be used as a model to have employees participate in decision making.

It was unanimously agreed that employee participation is certainly an area that can lead to competitive advantage if it is fostered in the right environment. Some strategies for Trinidad entail following the strategies of the global hospitality brands like Hyatt, McDonalds and Hilton. Where they make use of: online social networking to engage staff; suggestion schemes; autonomous work groups and they have also the removal of some levels of management to make decision making faster and to empower employees.

Figure 1-Benefits of Employee Participation Based on Stakeholder Views



This figure displays the projected benefits of employee participation in hospitality establishments according to the stakeholders.

CONCLUSION

This paper gave an insight into the area of employee participation, which has been one of the trends in human resource management, and the different practices associated with employee participation (Redman and Wilkinson 2009) have been shaped by environmental forces in different countries, such as; different political, economic and legal climates. It has surely grown over the years and cases substantiate how useful it can be. Some of the largest companies have employee involvement programs which give weight to employees. Trinidad and Tobago were focused on as two separate islands with each having a unique history and culture. Both islands differed in their general approach towards employee participation, and Tobago was not as liberal as Trinidad when it came to engaging employees.

Employee participation can take different forms and be rewarding for employees. Some cultures do not propagate the ideology that employees need to participate. In fact there are a few disadvantages for participation in the work place which were discussed. While the future is uncertain, more and more organizations are involving employees in the organization and encouraging participation. It may be encouraged for different reasons, but the fact is- that it has been growing.

Boxall and Purcell (2008), Sagie and Koslowski (2007) point to the fact that while employee participation continues to grow in the western world and how it operatesin Trinidad-it does not mean that it should be cast in stone as the best way for all organisations. It depends on the culture and type of job. While in some places, laws are influential in employee participation, for example; "*The European Court of Justice, in a series of rulings, has established that all workers have the right to be consulted and trade union exclusivity can no longer be sustained*." (Boxall and Purcell 2008: 146).

There cannot be any conclusive answers as to if employee participation is the universally best practice for organisations today, just as there can be no finite universally accepted code of ethics. But what can be predicted is that the traditional societies are following the modus operandi of the developed countries with the most power. The United States of America, and European countries have been some of the benchmarked countries which smaller less developed countries take aim at. And if this trend continues

then employee participation in many countries around the globe will continue to spread and become adopted even in cultures where it did not exist before.

This exploratory research work has some limitations. For example, the sample size examined is small and one should be very careful when generalizing. Another limitation is that this study did not examine the other variables of employee engagement or participation. Cost and time were also constraints when this study was undertaken. Additionally, the results and findings were somewhat restricted given that the literature search found little empirical work on employee participation in Trinidad and Tobago.

This study leaves room for future research to be done in the area of employee participation in Trinidad and Tobago, for example quantitative studies can now be done to gauge the scope of change in Tobago. Other studies can also be done to gauge other variables and how they mediate or moderate the concept of employee participation on both islands.

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MAPPING TECHNOLOGICAL INNOVATION: METHODOLOGY AND IMPLEMENTATION

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ABSTRACT

Technological innovation is the underlying driving force of economic development, both in a nation's economy and in an organization's competiveness. The first objective of this paper is to map the innovation space available in the Saudi Arabian Basic Industries Corporation, one of the largest petrochemical companies in the Middle East. The second is to suggest modifications to an innovation mapping tool and apply the modified tool to the same company. First, data were collected over a three-year period. They were analyzed and mapped using the 4Ps innovation mapping model. Second, modifications were suggested to eliminate the weaknesses associated with this model. The results showed that the company introduced a total of forty four innovations that were all incremental; the majority fell in the product and process. The implementation process of the 4Ps model showed that it has deficiencies in some cases, due to not having clear dividing lines between pure and combined innovations. It does not allow for mapping innovations that combine product-with-process or position-with-paradigm innovations; furthermore, radical and incremental innovations cannot always be clearly positioned. A modified model was developed that overcomes these weaknesses. A modified model was developed and successfully implemented to map the innovation space in the same company.

JEL: O32

KEYWORDS: Innovation Management, Innovation Assessment, Innovation Measurement, Mapping Innovation, Modeling Innovation.

INTRODUCTION

Over the past few years, technological innovation management has become one of the most attractive and promising areas of studies. Nieto (2004) confirmed this fact as the number of academics who oriented their research towards this field of study has increased, the number of new scientific journals concentrating on the study of innovation has also increased and every year there is consolidation of different academic associations concentrating on innovation. Governments need to pay attention to innovation, particularly in the developing world, because it is the key driver of economic development and is the key instrument in overcoming major global challenges. In spite of the relatively high expenditure on education in some Arab countries such as Saudi Arabia, whose expenditure on education as a percentage of GDP was 5.6% in 2008 (UIS, 2009), the literature shows that Saudi Arabia lags far behind developed countries in terms of science and technology (S&T): most S&T indicators reveal weak performance (Nour, 2005). Moreover, a UNESCO report (2010) noted that there is weak co-ordination between public and private funding for R&D in the Arab states and there is often insufficient capacity within the R&D system to absorb fresh graduates seeking to work in the research fields, especially female graduates. Funding for research and development in the Arab countries remains far below that of most other regions (UNESCO, 2010). Table 1 demonstrates the expenditure on R&D as a percentage of their GDP in some Arab states and other countries from 2007 to 2009 (The World Bank, 2012). It shows that in 2009 expenditure on R&D

as a percentage of GDP in Saudi Arabia and Egypt was 0.08 and 0.21 respectively, while in Israel and Finland it was 4.27 and 3.96 respectively.

The first objective of this paper is to map innovation space in one of the largest petrochemical companies in Saudi Arabia in order to determine the dominant types of technological innovation produced by the company and to make recommendations for improving innovation. The second objective is to modify and improve a current model for mapping innovation. The paper consists of five parts. The first part examines the literature on the topic of innovation and innovation mapping. The second discusses the case company's background. The third part describes the data and used methodology while the forth part explains the results. And finally, the last part presents the conclusions from the case study *analyses*. This is followed by the references and authors' biography.

Table 1: R&D Expenditure as Percentage of GDP in Selected Countries (The World Bank, 2012)

Country	2007	2008	2009
Egypt, Arab Rep.	0.26	0.27	0.21
Finland	3.47	3.72	3.96
France	2.08	2.12	2.23
Israel	4.80	4.66	4.27
Saudi Arabia	0.05	0.05	0.08
Sweden	3.40	3.70	3.62

This table shows R&D expenditure as percentage of GDP in some selected countries

LITERATURE REVIEW

Innovation: The perceptions of technology and innovation have changed over time. Flichy (2007) summarizes the development of the perception of technology and innovation. Economists were interested in technological progress and its impact on employment. Adam Smith, David Recardo and Karl Marx had different theories about technology and its impact on economics. Lionel Roberts and Frederick von Hayek, on the other hand, excluded technology from the scope of economics. Schumpeter, the "godfather" of innovation, was the first to distinct between invention and innovation. Schumpeter, was one of the first economists to define innovation, he stated that innovation is "the launching of a new product or of new form of organization, the accomplishment of a merger or the opening of new markets" (Schumpeter, 1939, cited in Flichy, 2007). In our modern world, the term "innovation" has gained momentum, and everybody is being told that their businesses need to embrace innovation otherwise; they will not be able to grow and remain viable.

Innovation Classifications: Innovation is classified according to its degree of novelty, continuity, form and many other characteristics. There are different degrees of novelty associated with innovation. Previous studies (Dosi, 1982; Dewar & Dutton, 1986) divided innovation into two categories, radical and incremental. Radical innovation is extremely risky and uncertain, which is why it is harder to explore; it is, however, seen as a source of long term growth. Incremental innovation on the other hand is easier as it is a continual process of making additional improvements. Dosi (1982) and Tushman & Anderson (1986) distinguished between innovations according to whether they affect existing ways of doing things (continuous) or develop new products, services or processes, individually or in combination (discontinuous). Continuous innovations happen in stable routines under clear rules, whereas discontinuous innovations are competence-destroying and very ambiguous. Innovation is also classified according to its form (OECD & Eurostat, 2005; Tidd & Bessant, 2009). Both publications classified innovation into four primary forms. They both named two of the forms as 'product' and 'process' innovations; the other two forms differ, the former categorized them as organizational and marketing, and the latter as position and paradigm.

Mapping Innovation: Mapping is defined as "a graphic pictorial tool to arrange key concepts" (Bradshaw & Lowenstein, 2007). Bailey and Martin (2009) state that visual models help visualize how something functions within the real world by providing some graphic or visual outputs. The literature has several tools with different objectives that are used to map innovation. Some of these tools are used to check the state of innovation across the world such as (McKinsey, 2008; O'RouRke, 2007); some are used to analyze innovation performance, such as the one proposed by Cutter (2012), while others are used to determine the dominant types of innovations presented by organizations, like the tool proposed by Sniukas (2010) and Tidd & Bessant (2009).

Francis & Bessant (2005) introduced an approach to identify innovation types. They suggested a diamond shape model to map innovation space which classifies innovation into four types that all start with a "P" and called them the 4Ps of innovation, these are: Product, Process, Position and Paradigm. Francis and Bessant (2005) tested the framework in five different companies in the pharmaceutical industry and found that it was useful. As the diamond shape model only allowed mapping innovation activities under a steady state of "do what we do, but better", Tidd, Bessant & Pavitt (2005) changed its shape into a circular model to show the degree of novelty of an innovation in addition to the 4Ps classification. The mixture of the degree of novelty with the 4Ps of innovation resulted in a map of innovation space. The area indicated by the circle in Figure 1 is the potential innovation space within which an organization can explore. The model helps organizations identify where they currently have innovations and where they might move in the future. It also helps explore different types of innovation instead of focusing on only one or two types. Another useful way to apply this concept is by comparing maps for different organizations competing in the same market, to determine where they might find innovation opportunities by looking at unexplored spaces. The framework has since been mentioned in several books and studies.

Figure 1: 4Ps Mapping Innovation Model (Tidd & Bessant, 2009)

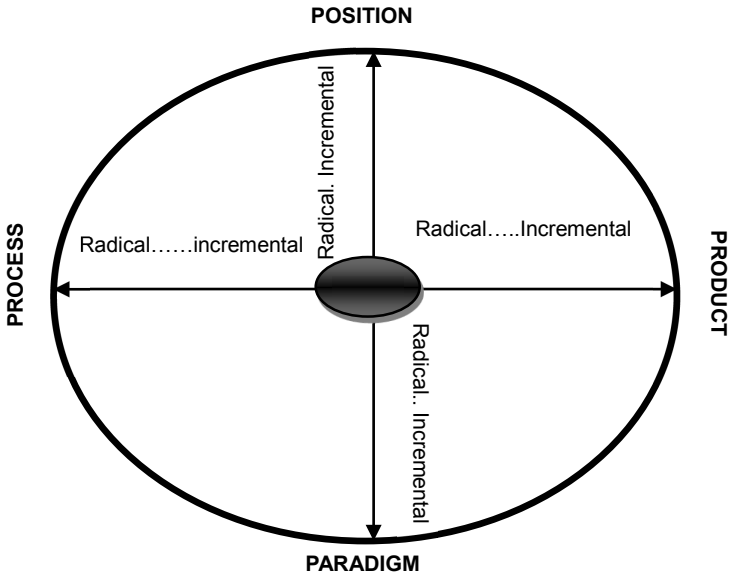


Figure 1 shows the traditional illustration of the potential innovation space within which an organization can explore.

MAPPING INNOVATION IN THE SAUDI ARABIAN BASIC INDUSTRIES CORPORATION

Petrochemical Industry in Saudi Arabia: Petrochemicals are making their impact worldwide as they are an essential part of our everyday lives. There is a wide range of petrochemicals products, such as cables, book

covers, rubber, plastic and a multitude of everyday items. Two decades ago, Saudi Arabia appeared an unlikely location for a major industrialization drive (Ramady, 2010). Today the Saudi economy is controlled by two key sectors, oil and petrochemical (AlRajhi Capital, 2010). A report published by the Oxford Business Group (2007) stated that Saudi Arabia is one of the largest petrochemical-producing countries in the world, and that in recent years it has managed an output almost equal to China's. Another report stated that Saudi Arabia is supplying over one hundred countries and accounting for about seven percent of the worldwide supply of basic petrochemical products (SAMBA Financial Group, 2009). An AlRajhi Capital report (2010) declared that, nowadays, the petrochemical industry is a crucial driver in the Saudi market as it accounts for 5% of Saudi GDP and 34% of the value of the stock market.

Saudi Arabian Basic Industries Corporation (SABIC): SABIC is a public company based in Riyadh and was established in September 1976 to produce commodities such as chemicals, polymers and fertilizers for export, in order to create new industries to help Saudi Arabia to diversify and develop. The Saudi Arabian government owns 70% of its shares, and the remaining 30% are held by private investors in Saudi Arabia and other countries of the Gulf Cooperation Council (SABIC, 2011). The company's main manufacturing facilities in Saudi Arabia are located in two industrial cities: Al Jubail on the east coast and Yanbu on the Red Sea coast. According to a report by Oxford Business Group (2007), SABIC is often called the second pillar of the Saudi Arabian economy, after Saudi Aramco. It is now a regular on the Fortune Global 500, Fortune Magazine's list of the 500 largest world corporations by revenue, and ranked 210th in 2011, with revenue equal to around $41 billion (Cable News Network, 2011). A report by SAMBA Financial Group (2009) indicated that SABIC is the largest listed company in the Middle East. Another report stated that SABIC alone represents 21.6% of the market capitalization of the Saudi stock market and 64% of the market value of the petrochemicals sector (AlRajhi Capital, 2010). Today, the company operates in more than 40 countries with more than 33,000 employees across the world. It has ownership rights or licenses to about 3,760 active patents, and 3,394 pending patent applications around the world. In one year it has submitted more than 18 papers for publications or to be presented in conferences (SABIC, 2009). SABIC has received many awards for its innovativeness. One of these was from the European Polycarbonate Sheet Extruders (EPSE), which honored SABIC Innovative Plastics with its 2009 Best Project and Innovation Award for the contribution of SABIC's technology to Dublin's Aviva Stadium.

DATA AND METHODOLOGY

The company consists of six Strategic Business Units (SBUs) organized by products: Chemicals, Performance Chemicals, Polymers, Innovative Plastics, Fertilizer and Metal. The data needed for the mapping model for each of the SBUs for three years, from 2008 to 2010, were gathered from the company's website and from primary sources such as the company's reports and accounts (SABIC, 2008, 2009, 2010 and 2012). The data were then analyzed and categorized into the four forms of innovation for the company and for each SBU. This was done for each of the three years from 2008 to 2010 (AlSanad, 2012).

