

# Triggers and Conditions for Innovations in Dubai

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March 2009

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## ABSTRACT

The dissertation was set out to get a thorough understanding of innovation in general, the different factors that may trigger the adoption of the innovation, and the conditions required in the organization to ensure the innovation's success. The dissertation aims to enhance the level of innovation in the United Arab Emirates' organizations, and specifically in Dubai's organizations. This can be established through the understanding of the main triggers and conditions that are associated with successful innovations in Dubai's organizations. Provided that innovation is claimed to survive organizations through tough market situations, this dissertation seemed timely due to the current global credit crunch crisis. Considering the importance of this topic and its different dimensions, mixed approach research was selected for this dissertation. The surveys and interviews were conducted concurrently to collect different information and data from both targeted populations. The findings of the dissertation revealed several external triggers for innovation in Dubai's organizations, such as the client's demand and the market conditions. The suggested internal triggers were management's characteristics, and vision. The proposed organizational conditions that seemed associated with successful innovations were the organization's culture, climate, structure, employee empowerment, and the allocation of innovation champion. On the one hand, Dubai's organizations seemed to associate innovation significantly with the organization's climate, staff empowerment, and the allocation of innovation champion. On the other hand, innovation in Dubai's organizations seemed to be specifically dependent on the level of staff empowerment, and a positive organizational climate. The dissertation was concluded with a set of recommendations to improve the main organizational conditions that are associated with innovation. This included : guidelines on emplacing an appropriate staff empowerment, setting an "Enterprise Integration Group" to align the organizational climate with the organization's direction, proposed different approaches on allocating innovation champions, and finally, additional recommendations included different suggestions on enhancing the organizational culture, management skills, and employee development.

## DEDICATION

For the one person who always loved me, supported me, prayed for me, believed in me, and constantly pushed me to higher levels I never knew I could reach. I love you beyond what words can ever describe. To you, my beloved mother, Layla Bushehri, I dedicate this dissertation.

## ACKNOWLEDGEMENTS

First of all, I would like to deeply thank my advisor Dr. Dulaimi for his constant support and guidance throughout the dissertation phase. Thank you for always painting the bigger picture for me, and being the biggest advocate for my topic.

I would like to thank Mrs. Lynn Randall for her continuous direction and assistance in writing the dissertation. Thank you for keeping your door opened for any urgent query I had on writing certain chapters.

I would like express my sincere gratitude for my very supportive management at my work: Nasser Rafi, Kenneth Foong, Wesam Lootah, and Sam Wei Hoong. Thank you for understanding the importance of this dissertation, and always advising me on the dissertation in general, and giving me the required time off so that I could achieve in my studies. Also, I would like to acknowledge the support from my colleagues at work, who kept on reminding that I'm doing the right thing, and always cheered me up whenever I felt overwhelmed between my work and studies.

I would like to thank my mother, father, and the rest of my family for always supporting my studies, offering assistance, and always being there. Also thanks to my dear brothers, Ahmed and Amin, and my cousin Insiyah for often teasing me when I am tired, knowing that it is the only thing that will always boost me up.

And of course my dear friends Muna and Sara, thank you for always giving me the emotional support I need when the light at the end of my tunnel seemed to be turned off! And for all the academic advises whenever I needed. My dear friend Maryam, for always being proud of me, reminding me of the achievement I am heading to, and praying for my success. Thanks for the rest of my friends who always cheered for me, encouraged me, and understood that when I lose contact with them, it is only cause of my studies.

Thank you all!

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## **Chapter 1: Introduction**

This chapter introduces the topic of innovation and examines its main themes. Then, the chapter presents a background on the topic, defines the need for this dissertation, followed by the aims, objectives, and research questions of the dissertation. And finally, the chapter describes the structure of the overall dissertation.

### **1.1. Overview**

Innovation is a phrase that is widely used in the business world, yet few people really understand what innovation is actually about.

Innovation is mainly thought off as inventing new products, but the research shows that innovation can also be by introducing new organizational processes and methodologies (Rosenkranz, 2003; Zhao, 2005; Damanpour, 1987). Innovation can occur by improving the current products and processes, and making them more efficient and effective (Cooper, 1998; Deppe et al, 2002; Taatila et al, 2006 ). It can also be through addressing new market segments that may have been overlooked previously (Johne, 1999 ; Brown, 1992; Drucker, 2002).