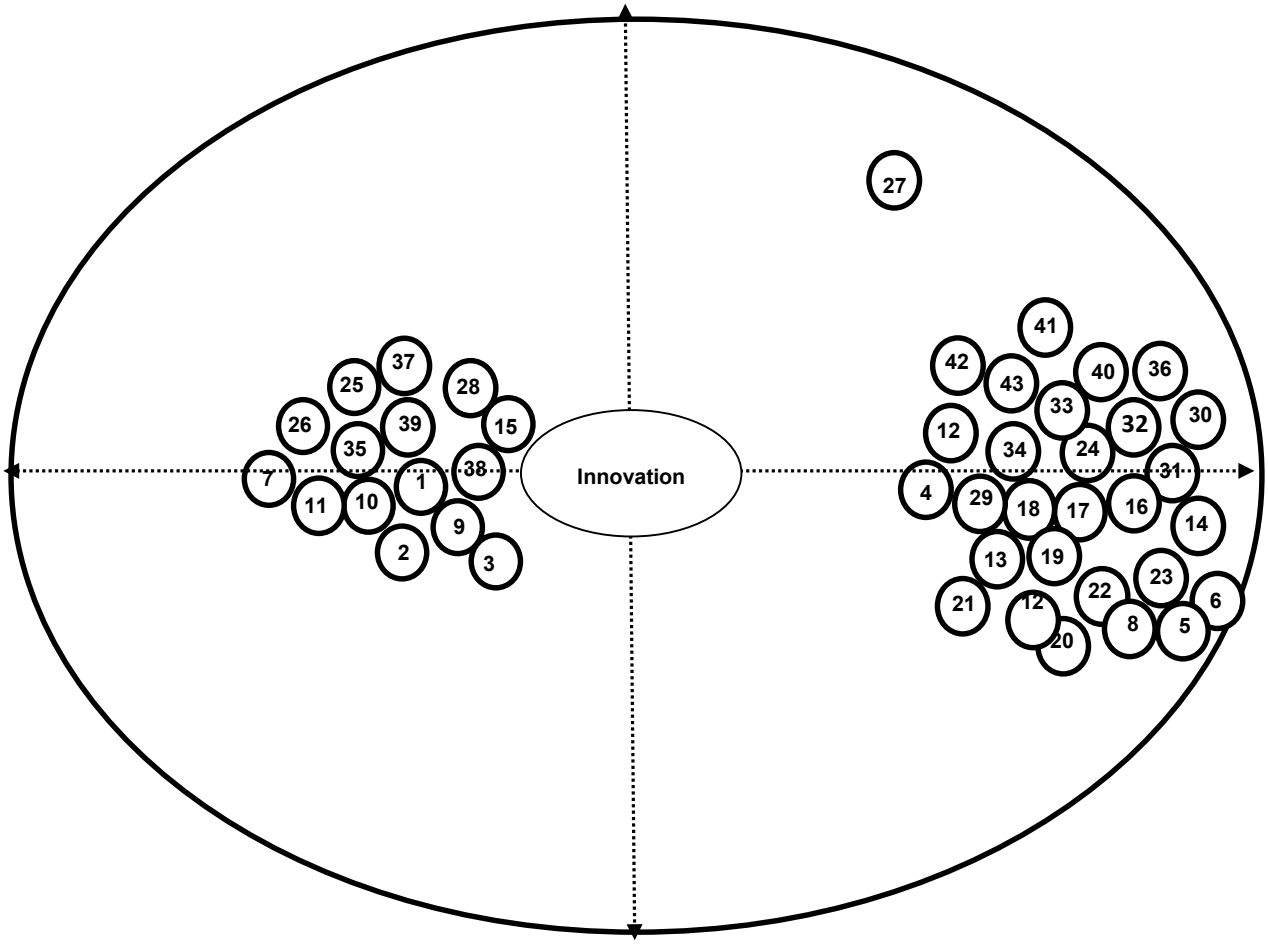
MAPPING RESULTS

Mapping Overall Company Innovation

The innovations by all the six SBUs, from 2008 until 2010 are mapped in the 4Ps model in Figure 2. The total number of innovations is forty four. The model shows that the company's focal area was in products, with twenty nine out of forty four innovations. Point number (27) is both a product and a position innovation, which is why it was positioned in the area between them. Likewise, point 7 is both a process and a product innovation, but it was positioned in the process area because the model does not have an area that combines these two types. It is clear from Figure 2 that all the innovations made by the company are incremental, which indicates that the company lacks the necessary capabilities to undertake radical and revolutionary innovations that are risky, yet can change the rules of the game and are a source for long term

growth. The trend of the company's innovations was also investigated. The results showed that the number of innovations increased by 100% from 2008 to 2009, and by only 25% from 2009 to 2010. The breakdown of all innovations was analyzed. The results indicated that the strength of the company lies in product and process innovations, as 64% of its innovations are in the product area, 32% in the process area, 2% fall in the area between product and process, and the remaining 2% are a combination of product and position innovations. There are, however, weaknesses in the position and paradigm innovation, as none of the innovations fell into these areas.

Figure 2: Mapping SABIC Innovation (2008 to 2010)



This figure shows the mapping of the innovations by all the six SBUs, from 2008 until 2010 in the original 4Ps model.

Mapping Innovations of the Company's SBUs

The innovations by each of the company's six SBUs were analyzed and mapped. The results showed that most of the innovations were produced by the two units which specialize in plastics, Polymers and Innovative Plastic. These two SBUs each produced around 36% of the company's total innovations. Product innovations dominated, followed by process. The Chemicals Unit ranked third in producing innovations, with a total of five during the three years; 80% of its innovations fell in the process area, and 20% fell in the area between product and position. The Metals Unit came slightly behind the Chemicals Unit, producing only three innovations that all fell in the product area. The Performance Chemicals and Fertilizers Units produced the least number of innovations, with only four in the three years. The

innovations of the Performance Chemicals were in the process area, whereas the Fertilizers produced one in product and the other in process innovation. The innovation trend was assessed for each SBU in each of the three years from 2008 to 2010. The results showed a steady increase in the performance of both the Chemicals and Polymers Units. The Innovative Plastic Unit ranked best among the six units in the first two years in terms of the number of innovations produced. However, the number of its innovations decreased in the following year. The Metals Unit performance was stable during the three years, as it presented one innovation each year. The SBUs with the weakest performance were the Performance Chemicals and Fertilizers, as they only produced two innovations each during the three years. The Performance Chemicals contributed to the company's innovation portfolio with one innovation in 2009 and another in 2010, while the Fertilizers presented two in 2008 and none in 2009 and 2010.

SUGGESTED MODEL FOR MAPPING INNOVATION

The original 4Ps model has some weaknesses that were revealed in the process of the mapping explained above. For example, with reference to Figure 1, the innovation presented as point number 7 is both a process and a product innovation, but it was positioned in the process area because there is no location for these types of innovation and the model does not have an area that combines these two types. Likewise, point 27 is both a product and a position innovation, so it was placed between them since there is no defined location for these types of innovation on the model. The modified model is used to map the innovation of SABIC using the same data collected during the three years 2008-2010. A square-shaped model was designed using Excel. It is divided into ten areas and called 10Ps. It has four pure types of innovation: Product, Process, Position and Paradigm. In addition, six clearly defined areas were created, each representing a combination of two types of innovation: Product-Process, Product-Position, Product-Paradigm, Process-Position, Process-Paradigm and Position-Paradigm. Figure 3 illustrates the 10Ps areas of innovation.

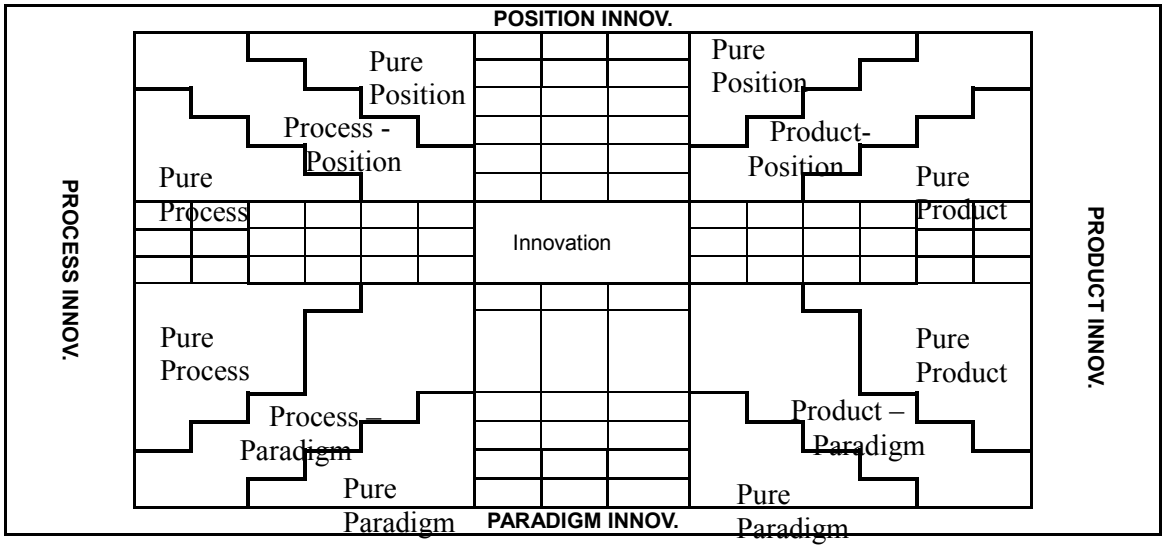
The 10Ps modified model overcomes the shortcomings of the original one by having the following three features. First, it is easy to apply, as it is used through a simple computer program that asks users to enter the innovation, its number and type into a table and then automatically places them in their matching spaces on the model. Second, the 10Ps model allows mapping a combination of Product-Process innovations and Position-Paradigm innovations. The 4Ps does not enable the user to map Product-Process or Position-Paradigm innovations. The 4Ps model does not have an area that combines these two types while the 10Ps model does. Third, in the modified 10Ps model, it is easy to distinguish the degree of novelty of an innovation by looking at its background color instead of looking at the axis. If the color is black it is radical, otherwise it is incremental. Note that the confusion regarding the degree of novelty that might arise in some cases when using the 4Ps model is overcome.

CONCLUSIONS

An innovation mapping model, known as the 4Ps, was used to map innovation in one of the largest Saudi petrochemical companies (SABIC). The implementation process of the 4Ps model showed that it has deficiencies in some cases, due to not having clear dividing lines between pure and combined innovations. It is weakened by the fact that it does not allow for mapping innovations that are combined product-with-process or position-with-paradigm innovations; furthermore, radical and incremental innovations cannot always be clearly positioned. A modified model was developed that overcomes these weaknesses and makes the implementation easier with the help of a computer program. The modified model was tested and used to map the innovation space in the same company. It succeeded in eliminating the confusion caused by the deficiencies of the original model. It is concluded that the modified mapping tool is valid, successful and useful.

The results showed that the company produced a total of forty four innovations, mainly in the areas of product and process, with 60% and 35% of total innovations respectively. However, the company has neglected position and paradigm innovations. Furthermore, all innovations fall in the incremental area with none in the radical. A major increase in the number innovations occurred in 2009, as total innovations increased by 100% of what they were in 2008. However, the number decreased by 25% in 2010 compared to 2009. Mapping of innovations was also done for each of the Company's six SBU's. The results revealed that the most innovative SBUs were the Polymers and Innovative Plastic. Together they contributed over 70% of total innovations. The Chemicals and Metals units participated with 11% and 6.82% of total innovations respectively. The Performance Chemicals and Fertilizers units produced together less than 10% of the total innovations. Product innovations were dominant as they accounted for 63%, 82% and 100% of the Polymers, Innovative Plastic and Metals SBUs' innovations respectively. The Chemicals and Performance Chemicals SBUs focused on process innovation, which accounted for 80% and 100% of their total innovations respectively.

Figure 3: The Modified 10Ps Mapping Model



This figure illustrates the modified model (!)P) with ten areas of innovations.

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RELATIONSHIP BETWEEN MISSION STATEMENT AND SCOPE OF BUSINESS: EVIDENCE FROM FINLAND

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ABSTRACT

The purpose of this study is to investigate the connection of a business' mission statement to its corporate strategy. The literature review presents the concepts of the core competence, the mission statement, focus strategy and competitive advantage. The findings of the literature review indicate that these concepts have consistent contextual linkages and can be placed in the perspectives of the balanced scorecard. The case study reveals the complexities and details that illustrate the role of the mission statement, focus strategy and competitive advantage. Empirical evidence is presented from Neste Oy which aimed for growth with new products and customers, but failed to diversify. The results of this study are useful for those who are involved in the strategy process, want to define a mission statement and succeed with diversification.

JEL: L1, N7

KEYWORDS: Strategic Management, Core Competence, Mission Statement, Diversification, Competitive Advantage

INTRODUCTION

Researchers have studied the effect of the mission statement on company performance (Sidhu, 2003). Recent analyses of mission statements provide contradictory evidence that mission statements enhance company performance; the contribution of the mission statement remains elusive (Desmidt, Prinzie and Decramer, 2011, and Williams, Morrell and Mullane, 2014). The empirical estimation of the relationship between the mission statement and company performance is not always relevant to make conclusions, because the mission statement is only a single element of management and the empirical estimation cannot reveal all factors in company performance.

The mission statement describes and communicates the purpose of an organization (Baetz and Bart, 1996, and Keeling, 2013). Strategic thinking and strategic planning are driven by the organizational mission and members of the organizational culture are guided by the organization's values to achieve the outcome described by the vision (Minzberg, 1994, and Senge, 1990). The mission has been studied in the literature of strategic management (Atrill, Omran and Pointon, 2005, and Green and Medlin, 2003), but strategic management is among many other management tools such as quality assurance, process management and knowledge management, which improve company performance.

The purpose of this study is to investigate the role of the mission statement in the strategy process in order to capture its corresponding richness and complexity. Core competence is a driver of the mission statement which determines the scope of the company strategy. When a company considers growing by diversification it should take advantage of core competencies, focus strategy and opportunities described by the mission statement to achieve competitive advantage. The empirical evidence of diversification failures is sought from the case study.

The study presents empirical evidence about Neste Oy, an oil refinery and petrochemical company. The company was successful in its core business, but unsuccessful in diversified activities that did not create synergies with the core competencies. The empirical evidence supports the argument that the definition of the mission is important in the strategy process and the company focus should meet the scope described by the mission. The mission provides the context within which the strategies should be defined.

Neste Oy was established as a petrol company to ensure the availability of refined fuels after the World War II in 1948. The refineries were built and the requisite technologies were put into operation. Neste Oy held a strong position in the market, because it was state-owned, supported by the government and had a legal import monopoly until market deregulation in the 1990s. The monopoly, political decisions and bilateral trade with the Soviet Union protected the company against market forces. Finally the deregulation of energy markets brought the company to a competitive situation.

The remainder of this paper is set up as follows. The next section includes the literature review which shows that mission statements are theoretically related to the focus strategy and diversification. The third section describes the data and methodology. It presents the case of the Finnish company Neste Oy, which was successful in oil products for decades. The results and discussion in the fourth section present examples of the company departing from oil products and failing to diversify in energy business. The final section offers concluding comments.

LITERATURE REVIEW

Minzberg (1994) claims that strategic planning should follow strategic thinking. In his view, strategic planning consists of articulation, elaboration, the formalization of existing strategies and strategic thinking that is characterized by intuition and creativity. Strategic thinking is driven by a strong sense of the organizational mission and a vision of the desired future for the organization. For Senge (1990) visions are "pictures or images people carry in their heads and hearts" and represent what people truly want. The mission is widely studied in the literature of strategic management (Atrill, Omran and Pointon, 2005, and Green and Medlin, 2003). This literature review sheds new light on the connections among core competence, the mission statement, competitive strategies and business diversification.

The core competence is what a company can do particularly well. Core competencies have been described as the building blocks or roots for a corporate strategic plan (Collis and Montgomery, 1995, Frery, 2006, and Prahalad and Hamel, 1990). When a company decides to diversify, it must consider businesses that take advantage of core competencies such as managerial expertise, innovation capabilities and professional knowledge and skills because leveraging such abilities can result in cost efficiencies and operational effectiveness (Markides, 1997, and Porter, 1987). The review of literature highlights two essential attributes of core competence. Core competence is a skill or capacity of a company that enables a company to remain faithful to its mission, define its strategy within the scope of business and achieve competitive advantage.

Baetz and Bart (1996) analyzed mission statements by using grounded theory. The categories were not based on what the researchers hypothesized but on what Canadian Chief Executive Officers (CEOs) understood by the mission statement. The five rationales achieving the highest average scores in terms of frequency were to 1) guide the strategic planning system, 2) define the organization's scope of business operations/activities, 3) provide a common purpose/direction transcending individual and department needs, 4) promote a sense of shared expectations among all employees at all levels, thereby building a strong corporate culture (i.e. shared values), and 5) guide leadership styles. These results describe the common understanding about the mission statement.

The lack of empirical evidence about the role of the mission statement on company performance has made some managers skeptical, cynical and half-hearted when they develop and implement the mission statement and the strategic plan (Baetz and Bart, 1996, and Sidhu, 2003). Practitioners lose confidence in mission statements if they lack the evidence and knowledge to use it as an effective management tool. There is also evidence that the commitment of top management on the mission statement might influence the effect of mission statements on company performance (Mullane, 2002).

There is empirical evidence of a positive relationship between a mission statement and company performance. Green and Medlin (2003) found a positive relationship between the quality of mission statements and a company's financial performance. Sidhu (2003) found that complete mission statements correlated with exceptional performance in the Dutch multi-media industry. Several other studies have found a positive relationship between mission statements and desired organizational behavior (Bart and Baetz, 2001, Desmidt, Prinzie and Decramer, 2011, and Hirota, Kubo, Miyajima, Hong and Park, 2010).

Results from multiple empirical results, however, have found no positive relationship between mission statements and financial performance (Atrill, Omran and Pointon, 2005, Bart and Baetz, 1998, Bartkus and Glassman, 2008, Dharmadasa, Maduraapeurma and Herath, 2012, and Green and Medlin, 2003). Similar research results can be found in non-profit health care, where no significant relationship between mission statements and desired employee behavior was found (Vandijk, Desmidt and Buelens, 2007). Desmidt, Prinzie and Decramer (2011) concluded that, after two decades of empirical investigation, research has not found convincing evidence about the effect of the mission statements on company performance between companies with mission statements and those without.

The literature review indicates that not enough is known about the role of mission statements and how they should be deployed. There may be inconsistencies and interpretations of a different kind in the definition of the mission statement (Khalifa, 2011). It makes no sense to study only the effect of the mission statement on the company performance, because the mission statement is just a single element of strategic management. Another point is that the mission is typically stationary in the short run and in many cases regulated by law. The strategy towards the vision is a dynamic element that affects company performance and creates a better future.

The company mission is related to the focus strategy described in the literature of strategic management. There are three generic competitive strategies - focus, differentiation and cost leadership (Kettunen, 2002, Ortega, 2010, and Porter, 1990). The organization should use the focus strategy to select the products and markets it wants to serve. It may also differentiate its products to achieve uniqueness or achieve cost efficiency. A company's mission is related to its focus strategy. Each organization must have a reason for existence, something to offer and a type of client.

A focused company may be competitive and produce high-quality products, because it serves a narrow target market better than companies which have diversified their products to serve a broadermarket. The narrow focus implies limitations on market share, because the company leaves markets for other companies. The focused company inevitably differentiates its products to meet the needs of target markets or reduce its costs even though differentiation and low costs are not the primary aims of the focus strategy (Porter, 1990).

The focus strategy means market concentration and allows a company to direct all its resources to ensure the growth in a single business or product, making use of dominant technology to increase returns on assets (Pearce and Robinson, 2007). The company concentrates on doing what it is known for, drawing on its strengths and opportunities to do those things in a more productive way and to use new methods to eliminate the risk of losing focus. Kotler and Armstrong (2008) posit that corporate diversification strategy involves a company acquiring and setting up business inside or outside its core business or geographic location.

Competitive advantage is a strong competitive position (Ansoff, 1965). A competitive advantage consists of organizational factors that enable a company to outperform its competitors; sustaining competitive advantage should be the main purpose of the competitive strategy and creating value to customers is the means of attaining it (Porter, 1985). Competitive advantage is a position of superiority recognized and valued by the client, which makes a company more competitive than a competitor or itself at a previous moment (Contador, 2008, and Ferreira, Simões and Souza, 2012). Competitive advantage can be placed in the financial perspective of the balanced scorecard approach (Divandri and Yousefi, 2011).

Table 1 depicts the core competence, mission statement, focus strategy and competitive advantage using the balanced scorecard developed by Kaplan and Norton (2001, 2004). The balanced scorecard has been used to implement and communicate the strategic plans (Kettunen, 2008, 2011). The perspectives of the balanced scorecard in this study are the learning and growth, processes and structures, customers and financial perspective. The literature review shows that the core competence is required to fulfil the mission statement. The focus strategy should define the products and customers within the scope of business described by the mission statement to prevent diversification failures. Competitive advantage is an outcome based on the recognition and valuation by satisfied customers.

Table 1: Core Competence, Mission Statement, Focus Strategy and Competitive Advantage in the Perspectives of the Balanced Scorecard

	Learning and Growth	Processes and Structures	Customers	Financial
Core competence	✓			
Mission statement		✓		
Focus strategy			✓	
Competitive advantage				✓

The literature review indicates that the core competence, the mission statement, the focus strategy and competitive advantage have conceptual linkages between each other and they can be placed in the perspectives of the balanced scorecard. The linkages can be described in the strategy map for an organization.

Sueyoshi and Sekitani (2009) examined a synergy between electricity and gas services in the US electric utility industry. Synergy is typically measured by the cost reduction of joint production. Sueyoshi and Gato (2011) used data envelopment analysis and found that there had been no synergy in the operational performance of diversified utility company before or after the deregulation on the US electricity markets. Thus, core business concentration is more effective for electric utility companies than corporate diversification to enhance their operational performance under US deregulation policy. The next sections describe the importance of the mission statement in the oil and energy business to take advantage of the synergies.

DATA AND METHODOLOGY

This study uses historical data of state-owned Neste Oy to identify and describe important research and practical issues. Finland imported all of its oil and petroleum products before World War II. Petrol rationing started and fuel and lubricant oils were placed under government control during the war. Companies had no interest in investing in the business. State ownership was a viable way to introducing a new industry. Fuel oil and lubricant supplies were stored in caves in the granite rocks in Naantali on Finland's southwestern coast. The company Neste Oy was established in 1948 to execute the plan to introduce a new industry. Neste Oy was in a protected market position, because it held a legal import monopoly until the market deregulation of the 1990s (Larsio, 1974). It also benefited from bilateral trade with the Soviet Union.

The mission of Neste Oy was to own and rent storage for liquid fuels and lubricants, and to import, transport, trade and manufacture these products. The company invested in oil tankers and in a refinery in Naantali during the 1950s and 1960s. The strategy of the company was to deliver all the motor petrol Finland needed

and adjust the production of other derivatives of crude oil accordingly. Consequently, the company constructed a second refinery in Porvoo.

Neste Oy started to invest in petrochemicals after the building of the oil refinery in Porvoo at the end of the 1960s, because it was closely associated with the refinery business. The production of ethylene, polyethylene, polyvinylchloride (PVC) and polystyrene for the plastics industry became integrated activities of the Porvoo refinery. Neste Oy became Finland's dominant petrochemicals producer.

The company found synergies with transport and imported crude oil by ships owned by the company. At the same time, it entered the service station market in the 1980s through the acquisition of three Finnish petroleum marketing companies and increased the number of service stations in Finland. It also established service stations in the Baltic countries, Poland, Germany and Russia.

Neste Oy made considerable investment in research and development. At first the efforts were in the improvement of quality of its products, but the research interest moved to the development of products in petrochemicals. Bonn (2001) states that organizations that integrate strategic thinking and the core competence create an enduring source of competitive advantage. The core competence of the company in the oil refinery and petrochemicals was aligned with the mission of the company. The importance of the core competence in successful companies has also been emphasized by Mooney (2007) and Ljungquist (2013).

A case study described by Yin (2003) involves an interpretive approach, which is used here to capture the contextual linkages of the mission statement. The interpretative approach is designed to understand the phenomenon through the meanings that can be assigned to them (Deetz, 1996). An interpretative study seeks a subjective understanding about the conditions, practices and consequences of social action. It is also expected that an interpretative study reveals complexities and details that are commonly omitted in quantitative studies (Mason, 2002). The limitations of the case study are unlikely to have a significant effect on the validity and reliability of the outcomes, because the objective of the study is not to generalize, but to support and illustrate the role of the mission statement in relation to other relevant concepts.

RESULTS AND DISCUSSION

Table 2 depicts the diversification failures of Neste Oy. The company had many strengths in the in oil business. Neste Oy was a state-owned company supported by the Finnish government. It also had a legal import monopoly on oil, which was its main business area. Finland had a bilateral trade (clearing trade) with the Soviet Union from the end of World War II until the end of the Soviet Union and Neste Oy was deeply involved in this bilateral trade. The powerful market situation attracted the company to experiment with ways to test the business growth in energy business which eventually led to diversification failures.

Finland signed an agreement with the Soviet Union for the delivery of natural gas to Finland. Neste Oy got the project of building a network for the distribution of natural gas in 1974 and delivery contracts were drawn up with industrial customers. Finnish industry was looking for new imports from the Soviet Union in order to promote its own exports in the context of the bilateral trade. The company did not keep its business within the scope defined by the mission statement in oil products, but started to diversify its activities to gas business. Neste Oy and Gazprom of Russia established a joint venture called Gasum Oy, which took the responsibility for the pipeline that delivered natural gas from Russia to Finnish industry in 1994.

Neste Oy did not limit its business to the scope defined by the original mission during the 1980s. It aimed for growth and extended the oil refinery and petrochemical industries to energy business, which is a much broader business area than the oil industry. The company set up a coal trading division of energy production

in 1981. Soon the company experienced a diversification failure. The coal trading business had insufficient synergies with the core business and the coal trade was sold to a Finnish coal merchant in 1985.

Table 2: Diversification Failures of Neste Oy

Product	Period
Natural gas	1974-1994
Coal	1981-1985
Batteries	1981-1990
Solar and wind energies	1981-1998
Electricity	1998-2005

The company used state ownership, bilateral trade with the Soviet Union and the monopolistic situation until the deregulation of European power industry at the end of the 1990s.The company aimed for growth but had five diversification failures during its history.

A similar diversification failure occurred with the lead accumulator batteries produced by Pakkasakku Oy. Neste Oy bought the company in 1981. Even though Pakkasakku Oy had operated since 1922 and achieved a notable position in the battery market, Neste Oy found that battery market did not fare well and it had to sell Pakkasakku Oy to Spanish Grupo Tudor in 1990. The core competence of the battery business is entirely different from that of the oil industry.

Neste Oy applied its mission in the energy business to the development, manufacture and marketing of solar electricity, solar heat and wind energy in its unit Neste Advanced Power Systems (NAPS) (Sullivan, 1998). The company entered the renewable solar and wind energy business in 1981 with projects in Scandinavia, the United Kingdom, Greece and Kenya. Neste Oy had to give up the business in 1998 when Neste Oy was privatized and NAPS Systems Oy was established.

The Finnish government merged the state-owned Neste Oy and the electric power company Imatran Voima Oy to form a larger energy group that could compete in Europe's rapidly deregulating power industry. The merger took place over objections to combining two companies that appeared to have no synergy (Cragg, 1998, and Madslien, 1998). Fortum Corporation Oyj was established as a new holding company for the combined operations of these companies in 1998. By the time of proposed merger, the state-owned Imatran Voima Oy was the main power company in Finland. Several deals in 1998 and 1999 transfigured various subsidiaries to the nascent Fortum Group and the European Commission approved the creation of Fortum Oyj.

The Finnish government founded Imatran Voima Oy to build a hydropower plant near the town of Imatra in 1932 (Auer and Teerimäki, 1982). At first, the company concentrated on building and operating hydroelectric power plants and the power transmission system in Finland. It expanded to coal-fired power plant during the 1960s and constructed power transmission links to the Soviet Union and Sweden. It also electrified the Finnish railway system. The company entered the nuclear power generation sector in the 1970s and began selling district heat in 1982. During the 1980s, the company began developing combined heat and power plants and expanded overseas in the area of design and construction of power plants.

The Finnish government pressed ahead with the decision to merge two state-owned companies - Neste Oy and Imatran Voima Oy - believing that these companies could easily enter the deregulating European power industry even they had no synergy. The Finnish government maintained a 75.5% stake in Fortum Oyj though it was a publicly traded company. The same diversification failure that had taken place decades earlier was repeated with the merger of Neste Oy and Imatran Voima Oy in 1998.

The merged energy company Fortum Oyj remained in business until its demerger in 2005. The oil division of Fortum Oyj was transferred to the re-established Neste Oil Oyj which took place on the Helsinki Stock Exchange. The company produces and sells premium quality traffic fuels. Its product segment focuses on

gasolines, diesel fuels, aviation fuels, marine fuels, heating oils, heavy fuel oils, base oils, lubricants, traffic fuel components, solvents, liquefied petroleum gas and bitumen. Hence Neste Oil Oyj returned to the business area that Neste Oy had had when it was founded.

In 2013, Neste Oil Oyj presented its new mission statement, "Refining the Future" and its strategic plan, "Way Forward." Its business areas include oil products, renewables and oil retail. Neste Oil Oyj has created a renewable products business which generates more than EUR 2 billion in revenue within just a few years and is now the world's largest producer of renewable diesel. The technology developed by Neste Oil enables premium-quality renewable diesel to be produced from virtually any vegetable oil or waste fat. The renewable energy has synergies with traditional oil business and fits the company's previous business area.

CONCLUDING COMMENTS

This study analyzed the role of the mission in strategic management. The goal of the study was to investigate the connection of a business' mission statement to its corporate strategy. The common understanding is that the mission statement describes the purpose of an organization, defines the scope of business, promotes shared expectations among employees and is a basis for the corporate culture and values in promoting leadership. This paper argues that when the mission defines the scope of business it also sets limits to the focus strategy by defining the products and markets of the company. An organization that is not able to develop its strategy and activities within these limits may experience diversification failures.

The focus is a competitive strategy which is defined by the main business area, products and customers. The focused company sets limitations to its market share, serves the target market more efficiently than competitors with broad operation and is able to achieve high quality and competitive advantage. If the company is unable to maintain the scope of its mission or diversify by creating synergies with its previous activities and core competencies, it will probably be in a poor strategic situation and have low competitiveness. The successful implementation of the mission statement keeps the organization on the track and avoids unnecessary pitfalls.

The successful mission and focus strategy are based on the core competence, which is a requirement for efficient processes, high-quality products and customer satisfaction. The alignment of the core competence with both the mission statement and focus strategy is essential to ensure a viable strategy for a better future. Competitive advantage is attained by creating value to customers. The literature review of this study indicates that the core competence, mission statement, focus strategy and competitive advantage can be placed in the perspectives of the balanced scorecard.

The historical data of the Neste Oy case provides empirical evidence and supports the arguments found in the literature review. The company had a history of failed diversifications. Neste Oy entered the distribution and natural gas business in the 1970s, and left it in the 1990s. The mission of the company changed during the 1980s to include the energy business. It invested in coal and battery business areas, but rather quickly realized that there were no synergies with the oil business. The failed diversifications included solar and wind energies, which the company also abandoned in the 1990s. Neste Oy underwent yet another diversification failure in 1998, when it merged with electricity company Imatran Voima Oy to form Fortum Oyj which continued until the demerger in 2005. After the demerger, Neste Oil Oyj has successfully focused its mission on oil products, renewables and oil retail. These results support the argument that the mission statement should define the products and customers within the scope of business. The empirical results are limited only to Neste Oy, but the study can be extended to other companies.

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IDENTIFICATION OF INNOVATION CAPABILITIES FOR MICRO AND SMALL ENTERPRISES IN MORELOS, MEXICO

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ABSTRACT

Innovation is usually associated with the use of new technology or with important research and development departments, leaving micro and small enterprises (MSE) lacking. Our research shows that MSE can find success by doing things differently, better, quicker and more cost efficiently. Unfortunately, the innovation level of MSEs is hard to evaluate because most innovation models have been developed for medium and large enterprises. This paper's main objective is to determine indicators that can efficiently measure innovation in MSE in Morelos, Mexico dedicated to service and commerce activities. Three innovation models were analyzed: "Innovating for the next three billion" report by Ernst & Young, "Measurement of basic processes and innovation enabling" and "The Innovation Kite Model". From this analysis, and after the identification of the characteristics and needs presented by the Mexican commerce and service MSE, we stablished 12 innovation capabilities to measure innovation levels.

JEL: M10, M16

KEYWORDS: Innovation, Micro and Small Enterprises, Innovation Capabilities

INTRODUCTION

Innovation is an important topic for business. Innovation is a way enterprises manage challenges in developing new products and services, as well as to improve processes and management to offer added value to their customers. Innovation has been widely accepted as a driving force in creating economic value since Schumpeter defined it in 1934. Being effective at innovation is about creating knowledge and generating a competitive advantage.

Enterprises have good opportunities to make improvements. They must pay attention to what they are doing and what customers are telling them about their products and services. Customers know how they want products and services to be better. The enterprises' job is to do research and ask customers their desires. Employees are also an important source of information. Creative ideas can be conceived by anyone in the enterprise. But, these suggestions must be taken seriously and some selected for implementation (Morris, 2013).

To profit from innovation, enterprises make great efforts to build their innovation capability. Measuring innovation capabilities is complex. Multi-dimensional difficulties are shown in the innovation process. Innovation involves a broad and dynamic spectrum of activities related with markets, new products, redesigning, production and others. Successful innovation comes from the integration of a set of capabilities, rather than a single type of capability (Zhang, Garrett-Jones, & Ricky, 2013).

To manage the innovation capabilities the first step is to be able to measure them. Therefore, the creation of metrics or indicators to measure innovation in companies is crucial to determine the current condition of the company and define a strategy for improvement (Galvez, Camargo, Julio, & Morel, 2013).

Usually, the methodology and tools available to evaluate innovation are not sufficient. Most are based on the design and use of science and technology. Descriptive methods focused on processes or innovation resulting in research done at a country level, does not show the perspective from enterprises' point of view. (Moreno Rojas & García Carrillo, 2014)

The innovation level for micro and small enterprises (MSE) of commerce and services sectors is difficult to evaluate. The evaluation criteria can be applied to bigger enterprises which have more resources and activities related with research and development, high levels of technology and other factors that MSE cannot easily obtain. Adams, Bessant, and Phelps 2006 show evidence that the best way to measure innovation capabilities in MSE is using a multi-criteria approach. (Moreno Rojas & García Carrillo, 2014)

Innovation is easy when enterprises have enough resources. But when resources are limited, things get difficult. Micro and small enterprises commonly face resource limitations. Why are Micro and small enterprises not able to innovate? Answering this question is the main reason for the present research. Innovative capabilities that can be applied to MSE are not defined. For this reason evaluation of innovation for the characteristics and needs of this specific sector is difficult.

This study begins with a discussion of the literature defining commerce and services of MSEs in the Morelos, Mexico context. Then, innovation definitions and the relation of MSE and innovation are explained. We also discuss types of innovation. The paper is based in three innovation models: a) "Innovating for the next three billion" report by Ernst & Young, b) Measurement of basic processes and innovation enabling and c) The Innovation Kite Model. These were used to identify feasible innovation capabilities to be assessed in micro and small enterprises. Identification and explanation of the innovation capabilities as they related to micro and small enterprises is the goal of this paper.

LITERATURE REVIEW

Commerce and Services Micro and Small Enterprises in Morelos, Mexico.

Innovation capabilities are evaluated in a micro and small enterprises in the state of Morelos, Mexico. Morelos, officially named "Free and Sovereign State of Morelos," is one of 31 states which, with the Federal District, comprise the 32 Federal Entities of Mexico. It is divided in 33 municipalities and its capital city is Cuernavaca. It is located in South-Central Mexico. It is bordered by the states of México to the north-east and north-west, Puebla to the east and Guerrero to the southwest. Mexico City is situated north of Morelos. This state is the second-smallest state in the nation.

The importance of small business as an engine of economic growth has been widely recognized (Valladares, De Vasconcellos, & Di Serio, 2014). Market-based services (that is, excluding those typically provided by the public sector, such as education, health care, and government) account for 50% of the total and have become the main driver of productivity and economic growth in OECD countries. Services have also emerged as a main source of job creation in OECD countries, often compensating for job losses in manufacturing (Sheehan, 2006).

Small and medium enterprises in Mexico represent an economic force for the country. According to information from the Instituto Nacional de Estadística e Informática (INEGI), a national organism responsible of statistics, in Mexico there exist approximately 4.015 million entrepreneurial units, of which 99.8% are micro, small and medium enterprises that generate 52% of GDP (Gross Domestic Product) and

72% of employment (ProMéxico, 2014). Commerce, transportation, services and tourism in Morelos accounts for 59% of the state's GDP and employs just over 50% of the working population. Growth of the commerce sector is due to urbanization and the growth of tourism (INAFED, 2010). This confirms the findings of Shiatarella (1999), who concluded that small firms have passed big firms in the creation of new employment (Gómez Ortiz, 2008).

We define services as the set of activities and tasks oriented towards the clients' satisfaction once their needs and expectations are identified. Services are intangible and their value varies from client to client depending on their personal experiences and needs (Sánchez Méndez & Bravo Alcántara, 2011). Commerce enterprises are dedicated to purchasing and selling finished products without adding value to them. They offer the service of distributing finished products to customers.

Customer satisfaction defines the quality degree of how a service is delivered. This concept is changing due to the fact that quality depends on the client. Only through a comparison between the needs of costumers against their satisfaction, allows enterprises to define bad or good quality (González, 2014). The purpose of innovation in service and commerce enterprises is to have a positive impact on costumers' satisfaction. Services are uninteresting with respect to innovation, which may have caused them to attract relatively little attention from scholars of innovation (Tether, 2005). One reason is that due to its intangibility of service outputs, service innovations can be invisible and therefore difficult to identify (Prajogo, McDermott, & McDermott, 2013).

With the information provided by ProMéxico, some advantages of MSEs in Mexico can be distinguished. They are a source of development for the country. Their recently born organizational structure is flexible so modifications and adaptations can be easily made to their processes. They have growing opportunities. They represent a large percentage of the economically active population because SME generates a large amount of jobs. Mexican MSEs contribute to local and regional development. The owners are frequently the enterprise managers, so they are aware of the needs of the business. Finally, MSEs can easily assimilate and adopt new technologies (ProMéxico, 2014).

On the other hand, some disadvantages are related with administration issues. Frequently, MSEs do not reinvest profits to upgrade their equipment and production techniques. The lack of an efficient organization results in a shortfall of sales and providing inefficient service to customers. MSEs commonly do not know how to set prices for their products or services because they do not distinguish all the costs involved, they lack of inventories control, they have taxation problems and have other problems. These problems can be translated into affectations when these enterprises intend to request financing from government of financial instances (ProMéxico, 2014).

What is Innovation?

Innovation has become an imperative for enterprises of any kind and size. A changing environment in all aspects lead enterprises to search for new ways to offer their products and services such as innovating in services and products already offered, processes and management improvements, trying to access new markets. They wish to follow a path to create value and keep a competitive advantage.

Innovating is essential to moving forward. It is not enough to innovate once. Implemented innovations frequently are imitated by others transforming the innovations into standardized practices, methods, or products. For this reason enterprises must continuously innovate (González Candía, García Coliñanco, Lucero Caro, & Romero Hernández, 2014).

Innovation enables existing advantages to be maintained and new advantages to be created. Innovation helps making today's products and services better. This often leads to continuous or incremental innovation.

Incremental innovation is what most enterprises do to match progress made by competitors and sustain a position in the market (Morris, 2013).

Decreasing production costs, rapid changes in technology, reduction of commerce limitations as well as competition growth, are factors that force enterprises to improve their competitiveness and productivity, without leaving aside the impact in the quality of the product or service that the business is offering to customers. Innovation is a necessary and unavoidable strategy when objectives, goals, directions are being formulated to manage organizations in an effective manner (González, 2014). Innovation must have a strategic purpose making implementation easier and opens the possibility to take advantages of new opportunities.

Innovation has been defined in different ways. Most often, innovation is related with something new and also with something that needs to be useful. The Organization for Economic Co-operation and Development (OECD) in the Oslo Manual, defines innovation as "the implementation of a new or significantly improved product (good or service) or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations". (Organization for Economic Co-operation and Development, 2005)

According to Schumpeter, innovation goes beyond technology. Schumpeter proposes the following components: a) The introduction of a new product into a market, b) The introduction of a new production method, c) The opening of a new market in a different country, even though if that markets already exists in another country, d) Find a new source of raw material or semi elaborated products, without consideration if that source exists of has to be created and e) Implementation of a new structure in a certain market (Escorsa Castells & Valls Pasola, 2003).

Other studies have attempted to improve on the Schumpeterian approach opening a wider perspective. Processes of innovation are not limited to R+D activities and patents. Other aspects are considered as well including: the role of institutions, business culture and behavior, collaborative relationships among organizations, sources of innovation and the training and learning process (Cáceres, Guzmán, & Rekowski, 2011).

Innovation, as a system, emphasizes interactions that take place among involved agents and the knowledge these interactions produce. Innovation seen as a process tackles the characteristics of how innovation happens and the inherent capabilities to get the required actions done (Moreno Rojas & García Carrillo, 2014).

Creativity is related to innovation. The creativity concept includes processes about idea generation. Innovation includes processes about practical appliance and the exploitation of those ideas. Creativity is present in MSE's. Many of these enterprises have their origin in a brilliant idea, and the lack of resources often makes entrepreneurs be creative. What these enterprises have to develop is the ability to transform ideas into a product or service that can be the source of profits (Asociación de la Industria Navarra, 2008). The generation of added value is produced through something new which is transformed or incorporated in products, services, processes, systems, structures and brands into something that the customer is willing to pay for. Then, innovation is seen as the sum of invention and commercialization (B+I Strategy, 2007).

The role of the enterprise owner or manager is highly important for innovation. For Peter Drucker quoted in (Gómez Ortiz, 2008), a leader has to be a leader for change. The leader has to show willingness and the ability to apply changes, make new and different things, and design policies to turn the present into future. The change leader tests every product, service, process, market, distribution channel, customer and final usage to see if they might be innovated (Gómez Ortiz, 2008).

Finding innovation sources for all kinds of enterprises is important. The most common sources of innovation opportunities in organizations are processes and customers. Opportunities of innovation based on the needs of customers can generate more value for the organization. These help to launch new products or services. An enterprise that fulfills the needs of customers can achieve better profitability. In processes it is also an opportunity to improve how things are done, save resources and gain in quality and performance (Bermúdez García, 2010).

Innovation definitions have in common the element of being successful in the market. If the new products, procedures or services are not accepted by costumers, innovation does not happen. Innovation implies competitiveness. Innovations become an attribute to generate value. Innovation's goal is the improvement of the results of an organization by obtaining competitive advantages. Innovation has been described as "the engine that drives revenue growth" and is considered the basis for organizational survival (Galvez, Camargo, Julio, & Morel, 2013). The challenge for all sizes of enterprises is to identify innovation capabilities and work on their development.

MSE and Innovation

Innovation by itself creates value and pushes societies forward through growth and welfare. There are no stablished formulas for the innovation process. But, it is useful to consider certain principles to generate innovations in organizations including: stimulate disruptive thinking, acting with the knowledge of innovation's sources, boost technological vigilance, solve problems using an interdisciplinary approach, generate spin-off and creating networks for association (González Candía, García Coliñanco, Lucero Caro, & Romero Hernández, 2014).

Innovation requires policies, processes and tools to allow creativity in both, individuals and organizations. It contributes to the corporative strategy through the creation of new products, services, and business models that add value to enterprises. Innovation, strongly related with a business strategy, has to be focused on the customer (González Candía, García Coliñanco, Lucero Caro, & Romero Hernández, 2014). Developing quality relationships with customers can be a driver to innovation processes. Proximity and knowledge of the customer are key factors for innovation in MSE (Armenteros Acosta, Medina Elizondo, Ballesteros Mirón, & Molina Morejón, 2011). In fact, informal innovation strategies, can be transformed into formal strategies by providing a definition of the capabilities in which the MSE can innovate. MSEs relate with external instances such as their customers, other enterprises and the government, all of which can be innovation sources.

MSEs have advantages and disadvantages in innovation. They are flexible and focused on particular products or services, and in contrast do not have enough capacity to manage the whole innovation process. These enterprises relate with the external environment, other enterprises, organizations, government and partners. The involvement of customers is relevant particularly in modifications of products and market research. Despite, being flexible and adaptable, MSEs have scarce resources and lack capabilities of searching what is needed to develop a culture of continuous innovation. MSEs must focus on developing their capabilities and reconfiguring them to deal with the changing and challenging business environment (Grimaldi, Quinto, & Rippa, 2013).

Innovation measurement in enterprises must be done according to their own characteristics. There are clear obstacles faced by MSE's when innovation looks forward to the generation and patenting of new processes and products through investment in infrastructure, high fixed costs, specialized knowledge and other factors. Although these obstacles reduce the options for these enterprises to generate new knowledge there remains, a universe of gradual improvements and tacit knowledge that could be used by these enterprises to reach new levels of competitiveness and productivity enabling them to grow and develop. Hughes (2001) in (Galvez, Camargo, Julio, & Morel, 2013) concludes that management abilities are more important than

financial factors for growth based in innovation (Galvez, Camargo, Julio, & Morel, 2013). MSE have fewer management resources compared with large companies (Mizuno, 2014).

Tejada and Moreno explain there are determinant factors of innovation in service MSE's including size. The larger the enterprise, the more intensive the firm's innovation activities become. The existence of any type of co-operative arrangement encourages innovation activities. Higher dependency on external financial resources implies greater obstacles to innovation activities. Higher levels of dependency on providers implies less dynamic innovation processes (Tejada & Moreno, 2013).

According to Dini and Stumpo (2011), there is a need to focus on three elements that should be considered in small and medium enterprises (SME) innovation policy design and well as research projects. These factors are: a) SME adopt innovation strategies (informal ones) different from the ones developed by big enterprises. The efficiency of these strategies depends on the competitive context in which they operate. b) SME capacity to efficiently relate with the economic and institutional environment affects significantly their informal innovation strategies and c) SME access to more formal innovation processes may be facilitated by promoting their links to other economic organizations that do not experiment their scale limitations (Dini & Stumpo, 2011). Cormican and O'sullġvan quoted in (Çetinkaya Bozkurt & Kalkan, 2014) emphasize the importance of having a strategy for innovation. It is not possible to have a correct innovation management, without an effective strategy. (Çetinkaya Bozkurt & Kalkan, 2014)

Innovation-oriented strategies contribute to ensure the protection and sustainability of presence and increasing competitiveness for MSEs. The flexibility of MSEs helps to adapt themselves easily to innovation strategies concerning technology, production methods and marketing (Çetinkaya Bozkurt & Kalkan, 2014). Nevertheless, barriers for innovation are present, especially for this type of enterprises, where the lack of all kind of resources is a common denominator.

Forsman & Serdal, 2011 recommends small enterprises consider the type of innovation that can improve their present and future performance, the time it takes to achieve better performance by innovating and the economic situation needed to be successful. Both, innovation types and innovation diversity should receive special attention. (Forsman & Serdal, 2011)

Innovation is not an easy task. As Hauser (2006) explains in (Klingebiel & Rammer, 2014) only a fraction of innovation efforts are successful. It is difficult to predict key determinants of innovation success. Commercial uncertainty shortens the period within which managers can see opportunities to create innovation. Customer preferences, technological standards and competitive scenarios are obstacles for MSEs. Resources for innovation are sometimes allocated too late to implement an innovation project.

For micro and small enterprises, the implementation of innovation strategies is not easy. The problem examined in this research is the accurate identification of the capabilities that these enterprises can handle.

Types of Innovation

According to Valladares, De Vasconcellos, & Di Serio (2014) the elements that determine an enterprises' innovation in products or processes are behavior and integration; identification and implementation of projects and knowledge and abilities. In either case, enterprises need to exploit knowledge to create new opportunities in which innovations might be developed. Internal knowledge refers to knowledge inside the organization with the purpose of improving processes or products. External knowledge exploitation refers to outward knowledge transfer (Grimaldi, Quinto, & Rippa, 2013).

There are different types of innovation. Avlonitis et al. (2001) offer a typology that classifies service innovation into six different types: new-to-the-market services, new-to-the-company services, new delivery

processes, service modifications, service line extensions, and service repositioning (Partanen, Chetty, & Rajala, 2011).

One classification is related to originality. Innovation may be incremental whereby value added improvements are made to existing products or services. Radical innovation refers to new technology applications, changes or introduction of new products, services or processes (González Candía, García Coliñanco, Lucero Caro, & Romero Hernández, 2014).

Some scholars examine product innovation from a resource-based perspective. Leonard Barton (1992) argued that paradoxically core capabilities both enable and impede product innovation. She found that core capabilities facilitated the development of projects closely aligned with those capabilities. In contrast, projects lacking alignment with the four dimensions of a firm's core capability (employee knowledge and skills, technical systems, administrative systems, values and norms) were inhibited (Danneels, 2002).

In Mexico, since 2006, the Economy Ministry promoted enterprises' public organizations to create an organization called Foundation Innovation and Technology National Award. The goal was to operate and manage this program to promote the participation of economic entities in the development of technology and innovation and as an incentive for promoting successful processes in the topic. Some of these public organizations are CANACINTRA (National Chamber of Transformation Industry), ADIAT (Mexican Association of Applied Investigation and Development Directives), FUMEC (Mexico – US Foundation for Science) and FUNTEC (Mexican Foundation for Innovation and Technology Transfer in Small and Medium Enterprises) (Premio Nacional de Tecnología e Innovación, 2014). The Economy Ministry has developed the National Model of Management of Technology and Innovation which has a main purpose to enhance the development of Mexican organizations of any activity and size to help them to reach competitive levels through an explicit, sustained and systematic management of innovation and technology.

This Model differentiates four types of innovation: product, process, marketing and organization according to the Oslo Manual. Product innovation is the introduction of a new or significantly improved good or service, in its characteristics or usage. Product innovations in services can include significant improvements in the way these services are given such as efficiency or speed, the addition of new functions or characteristics to actual services or the introduction of completely new services.

Process innovation is the introduction of a significantly improved production or distribution process. This implies changes in techniques, materials or information systems. Methods of creation and provision of services are included, also significant changes in equipment or systems used by enterprises or in procedures and techniques to give these services to customers. Supporting activities as purchasing, accounting or maintenance are considered innovation in processes.

Marketing innovation involves applying new methods in commercialization that implies significant changes in design or packaging of a product, its market positioning, promotion or pricing. The introduction of a commercialization method which application is new for a specific enterprise can be considered as innovation too. The method can be adapted from other enterprise or organization. The first usage of a new method that allows changing the price of a good or service based in the demand or in the desires and need of the customer is also considered innovation in marketing.

Organizational innovation is the introduction of a new organizational method in the practices or organization of the workplace or in the external relationships of the enterprise. Organizing routines and management procedures of work, improvements to the supply chain, restructuring activities, demand based production and application of quality systems are examples of this kind of innovation. The first time usage of new ways to establish relations with other enterprises and with the government, new ways of collaboration with customers, new ways of integration with suppliers and first time outsourcing, are

included in organizational innovation (Organization for Economic Co-operation and Development, 2005). There are studies that suggest that even gender diversity in the administration board has a direct impact on organizational innovation.

Innovation Models

Based on the literature research, we note that innovation models have been developed in order to identify indicators that enable the quantitative measurement of innovation activities in economic organizations. In this paper, three specific innovation models are examined: a) "Innovating for the next three billion" report by Ernst & Young. b) Measurement of basic processes and innovation enabling. c) The Innovation Kite Model

Innovating for the Next Three Billion

Ernst & Young in their report named "Innovating for the next three billion" emphasize the importance of entrepreneurship and the contribution of small and medium enterprises to the growth of markets around the world. This report notes that innovation is more than research and development (R+D) activities, to meet the requirements of quality, affordability and access. Companies should be prepared to rethink their entire business and operating models. They should build new relationships with stakeholders across the supply chain, seek out new distribution channels, and develop an intense focus on operational excellence to bring down costs and increase efficiency (Ernst & Young, 2011). This opens the possibility for MSEs to innovate even if they do not have enough resources to develop R+D activities. These activities are accessible to MSEs despite their size and characteristics.

Ernst & Young describe an innovation model with local and global approaches. The model includes four perspectives to be met in innovation. In the case of MSE, if they take the local approach is important to see innovation as a path to be followed. 1. Customer insight. The customer needs have to be understood and requires resources in local markets. First, observation is an important tool to take note of the existence of potential customers. The next step is engaging customers and treating them as partners and collaborators in innovation. 2. R+D activities need to be carried out where the customers are located. New ideas need to reach the decision-makers to be practical. 3. People and culture. Talent and expertise of the people in enterprises are a key element to innovation. The power of decision making related to recruitment, in translating customer needs into new services or products, the possibility of assign rewards to embed responsibility to ensure managers' accountability are elements that allow people working in the business to be engaged with innovation. 4. Operations and business model. This element involves trying to identify local partners to help build a value chain. The objective is to make operations as efficient as possible to lower costs and maintain profit margins. The needs of customers must be observed to ensure appropriate pricing policies of pricing (Ernst & Young, 2011).

Measurement of Basic Processes and Innovation Enabling

Basic processes in the enterprise need to be followed by implementing a set of appropriate measurements. Chisea et. al., quoted by Pervaiz (2010), propose an audit tool for this purpose. The use of this tool increases the capability of the enterprise to satisfy strategic and tacit objectives of the business. It will be possible to verify improvements in the execution of processes which are fundamental to generating innovative results. The basic processes and their measurement are listed in Table 1.

Table 1: Basic Processes and their Measurement. (Pervaiz, 2010)

Process	Measurement
Enabling Processes	Leadership. The measure of performance and agreement that indicates that the innovation is working in an effective way. Systems and structure. Effectiveness of the organizational structure and infrastructure support to satisfy the needs of the enterprise. Resources. Degree to which available resources satisfy the demands of product or service development. Financing sources are important in this classification.
Basic Processes	Definition of the concept. Efficiency in the innovation process that generates ideas for commercial success. Product development. Efficiencies associated with taking the concept to market. Technology acquisition. Degree to which technology is brought instead of being developed internally. Process innovation. Effectivity related with continuous improvement inside the enterprise. Production efficiency. Management of costs and the way products or services are delivered.
Performance Indicators	Customer's acceptance. Success in customer's recognition of the value of products or services. Financial performance. Financial success product of an effective investment and execution in products and services development. Organizational maturity. Joining legal certifications and industrial regulation in order to compete efficiently in the industry.

This table shows the processes and respective measurements proposed by Chisea, et. al. in (Pervaiz, 2010)

The Innovation Kite Model

B+I Strategy is a Spanish consulting firm that helps other enterprises innovate, by developing research projects focusing on networking with stakeholders by interchanging and generating knowledge. In 2007 B+I Strategy issued a publication called "El Cometa de la Innovación" ("The Innovation Kite") to present the results of a Research Project about Strategic Innovation. A product of the research made by the firm is a model called Modelo de Innovación Estratégica "La Cometa" (Model of Strategic Innovation "The Kite"). The Model has two main elements related and complementary:

WHAT: In which innovative businesses the enterprise is working and differential components that it offers. It includes a global vision of a flexible and dynamic enterprise with strategic guides to innovation. The enterprise develops new ideas and experiments for innovative businesses.

HOW: How to develop a constant innovation capability in the enterprise. This is about generating the context in which the activities (WHAT) may work out. Some elements are: leadership and culture, people's management, external relationships, organizational structure, management processes and indicators to assess management.
This Model represents the environment (market, technical, institutional), competitors, customers, government and other external agents that enable collaboration opportunities. The model changes as the environment does, adapting to new circumstances and innovation activities of the enterprise.

The last element is people in the leading role of innovation. They have the responsibility to develop an innovative culture, supported by a management model to assure their training, rewards systems, and resources (B+I Strategy, 2007).

METHODOLOGY

The research will have a qualitative approach. The qualitative phase is about identifying characteristics of commerce and services micro and small enterprises in Morelos. Next, we define innovative capabilities that can be found in these enterprises. This paper provides a literature review to identify innovative capabilities and how they are adequate for micro and small enterprises. The following general and specific objectives and hypothesis

The general objective is to determine the innovation capabilities in micro and small enterprises of the commerce and services sectors and how to measure them. More specifically, we wish to: 1. Define the characteristics of MSEs of the commerce and services sectors 2. Select the innovative capabilities and their indicators that can be applied to MSEs of the commerce and services sectors and 3. Design an evaluation instrument to measure the innovative capabilities and apply this instrument to a specific sample of enterprises of Morelos, México.

The hypothesis involves determining the appropriate innovative capabilities for MSEs that allow for the measurement of innovation level for this specific sector of enterprises.

RESULTS AND DISCUSSION

After reviewing the three previous models which analyze innovation characteristics that can be evaluated in actual enterprises, and the characteristics of the study (Mexican MSE), we propose for future research in Morelos Mexico, the following innovation capabilities be measured in Micro and Small Enterprises:

1. Good/Service: MSEs can innovate in the product they deliver to their target market. The characteristics of this product can be turned into a competitive advantage. Many enterprises, before beginning operations, have already observed a specific need or desire to fulfill. a) Characteristics include new features of goods or services and how often are implemented. b. Variety involves providing more than one good or service to meet needs of a certain target market.

2. Market: Actual and potential customers includes the following components: a) Promotion and advertising strategies includes new ways to reach the market and how often are implemented. b) Market segments involve identifying new market segments and how often this aspect is diagnosed. c) new distribution channels that enhance efficiency and speed in the delivering of the goods or services. d) Customer interaction (relationship) which involves measurement of the customer satisfaction and implementation of improvements in this area.

3. Processes: How goods or services are produced. This component includes the following elements: a) Supply chain management involves finding new material resources in order to reduce variable costs. b) Use of technology involves implementation of new technology resources, such as internet, information systems, social media, machinery and equipment. c.) Formalization which involves processing documentation to ensure the quality of goods and services.

4. Organization addresses how resources are oriented to achieve innovation objectives of the enterprise. This element includes a) Sources of economic and human resources includes new recruitment methods, implementation of incentive and rewards systems, new training programs and finding new funding sources.
b) Effectivity of organizational structure including improvements in activities' distribution. and
c) Decision-making processes involve new sources of information to improve the decision making process.

CONCLUSIONS

Micro and small enterprises represent an important source of growth and development for the economies of Latin American countries. In Mexico, more than 98% of total enterprises are micro and small units providing 50% of total employment in the country. These enterprises are essential for our economic survival. Therefore, all the tools available for their consolidation are useful.

Innovation is a key element for businesses success and consolidation in competitive markets. Innovation can be present in any business despite its size and activity. We present a literature review. From this review we conclude that innovation does not necessarily involve high technology or a great amount of economic resources. Innovation is about doing things differently and producing a positive impact on products or processes.

MSEs, more than any other type of enterprises, have to be aware of the environment, behavior and response of the market. These are key elements offering innovation opportunities. MSE enterprises are quite adaptable and flexible. They must realize the importance of innovating and implementing actions toward innovation and constant evaluation has to be done. This is the main reason for developing a model of innovation capabilities for micro and small enterprises. These firms cannot be evaluated as big enterprises, because even small efforts count to be innovative.

To begin this paper, the actual framework of commerce and service MSE in Morelos, Mexico was presented to understand the context in which this research is taking place. The definition of commerce and services enterprises and their important role in the Mexican economy are identified. We also discuss the advantages and disadvantages that Mexican micro and small enterprises represent today in regard to innovation.

Once the study context was set, the paper presents a section dedicated to review different definitions and the importance of innovation. According to the literature, we conclude that innovation is the implementation of something new. It is a product, a process, a marketing method or even an organizational change to make a difference and improve the activities of the enterprise. It adds value for the customer. This improvement ultimately will has a positive economic impact within the organization. Once the importance of innovating was explained and an understanding the characteristics of MSE established, the need for formulating innovation strategies of this kind of enterprises is obvious.

Based on academic journal articles reviewed, we concluded that implementation of innovation strategies is not an easy task for MSE. They face limited access to technology and to economic resources. For this reason identification of innovation capabilities retrieved from the analyzed models are those that MSE can handle. Twelve innovation capabilities were identified and classified into four categories.

This paper is limited to the analysis of innovation and how it can be done in all sizes of enterprises. We also identify what can be assessed in MSEs to lead them through innovation that may help them to improve their operations and accomplish their goals.

Future research will generate an evaluation instrument to measure the proposed innovation capabilities and its indicators, grading them in a sample of MSE of commerce and service sectors in Morelos, Mexico. The main contribution of this body of research is to solve for the lack of information on the innovation topic. We wish to help build better oriented strategies which may allow the micro and small enterprises to improve their performance and profitability.

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GAAP VS. IFRS TREATMENT OF LEASES AND THE IMPACT ON FINANCIAL RATIOS

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CASE DESCRIPTION

As of January 1, 2013, most of the world financial market economies are using International Reporting Standards (IFRS) as the required framework for financial statements. A non-comprehensive listing includes the European Union Countries, Canada, Australia, Japan and New Zealand. In the United States, US Generally Accepted Accounting Principles (GAAP) is still required but adoption of IFRS has support of many accounting firms and professional organizations and is under consideration by the SEC. This case study focuses on differences in the treatment of leases and the impact of these differences on financial statements and selected financial ratios. Students take GAAP financial statements and prepare an IFRS based balance sheet, cash flow statement and income statement. It is necessary to understand both GAAP and IFRS rules regarding leases to address this case study. This case study is suitable for use at both the undergraduate and graduate levels. It may be used in an Intermediate Accounting II, Accounting Theory, Financial Statement Analysis or an International Accounting class, as well as an Investment Finance course. The case can be offered as an individual case study or as a group project.

JEL: M4, M41, M42, M48, M49

KEYWORDS: US GAAP, IFRS, Capital Lease, Operating Lease, Financing Lease, Ratios

CASE INFORMATION

ACE Corporation (ACE), a publically traded NASDAQ company (symbol ACE), is a manufacturer of electrical automobiles. It is based in Detroit, Michigan and the company has been operating since 1996. The company sells their electrical automobiles to auto manufacturers as well as the retail market on a worldwide basis. Its major clients are Ford, General Motors and Toyota. ACE has captured about 10 percent of the world market of the electrical automobile sales. Its stock sells at 25 US Dollars per share, and its 52-week price range is between 19.75 and 27.15 US Dollars, with a market cap of 10.6 billion dollars.

Their financial statements presented below for the year ending December 31, 2012 has been prepared using GAAP. The controller would like to see the effect of IFRS treatment of leases on the financial statements; you have been assigned this task. In particular, the controller would like to see the impact GAAP and IFRS differences have on balance sheet, income statement, cash flow statement and selected financial ratios. The company would like to adapt IFRS by as early as next year as it is considering a new stock issue in the Tokyo Stock Exchange, which requires IFRS compliance.

Table 1: US GAAP Balance Sheet for ACE Corp. at 12/31/2012 and 12/31/2011

ACE CORPORATION Balance Sheet (in 000 Except Par Value) As of December 31, 2012 an d2011				
ASSETS	**2012**		**2011**	
Current Assets				
Cash		$ 33,000		$ 19,000
Accounts Receivable (net)		25,000		17,000
Inventory (FIFO)		50,000		21,000
Total Current Assets		108,000		57,000
Noncurrent Assets				
Security Available for Sale	$ 10,000		0	
Property, Plant and Equipment	100,000		$136,000	
less Accumulated Depreciation	(30,000)		(28,000)	
		80,000		108,000
Intangible Assets				
Trademark	5,000		7,000	
Goodwill	7,000		7,000	
Total Noncurrent Assets		12,000		14,000
Total Assets		$200,000		$179,000
LIABILITIES AND SHAREHOLDERS' EQUITY				
LIABILITIES				
Current liabilities				
Accounts payable		$ 18,000		$ 17,000
Accrued interest		2,000		2,000
Accrued operating expenses		13,000		19,000
Income taxes payable		7,000		6,000
Total current liabilities		40,000		44,000
Noncurrent Liabilities				
Deferred income taxes	$ 5,000		$ 4,000	
Bonds Payable	45,000		45,000	
Total noncurrent liabilities		50,000		49,000
Total Liabilities		90,000		93,000
SHAREHOLDERS' EQUITY				
Common stock ($1 par)	20,000		18,000	
Additional paid in capital	30,000		17,000	
Retained earnings	60,000		51,000	
Total Shareholders' Equity		110,000		86,000
Total Liabilities and Shareholders' Equity			$200,000	$179,000

Table 1 shows the Balance Sheet of Ace Corporation for the years ended 12/31/12 and 12/31/11presented under US GAAP reporting. Note that the presentation is based on the order of liquidity-most liquid items followed by less liquid items.

Table 2: ACE Corp. US GAAP Income Statement for the Year Ended December 31, 2012

ACE Corporation Income Statement (in 000, Except Per Share Data) For the Year Ended December 31, 2012		
Sales		$270,000
Cost of goods sold		(175,000)
Gross profit		95,000
Selling and administrative expenses	$ 31,000	
Amortization and depreciation expense	10,000	
Interest expense	4,000	(45,000)
Income before taxes		50,000
Income tax expense		(15,000)
Income before extraordinary item		35,000
Extraordinary loss from hurricane (net of $6,000 tax savings)		(14,000)
Net Income		$21,000
Earnings per share:		
Earnings per share from continuing operations		$1.75
Extraordinary loss per share		(0.70)
Earnings per share		$1.05

Table 2 presents a statement of income for the year ended 12/31/12 prepared under US GAAP reporting. Also included is the earnings per share amount which is derived by taking net income and divided by the number of common shares outstanding.

Table 3: ACE Corp. US GAAP Cash Flow Statement for the Year Ended December 31, 2012

ACE Corporation **Cash Flow Statement (in 000)** **For the Year Ended December 31, 2012**		
Cash from Operating Activities		
Net income		$21,000
Adjustments for noncash items:		
Loss from hurricane	$14,000	
Depreciation expense	8,000	
Amortization expense	2,000	
Increase in accounts receivable	(8,000)	
Increase in inventory	(29,000)	
Increase in accounts payable	1,000	
Change in accrued operating expenses	(6,000)	
Change in income taxes payable	7,000	
Increase in deferred income taxes	1,000	(10,000)
Net Cash from Operating Activities		11,000
Cash from Investing Activities		
Insurance proceeds	$10,000	
Purchase securities available for sale	(10,000)	
Net Cash from Investing Activities		-0-
Cash from Financing Activities		
Issue common stock	$15,000	
Pay dividends	(12,000)	
Net Cash from Financing activities		3,000
Net increase in cash		$14,000
Cash December 31, 2011		19,000
Cash December 31, 2012		$33,000
Additional supplemental disclosure:		
Cash paid for income taxes		$ 7,000
Cash paid for interest		$ 4,000

Table 3 presents the Statement of Cash Flows for Ace Corp. for the year ended 12/31/12 under US GAAP. The cash flow presented is the indirect method. Alternatively, the Direct method-not presented here is also the other acceptable cash flow statement under both US GAAP and IFRS. The Direct Method is illustrated in the solution for question 5C where the Direct Method is presented in the solution under IFRS.

ADDITIONAL INFORMATION

1. ACE entered into a noncancelable lease on January 2, 2012 with the following terms:

   A. ACE leased specialized machinery manufactured by the lessor, Bell Corp., which enables ACE to manufacture their electric cars in a much more efficient manner. This machinery does not have a resale market and was made specifically for ACE to meet its specifications.
   B. The lease term is for 3 years with an annual lease payment of $10,000. Payment is due on December 31 of each year, with the first payment due on December 31, 2012. At the end of the lease term, ownership reverts to the lessor. There is no option for ACE to buy the equipment.
   C. The lessee will pay all executor costs of $1,500/year which in included in 2102 selling and administration expenses.
   D. The estimated useful life of the lease is 49 months (4 1/12 years.)
   E. The fair market value of the equipment is $30,000 on January 1, 2012.
   F. The implicit rate of Bell Corp. is 6 percent, and the lessee, ACE, knows this.
   G. ACE's incremental borrowing rate is 7 percent.

2. ACE Corporation did not sell any plant assets; however plant assets with a cost of $36,000 and accumulated depreciation of $6,000 were destroyed in a hurricane. Insurance proceeds of $10,000 were collected by the company.
3. Two million shares of common stock were issued at the beginning of 2012.
4. Securities available for sale were purchased on December 31, 2012.
5. Cash dividends were paid during 2012.
6. ACE's bonds payable have several covenants that involve net income and cash from operating activities. The controller is especially concerned that IFRS treatment of leases does not violate those covenants. She is concerned that renegotiating the debt covenants will be costly to ACE.

QUESTIONS

1. Differentiate between an operating lease and a capital/ financing lease for financial reporting purposes.
2. Under GAAP, has this been treated as a capital lease / financing lease or an operating lease by ACE? Why?
3. Under IFRS, should this lease be classified as an operating or a financing lease? Why?
4. Describe the different reporting results between GAAP and IFRS and make the necessary adjusting entries to conform the financial statements to IFRS compliance for 2012.
5. In answering the following parts, keep in mind companies usually prefer to report higher net income and higher cash from operating activities (although accounting research has identified exceptions to this).
   A. Prepare an income statement under IFRS for 2012.
   B. Prepare balance sheet under IFRS on December 31, 2012.
   C. Prepare a cash flow statement under IFRS for 2012.
6. Compute the following ratios for 2012, under both IFRS and GAAP reporting:
   Current Ratio
   Quick Ratio
   Cash Ratio
   Times Interest Earned
   Debt to Capital Ratio
   Debt to Shareholder Equity Ratio
7. Comment on your findings in 6 above.

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U.S Generally Accepted Accounting Principles (US GAAP).

GAAP VS. IFRS TREATMENT OF LEASES AND THE IMPACT ON FINANCIAL RATIOS

TEACHING NOTES

CASE DESCRIPTION

This case focuses on GAAP and IFRS differences in the treatment of leases and the grounds for classification as an operating or capital lease. It is designed to have students conduct research on GAAP and IFRS pronouncements. They must compare and contrast the differences in the treatment of leases under the two frameworks. It also requires students to prepare the adjusting entries for the conversion to IFRS. They will prepare IFRS statements, and compute and compare financial ratios for both GAAP and IFRS statements. Finally, they will discuss the status of IFRS lease adoption and the impact of its adoption in the US. Since this case requires research into GAAP and IFRS pronouncements, it is most appropriate for students who have completed or are currently enrolled in intermediate financial accounting II. It can be used at the graduate or undergraduate levels in a variety of additional financial reporting courses including accounting theory, international accounting, and financial statement analysis, as well as an investment finance course.

CASE LEARNING OBJECTIVES

The case is designed to have students identify reporting issues and apply U.S. and international authoritative accounting literature by researching the FASB Accounting Standards Codification and the International Financial Reporting Standards (IFRS).

The specific learning objectives are for the student to:

a) Identify differences in GAAP and IFRS treatment of leases:
b) Prepare adjusting entries to convert GAAP based financial statements to IFRS income statement and balance sheet,
d) Prepare an IFRS income statement, cash flow statement and balance sheet and
e) Calculate several ratios to illustrate the impact adopting IFRS accounting for leases could have on them.

Suggested Teaching Approach

The case may be offered as an individual case study or as a group project. For more advanced accounting students, this case should be an individual project. It could have a weight of 10-15 % of the final course grade. When offered as an individual project, students will need three to six hours to research and prepare the case solution.

For less advanced students, the case may be offered as a collaborative group project. This would enable students to demonstrate and develop team-working skills. The case presents an opportunity to discuss the status of IFRS implementation in the US and the impact IFRS had on ACE Corp. The in-class review of the solution and case discussion can be completed as part of a 50-minute class.

In grading the case write-ups, instructors should evaluate the identification of relevant issues, proper accounting for the IFRS conversion and computation of the ratios including the computational accuracy of numbers, quality and depth of research as evidenced by proper citations of the literature. We suggest that the instructor explain the basis for grading at the outset.

Pointers for Classroom Discussion

After the review of the IFRS statements, the instructor may wish to discuss the impact of IFRS. Suggested questions to ask the class are: What impact will IFRS have on ACE Corp.'s income statement, cash flow statement and balance sheet? What are the benefits of adopting IFRS? What are the disadvantages of IFRS?

You may wish to have students research the status of the FASB/IASB discussions on leases..

SUGGESTED SOLUTION

Question 1: Differentiate between an operating lease and a Capital/ Financing Lease for financial reporting purposes.

Solution 1: Operating lease payments are treated as rent expense and recorded on the income statement. An operating lease is an off balance sheet transaction and is preferred by companies because it lowers liabilities, the debt ratio and does not result in "frontloading expenses" in the early years as does a capital lease.

A GAAP capital lease is treated as a purchase of Property, Plant and Equipment and, therefore, capitalized on the Balance Sheet. Capital leases are termed "financing (or finance) leases" under IFRS. The present value of minimum lease payments required on the lease are recorded as a liability on the balance sheet. The discount rate is the lessee's incremental borrowing or the implicit rate of the lease, if it is lower and known by the lessee. The liability is separated into its current and long-term components, which affects the current ratio.

Pointers for Classroom Discussion

Discuss the differences between rules based US GAAP versus principles based IFRS requirements for distinguishing between operating versus capital/financing leases.

Question 2: Under US GAAP, is the lease treated as a capital lease / financing lease or an operating lease?

Solution 2: Under GAAP, if the lessee has a noncancelable lease and meets at least one of the four tests listed below, the lease is treated as a capital lease; otherwise, it is an operating lease.

Test 1: Transfer of Ownership Test: If at the end of the lease term, ownership transfers to lessee, then this test is satisfied. Test 1 is not met in this case, as there is no transfer of ownership at the end of 2014.

Test 2: Bargain Purchase Option: If the lessee has the option to purchase the lease at a bargain purchase price, then this test is satisfied. In this case, there is no purchase option (bargain or not), so test 2 is not met.

Test 3: Economic Life Test: If the lease term is equal to or greater than 75% of the economic life of the asset, it is a capital lease. In this case, the lease term is 36 months divided by the economic life of 49 months, yields 73%; Test 3 is not met.

Teat 4: Economic Recovery Test: If the present value of the minimum lease payments is 90 percent or greater of the fair market value of the asset then it is a capital lease. In this case, the present value of the minimum lease obligation is $26,730 (see Table 3). This divided by the fair market value of the leased asset of $30,000 is 89 percent; just shy of the 90% requirement. Test 4 is not met.

Since none of the four tests is met, the lease is treated as an operating lease to the ACE Corp. under US GAAP. Note should be made that ACE just missed some of these tests by fractional amounts.

Table A: Minimum Lease Payments

Date	Payment	Interest (6%)	Principal	Liability Balance
Jan. 2, 1012				$ 26,730
Dec. 31, 2012	$ 10,000	$ 1,604	$ 8,396	18,334
Dec. 31, 2013	10,000	1,100	8,900	9,434
Dec. 31, 2014	10,000	566	9,434	0
Totals	$ 30,000	$ 3,270	$ 26,730	N/A

Table A shows the interest and principle payments for each year of the lease. It also shows the liability at the end of each year. The interest expense is the beginning of the year lease obligation multiplied by the 6% interest rate.

Pointers for Classroom Discussion

Discuss why a corporation has an incentive for making a lease classification as operating rather than capital. The reasons, as discussed above are avoiding recording current and noncurrent liabilities and the frontloaded expenses in the early years; however, there is one positive aspect of a capital lease – under operating leases, the lease payment is classified as an operating cash payment which reduces cash from operating activities. As a capital lease the interest part of the lease payment is classified as an operating activity but the principal reduction payment is classified as financing. Treatment under IFRS of the cash payment on a finance lease is the same.

Question 3: Under IFRS, should this lease be classified as an operating lease or a financing lease?

Solution 3: Under IFRS, this lease is clearly a financing/capital lease as the criteria of lease type is based on principles, and not rules. Under IFRS, if the lessee assumes the economic benefit and risks of the leased asset, and the facts of the situation are such that the lease resembles a financing lease, then it is treated as a financing lease. The fact that this machine is specialized in nature for ACE's use, and many of the tests under GAAP are nearly met are indicators of a finance lease rather than operating lease. The lessor manufactured this equipment to ACE's specifications and in effect transferred the risk to ACE upon the inception of the lease. Further, ACE was able to circumvent the capital lease rules under GAAP by making estimates work to its advantage.

Question 4: Describe the different reporting results between GAAP and IFRS and make the necessary adjusting entries to conform the financial statements to IFRS compliance for 2012.

Solution 4: In each of the three years of the lease, GAAP treats the operating lease payment of $10,000 as rent expense on the income statement and no liability is recorded on the balance sheet.

A: Year of lease Inception (2012):
Under IFRS, the financing/ capital lease is treated as a purchase of property, plant and equipment and capitalized on the balance sheet as such for $26,730. Additionally, the minimum lease obligation is shown on the balance sheet as a liability of $18,334 ($26,730 less the year 1 payment of $8,396). Of this amount, $8,900 is classified as a current liability and $9,434 is classified as a long term liability. On the income statement, depreciation expense is $8,910 (26,730 divided by the lease term of 3 years) and interest expense is $1,604, for a total of $10,514.

B: Subsequent to Year of Inception - 2013 and 2014 of lease payments:
IFRS: The $10,000 lease payment is treated as an interest expense as calculated above; $1,100 in 2013 and $566 in 2014 in addition to a depreciation expense of $8,910. Over the 3-year period, the total expense will be the same ($30,000) under both methods of reporting (operating v. capital/financing.)

ADJUSTING ENTRIES 2012 TO CONFORM TO IFRS

1- This is a summary journal entry that records the leased asset as a capital lease, records the current and noncurrent portions of the lease liability (as of December 31, 2012), and "reclassifies" the December 31, 2013 lease payment from rent expense to interest expense and a reduction of the lease liability.

Lease asset	26,730	
Interest expense	1,604	
Lease obligation – current liability		8,900
Lease obligation – noncurrent liability		9,434
Selling and administrative expenses		10,000

2- This entry records the leased asset amortization expense for 2012. using straight line amortization.

Amortization expense	8,910	
Accumulated amortization		8,910

3. This entry reclassifies the extraordinary loss into the body of the income statement, see the discussion below (in 4) for the reason. The income tax effect of the loss is also discussed in 4, below.

Loss from hurricane	20,000	
Extraordinary loss from hurricane		20,000

There is no prompt in the case for the reclassification in 3. Students must demonstrate critical thinking by identifying that IFRS does not allow for the use of an extraordinary item. It is important to point out that we should not be so focused on one issue (lease treatment) that we overlook other issues that should be apparent.

3a. Entry 3 assume that ACE made the following entries during 2012 when the loss, insurance recovery and related tax savings were recorded:

Cash	10,000	
Accumulated depreciation	6,000	
Extraordinary loss from hurricane	20,000	
Property, plant and equipment		36,000
Income tax payable	6,000	
Tax savings from hurricane loss		6,000

The tax savings was netted against the extraordinary loss on the US GAAP.

4. This entry reclassifies taxes saved from the hurricane loss (which GAAP netted with the extraordinary loss, but IFRS would include with income tax expense); the entry also records the deferred tax effect of switching to IFRS for public reporting purposes, but not switching for income tax purposes.

Tax savings from hurricane loss	6,000	
Deferred income taxes	154	
Income tax expense		6,154

Adjusting entry 4 assumes ACE made the following summary entry to record income taxes in 2012:

Income tax expense	15,000	
Deferred income taxes		1,000
Tax savings from hurricane loss		6,000 (netted against the hurricane loss)
Income taxes payable		1,000
Cash		7,000

It also assumes that ACE would continue to report the lease as a operating lease for income tax purposes, therefore the tax ACE owed for 2012 would not change, but there would be a reduction of deferred income taxes for the tax rate times the difference between the expenses reported under a financing lease (amortization expense plus interest expense) and the rent expense reported under an operating lease [30% * (8,910+1,604)-10,000].

Pointers for Classroom Discussion

Show that under capital/financing lease treatment, the expense will be greater in the early year(s), resulting in lower income, and lower in the latter year(s), showing a higher income. In the entire term of the lease, each method will yield identical expense totals. Use of the amortization schedule will illustrate this clearly. However, it is worth pointing out that the IFRS treatment of a financing lease is favorable to the company's reported cash from operating activities on the cash flow statement.

Question 5A: Prepare an Income Statement under IFRS for 2012. Assume that the net income remains the same under IFRS as it does for GAAP and any difference is reconciled in the tax expense and tax payable accounts.

Solution 5A:

Table B: ACE Corp. IFRS Income Statement for the Year Ended December 31, 2012

ACE Corporation Income Statement (in 000, except per share data) For the Year Ended December 31, 2012			
Sales			$270,000
Cost of goods sold			(175,000)
Gross profit			95,000
Selling and administrative expenses	$ 31,000 – 10,000(1) = 21,000		
Amortization and depreciation expense	10,000 + 8,910 (2) = 18,910		
Interest expense	4,000 + 1,604 (1) = 5,604		
Loss from hurricane		(3) 20,000	(65,514)
Income before taxes			29,486
Income tax expenses		15,000 – 6,154 (4) =	(8,846)
Net Income			$ 20,640
Earnings per share:			$1.03

Table B shows the impact on the income statement of the conversion to IFRS. The numbers in parenthesis refer to the adjusting entry made to record the conversion to IFRS.

Table D presents the Cash Flow Statement under IFRS using the Direct Method.

Question 5B: Prepare a Balance Sheet under IFRS for 2012.

Solution 5B:

Table C: ACE Corp. IFRS Balance Sheet as of December 31, 2012.

ACE Corporation Balance Sheet (in 000 except par value) using IFRS As of December 31, 2012 and 2011				
	2012		**2011**	
ASSETS				
Intangible Assets				
Trademark		$5,000	$7,000	
Goodwill		7,000	7,000	
Total Intangible Assets		12,000		$14,000
Noncurrent Assets				
Property, Plant and Equipment [1]	$126,730			
less Accumulated Depreciation & Amortization [2]	(38,910)		136,000	
	87,820		(28,000)	
Security Available for Sale	10,000		0	
Total Noncurrent Assets		97,820		108,000
Current Assets				
Inventory (FIFO)	50,000		21,000	
Accounts Receivable (net)	25,000		17,000	
Cash	33,000		19,000	
Total Current Assets		108,000		57,000
Total Assets		$217,820		$179,000
LIABILITIES AND SHAREHOLDERS' EQUITY				
EQUITY				
Share capital	$20,000		$18,000	
Share premium	30,000		17,000	
Retained earnings *	59,640		51,000	
Total Shareholders' Equity		$109,640		$86,000
LIABILITIES				
Noncurrent Liabilities				
Lease obligation – noncurrent liability [3]	9,434		0	
Deferred income taxes [4]	4,846		4,000	
Bonds Payable	45,000		45,000	
Total noncurrent liabilities		59,280		49,000
Current liabilities				
Accounts payable	18,000		17,000	
Accrued interest	2,000		2,000	
Accrued operating expenses	13,000		19,000	
Income taxes payable	7,000		6,000	
Lease obligation – current liability [5]	8,900		0	
Total current liabilities		48,900		44,000
Total Liabilities		90,000		93,000
Total Liabilities and Shareholders' Equity		$217,820		$179,000

Table C shows the IFRS Balance Sheet after conversion. Where adjustments were necessary, they are indicated next to the account. Note that IFRS recommends listing accounts in reverse order of liquidity. The common stock is shown as share capital and additional paid in capital as share premium.

[1]	*100,000 + 26,730 (1) = 126,730*	*	*Retained earnings Dec. 31, 2011*	*$51,000*
[2]	*30,000 + 8,910 (2) = (38,910)*		*IFRS net income*	*20,640*
[3]	*(1) $9,434*		*Dividends declared*	*-12,000*
[4]	*$5,000 – 154 (4)= 4,846*		*Retained earnings Dec. 31, 2012*	*$59,640*
[5]	*8,900 (1) 8,900*			

The numbers in parenthesis refer to the adjusting entry made to record the conversion to IFRS

Table D: ACE Corp. IFRS Cash Flow Statement as of December 31, 2012

ACE Corporation **Cash Flow Statement (in 000) using IFRS** **For the Year Ended December 31, 2012**		
Cash from Operating Activities		
Cash collected from customers [1]		262,000
Cash paid for inventory [2]		(203,000)
Cash paid for selling and administrative costs [3]		(27,000)
Cash paid for income taxes [4]		(7,000)
Net Cash from Operating Activities		25,000
Cash from Investing Activities		
Insurance proceeds [5]	$10,000	
Purchase securities available for sale [6]	(10,000)	
Net Cash from Investing Activities		-0--
Cash from Financing Activities		
Issue common stock [7]	15,000	
Cash paid for interest [8]	(5,604)	
Payment on financing lease [9]	(8,396)	
Pay dividends	(12,000)	
Net Cash from Financing activities		(2,604)
Net increase in cash		$14,000
Cash December 31, 2011		19,000
Cash December 31, 2012		$33,000

Noncash inventing and financing activity: Ace recorded a $26,730 finance leased asset. (This could also be disclosed in the notes to the financial statements.)

[1] Sales	*$270,000*	*[2] Cost of goods sold*	*$(175,000)*
Increase in acct. rec.	*(8,000)*	*Increase in inventory*	*(29,000)*
	$262,000	*Increase in acct. pay.*	*+ 1,000*
			$(203,000)
[3] Selling & admin. exp.	*$(21,000)*		
Dec. in accrued oper. exp.	*(6,000)*	*[4] Income tax expense*	*$(8,846)*
	$(27,000)	*Increase in income tax payable*	*1,000*
		Increase in deferred tax liability	*846*
[5] Given in case			*$(7,000)*
		[6] Given in case	
[7] Chance in common stock (share premium)	*$ 2,000*	*[8] Interest expense*	*$(5,604)*
Change in APIC (share premium)	*13,000*	*Change in interest payable*	*0*
			$(5,604)

Question 6: Ratio Calculations on December 31, 2012

Solution 6:

		GAAP	**IFRS**
Current Ratio=current assets/current liabilities		2.70	2.21
$108,000/$40,000	$108,000/$48,900		
Quick Ratio=current assets-inventory/current liabilities		1.45	1.19
(108,000-50000)/40,000	(108,000 – 50,000)/48,900		
Cash Ratio=cash/current liabilities		0.83	0.67
33,000/40,000	33,000/48,900		
Times Interest Earned =EBIT/ Interest Expense		8.50	8.83
34,000/4,000	49,486/5,604		
Debt to Capital Ratio=Total Liabilities/Total Assets		0.45	0.50
90,000/200,000	108,180/217,820		
Debt to Shareholder Equity Ratio=Liabilities/Shareholder' Equity		0.82	0.99
90,000/110,000	108,180/109,640		

Financial ratios: The ratios presented above compare the effects of using US GAAP versus IFRS. Solution 7 presented below, provides an overview conclusion of the effects of using US GAAP versus IFRS and the resulting financial consequences on these key 6 ratios.

Question 7: Comments

Solution 7: The ratios clearly indicate that IFRS rules result in more conservative ratio results with respect to the current and long-term creditor when compared to US GAAP. Every liquidity ratios is lower under IFRS and the differences are significant. Similarly, all long-term ratios are also more conservative when compared to US GAAP. The implications here is that IFRS will have far greater negative implications on bond covenant agreements as well as other long and short-term creditor legally binding agreements than US GAAP.

CONCLUSION

IFRS is the future of worldwide financial reporting and should be included as a major part of any accounting and/or business curriculum in the US, as well as the rest of the world. This case illustrates a situation where a Balance Sheet and Income Statement is prepared using GAAP as a basis and converted to IFRS for comparison purposes, with the focus being from the creditor point of view. In this case study, IFRS rules are discussed, and key lease GAAP and IFRS accounting similarities and differences are addressed and the implications on the corporation's creditors.

BIOGRAPHY

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A REAL WORLD CASE OF IDENTITY THEFT

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CASE DESCRIPTION

This case examines a real world case of identity theft from start to finish. The case details the victim's experience from the day he was told he had insufficient funds in his bank account and realized that he had been the victim of fraud until the resolution of the fraud. By completing the case, students will learn steps to prevent identity theft and also actions they can take if they do become victims of identity theft. The case was designed to be used in either undergraduate or graduate level classes. It is suitable for an Introduction to Business, an Ethics or a Fraud Detection and Deterrence course. Students typically require one to two hours outside of class to complete the case. The instructor should budget approximately one hour of class time to go over the case in class.

JEL: M40, M19

KEYWORDS: Identity Theft, Fraud

CASE INFORMATION

Local Bank and Checking Account

Jim, a resident of the Northeast, returned home from a week spent out-of-state on vacation. Later the same day, Jim went to the local branch of his bank to cash a personal check. The branch was located across the street from his home and some of the bank tellers knew him as a regular customer. Jim was informed by the bank that his account had insufficient funds to cover the amount of the check. Knowing that there should have been approximately $5,000 in the account, he was a little confused. He thought that perhaps he had made a mistake and had inadvertently tried to cash the check on a different checking account. However, he soon realized that it was the correct account and that he had been the victim of fraud. Jim asked the bank teller how his account had insufficient funds to cash his check and he was told that a check had been recently cashed from that account in the amount of $5,200. Jim then asked for a copy of the check in order to see who had signed it. The bank indicated that the signature resembled the one they had on file for him (apparently in a folder), and although while not a match, the signature on the check was close enough for the teller not to question the validity of the fraudulent check. The thief had a fraudulent driver's license with the victim's name on it and the thief's picture, who was a different race than Jim. The teller who accepted the check from the thief was not one of the tellers who knew Jim.

A representative from the bank informed the victim that the bank had video of the person who had cashed the fraudulent check. Jim was further told that the video was recorded earlier the same day that he had come into the bank upon returning from vacation. He asked the bank to produce the video, but they never did. Jim demanded that the stolen funds be placed back in his account. However, due to the timing of the thief cashing a check and the Jim's attempt to cash another check, the bank had reason to suspect that the 'victim' might be attempting to 'defraud himself', pretending to know nothing about the situation and then claiming he was the victim of fraud. The bank said that they would only place the funds back in the account if local police were satisfied that he had nothing to do with the situation. After being questioned by detectives, Jim agreed to take a polygraph test at taxpayer expense. The test was delayed for weeks, despite the victim

pressing to take it as soon as possible so he could get the funds placed back in his account. Jim demanded to take the test but couldn't get detectives to return his phone calls, and he eventually contacted a supervising officer in the police department. He explained the delay and the lack of response from the detectives. The test was then scheduled to be administered a few days later. Jim passed the test and then took the test a second time to verify the results, which he also passed. (Prior to taking the polygraph, the tester talked with Jim for 10-15 minutes, asking him questions about his family life, parents' occupations, his brothers and sisters, what he does for a living, hobbies, etc., in order to get to know him a little bit. The tester said that he had been administering these tests for about 25 years and he told Jim after the test results were completed that he knew from talking with him that he had nothing to do with the situation.) The police then sent a letter to the head of security of Jim's bank acknowledging the result of the tests. A week later the $5,200 was deposited back into the victim's account, which was about three months since the initial discovery of fraud.

Check Printing

Jim had previously used an Internet-based check printing company for his personal checks in order to save money. He did not know how the thieves gained access to his checking account number, but armed with that number, as well as, presumably, his mother's maiden name, they were able to successfully order the fake checks. These checks were out of sequence from the Jim's actual checks. Also, the style of the fraudulent checks (very generic) was not the same as the checks Jim had previously ordered. The thieves had the checks overnighted to Jim's house so they would know when to wait outside of his house in order to 'intercept' the package, posing as Jim. This way, they could avoid filing a change of address with the check printing company, which may have raised suspicion. (It was unclear if the thieves knew the victim was away on vacation.)

Jim had previously noticed a check for a small amount that had cleared his checking account that was payable to a local branch of a National automotive service center. (He later learned the check was for some automotive parts.) The thieves used the check to test to see if the check would clear the bank. Jim saw that this small check had cleared his account, but he was busy preparing to leave for vacation at the time, and as a result, did not put a hold on the account and look into the matter with his bank. The thieves had apparently verified the current balance in the checking account with the bank, as the small test check was followed up with the $5,200 withdrawal, almost emptying out the account. Subsequently, Jim got a phone call from the garage informing him that he owed for some repairs. He immediately informed the garage that this was a fraudulent transaction, as he had only purchased gas there, but never had repairs done. Jim was informed that the purchase was made by a woman with a child in a Jeep Cherokee. Jim explained that he wasn't married, had no children, and didn't own that vehicle. The garage rep said he had written down the VIN number in case it was fraud. Jim told him to report this information to the local police department, as the detectives are currently working on the case. The garage reported the information and the following day the local police department informed Jim that the VIN number from the Jeep Cherokee matched the VIN of a van registered to a company in Northern New Jersey.

Credit Cards

Fraudulent activity also occurred with Jim's credit cards. The thieves had enough information to re-open two previously closed credit accounts, including one that had been paid off for the final time about five years earlier. The thieves were able to supply enough of Jim's personal information, which presumably included his Social Security number, full name, mother's maiden name, home address, telephone number and account number. Posing as Jim, they used the excuse that the he was going on vacation, and needed checks and credit cards. After the request was made, they waited for delivery outside of Jim's residence, possibly showing fraudulent identification to the driver. This part of the scheme was made easier as Jim lived in a condominium. Had Jim lived in a single-family home, this scenario may have raised some

suspicion. While he was away on vacation, thieves went on a shopping spree in local malls with fraudulently obtain credit cards, buying thousands of dollars of mostly children's clothing. (Jim had no children.)

It was not known how the thieves obtained Jim's personal information necessary to perpetrate the fraud. One of the only hints may be that a few pieces of mail turned out to have been missing during the months leading up to the discovery of fraud, including a credit card statement and a cable television bill. Jim suspected after the fact that the thieves might have been collecting information, specifically account numbers.

Credit Line

Jim also got a phone call from a furniture company which informed him that a piece of furniture that had been backordered had arrived for him. The thieves had applied for credit and purchased a few thousand dollars' worth of bedroom furniture, including waterbeds and dressers. They had previously picked up their items at the store rather than have them shipped to a location. So when the backordered item arrived and the thieves were long gone, the store called the Jim, who subsequently went to the financial institution that had provided the credit for the furniture purchases. He was told by the financial institution that the people who applied for the credit came into the location in person, where they completed the paperwork (and/or possibly were told that they needed to be interviewed regarding their financial situation). Jim inquired as to who was the furniture rep that met with the thieves, and he was told that that individual no longer worked at the store and could not be located. Subsequently, Jim heard that this person had been associated with some other suspicious transactions actions at the same financial institution, but it was not known if this person had anything to do with this situation. Jim asked a rep at the financial institution why someone didn't call to verify his place of employment, and he was told that someone did call, and 'verified' his employment there. However, Jim had never been employed by the company that was called.

Jim, who had earned an associate's degree in Science and Law Enforcement, played detective, even prior to police involvement, and worked as his own advocate in order to find those responsible. He made a point to go to the various organizations involved in this case in order to speak face-to-face with supervisors, including those at the furniture store, financial company and bank. Jim felt that looking into his case was also good for his psyche, being able to do something and not feel so helpless.

Wrap-up

The thieves had taken money from the victim's checking account (through the fraudulent checks), made purchases using Jim's credit card, run up charges related to car repairs, and used credit in his name to purchase furniture. In all, approximately $15,000 in fraudulent charges was made. In the end, the Jim was able to get back almost all of the stolen funds, including the $5,200 withdrawn from his checking account, as well as the various fraudulent charges made on credit cards (Jim recalled that he did not get back the small amount of the original check the thefts used to 'test' his checking account).

Jim had to straighten out his credit report with the three reporting agencies, providing them with reports from local police. In addition, he requested that his bank, credit card companies, and loan institution report the fraud to the credit reporting agencies, which they did. He also put a fraud alert on his credit with the three agencies. Jim continues to get credit reports to insure that everything is straightened out, and his credit rating has remained high. He was able to get everything resolved within one year, but it cost him many hours making phone calls, going to meetings and writing letters. No one who committed any of the fraudulent activity related to his case was ever identified.

QUESTIONS

1. What could the victim's bank have done differently that could have potentially stopped or limited the fraudulent activity?

2. After the fraudulent activity had been discovered, Jim met with a representative of the check printing company regarding policies/controls that the company should consider implementing in order to help identify fraud in the future. What changes would you recommend to the company?

3. What could the furniture store have done differently that could have potentially stopped or limited the fraudulent activity?

4. What could the credit card company have done differently that could have potentially stopped or limited the fraudulent activity?

5. Is there anything the victim could have done *prior* to the fraudulent activity that could have helped to *prevent* this fraud?

6. Is there anything else the victim could have done *after* the fraudulent activity that could have minimized the fraud?

A REAL WORLD CASE OF IDENTITY THEFT

TEACHING NOTES

J. Drew Procaccino, Rider University
Maria H. Sanchez, Rider University

CASE DESCRIPTION

This case examines a real world case of identity theft from start to finish. The case details the victim's experience from the day he was told he had insufficient funds in his bank account and he realized that he had been the victim of fraud until the resolution of the fraud. By completing the case, students will learn steps to prevent identity theft and also actions they can take if they do become victims of identity theft. The case was designed to be used in either undergraduate or graduate level classes. It is suitable for an Introduction to Business, an Ethics or a Fraud Detection and Deterrence course. Students typically require one to two hours outside of class to complete the case. The instructor should budget approximately one hour of class time to go over the case in class.

GENERAL COMMENTS

This case is based on an actual identity theft. Names and minor details have been changed to preserve anonymity. By completing this real world case study, students can go beyond textbook learning. It gives them a chance to see how easy it is for identity theft to take place in the real world. The case should help students develop both written and oral communication skills. This case is appropriate for an Ethics, Introduction to Business or a Fraud Detection and Deterrence course, and it can be used at either the undergraduate or graduate level.

The authors assign the case as an individual assignment, allow approximately one week for the students to complete the case, and spend one class period discussing the solutions on the day the case questions are due. We have found that students find the case to be interesting and informative, and students almost always note to us that upon completion of the case, they plan to be more diligent in protecting their own identity.

QUESTIONS

Question 1: What could the victim's bank have done differently that could have potentially stopped or limited the fraudulent activity?

Solution 1: The bank should have procedures in place to flag unusual transactions. These include asking for two forms of identification or providing answers to security questions for transactions over a certain dollar threshold. In addition, the bank could have a copy of the account holder's driver's license on file and use it to compare to the customer attempting a transaction. They should also verify the customer's signature with the one on file. Customers should be notified of any out of sequence checks. The bank should advise customers to notify the bank when the customer will be out of town. Additionally, procedures should be in place to flag instances of an account being accessed in two different geographic locations within a short period of time.

Question 2: After the fraudulent activity had been discovered, Jim met with a representative of the check printing company regarding policies/controls that the company should consider implementing in order to help identify fraud in the future. What changes would you recommend to the company?

Solution 2: When a customer places an order for new checks, the company should verify this order with the customer via an e-mail address held on file, and then ask the customer to provide the next check number

in the sequence. This number should then be compared to the highest check from the last known check order, if applicable. Alternatively, the company should advise the customer via e-mail if a set of newly ordered checks would be out of sequence from the last ordered set. The company should also note if the style/color of the newly ordered checks differs from the previous order. In addition, any request to ship the checks overnight, as opposed a more typical three-to-five day delivery, should be questioned and noted. If the company has any doubts regarding the authenticity of the check order, they could suggest to the customer that they can ship the order to the customer's bank, instead of home address, where they could be picked up after showing proper identification

Question 3: What could the furniture store have done differently that could have potentially stopped or limited the fraudulent activity?

Solution 3: The store should do background checks on employees. When there is an employee who was noted to have suspicious activity, the store should have investigated other transactions with which this employee was involved, and then follow up with customers as necessary. Also, customer pick-up of large items should be noted as a possible indication of fraudulent activity. It should be noted that when the financial institution ran a credit report on Jim, it should have been a red flag that two credit cards had recently been opened.

Question 4: What could the credit card company have done differently that could have potentially stopped or limited the fraudulent activity?

Solution 4: The credit card company should have contacted the customer to confirm the unusual transaction of re-opening closed credit cards. In addition, they should have flagged suspicious/large transactions, and contacted the customer to verify that these were legitimate transactions before allowing the charges to go through.

Question 5: Is there anything the victim could have done *prior* to the fraudulent activity that could have helped to *prevent* this fraud?

Solution 5: Since the victim did not know how his personal information had been compromised and his identity stolen, any of the following measures *might* have help: protect all personal information including Social Security number, account numbers, mother's maiden name, etc.; alert bank and credit card companies when he would be on vacation and where; shred all paper that contains personal information with a cross-cut shredder; continuously monitor bank and credit activity; be on alert for missing mail; consider using a locked mailbox with a key; put mail on hold with the post office while on vacation; order checks directly from the bank and arrange to pick them up at the bank; never give out personal information over the phone; be aware of email "phishing" activity.

Question 6: Is there anything else the victim could have done *after* the fraudulent activity that could have minimized the fraud?

Solution 6: Jim should have immediately reported the fraudulent 'test' check, as well as instructing the credit agencies to put a fraud alert on his file. He should also have considered filing a complaint with the FTC and notifying the Social Security Administration and the Department of Transportation. In addition, he should have immediately changed all passwords on his personal accounts, in particular those associated with any financial institutions. Lastly, he (and the investigating detectives) should have continued to request that the bank provide a copy of the video that presumably captured the thieves.

BIOGRAPHIES

J. Drew Procaccino is an Associate Professor of Information Systems at Rider University. He received his Ph.D. in Information Science & Technology from Drexel University, his MBA from Rider University, and a Bachelor of Science from Rider College, and Bachelor of Science from Ursinus College. His research has focused on identity theft and management of software development projects. He can be contacted at Rider University, 2083 Lawrenceville Rd., Lawrenceville, New Jersey 08648, USA, Email: procaccinod@rider.edu.

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