There are certain fields of innovation that are very essential for organizations. One field can be the understanding of factors that provoke and trigger innovations in organizations, whether those factors are internal or external to the organizations (Wolfe, 1994; Taatila et al, 2006 ). Understanding this area assists organizations in recognizing the importance of those triggering factors and be more attentive to what they may provoke.

However, the presence of the above mentioned triggering factors alone does not guarantee successful innovations in organizations. This is where the second field of innovation comes in place. The second field is about the identification and

comprehension of the elements that need to avail in the organization to enable successful innovations in them (Ahmed, 1998 ; Cottam et al, 2001; Klein & Sorra, 1996; Schneider et al, 1996). Therefore, organizations need to acknowledge those elements and invest in them to ensure the adoption of continuous innovations.

### **1.2. Background**

The United Arab Emirates, and specially the city of Dubai, has been witnessing a great industrial and commercial growth in a short period of time. This growth is attributed mainly to the great visionary leadership of His Highness Sheikh Mohammed bin Rashid Al Maktoum, UAE Vice President, Prime Minister and Ruler of Dubai. Part of Sheikh Mohammed's 2015 Dubai strategy plan is to position Dubai as a "Globally leading Arab City" (AlMaktoum, 2007a), which exhibits his constant eagerness to develop Dubai beyond expectations.

Sheikh Mohammed has always emphasized the importance of innovation to drive the constant growth of Dubai. In year 2000, while presenting the Dubai Government Excellence Awards, he advised the organizations to be creative and innovative to survive the accelerated global changes (AlMaktoum, 2000). His highness stated in his strategy plan of Dubai that innovation is the source of any successful development (AlMaktoum, 2007a). Furthermore, he launched in September 2007 the "Award of Innovation" to acknowledge innovative resolutions for global problems (AlMaktoum, 2007b). Moreover, during his attendance of "The Culture of Excellence in Government Services" workshop in Dubai, he affirmed the significance of innovation in all aspects of organizations, and extended his support for innovations at all levels (AlMaktoum, 2008).

Aside of the governmental support to innovations, the current "credit crunch" is yet another great force that should drive organizations to innovative. Credit crunch is an economic crisis that is currently affecting the global market tragically. It is a situation in which the loans are hard to attain, and the liquidity is almost diminished from the market (Lahart, 2007). This crisis is affecting the global market since summer of 2007

(Whalen, 2008). It started specifically in the real estate market, and is now dramatically affecting the entire businesses globally (Whalen, 2008). International organizations have declared large losses due to this crisis. Toyota, as such, announced that their losses of year 2008 were approximated to 4.96 billion US dollars (Kim & Massy-Beresford, 2009). The losses are almost four times more than the expectations that were announced less than two months earlier (Anon., 2008).

Property developer firms in the United Arab Emirates are not immune to the global credit crunch crisis. Those firms are extremely affected by the crisis, and were forced to lay off a large number of their operating staff to reduce the operational cost and survive the economic downturn. NAKHEEL announced the layoffs of 500 employees (Delmar-Morgan, 2008a). DAMAC reported 200 layoffs of their staff (Merzaban, 2008). TAMEER declared the layoff of 180 employees out of their total 350 crew (Bowman, 2008). OMNIYAT confirmed the layoff of one third of their staff (Delmar-Morgan, 2008b). Some of those organizations had to go through other phases of layoffs due to the continuous downturn of the market. Other organizations did not disclose the layoffs to maintain their reputation in the market.

Organizations are following the traditional approach of cost saving through cost cuts and layoffs. However, the literature shows that organizations are now advised more than any other time to embark on innovations (Köksal & Özgül, 2007 ; Roberts, 2003; National.Audit.Office, 2006). Attending to innovation and fostering it will guide organizations to enhance their processes, make them more efficient and effective, and reduce the time and cost associated with those processes. This leads organizations to the required cost savings. Also, innovation can lead organizations to produce new products or serve new markets, and by so, compensate the losses in the current products and markets.

### **1.3. Problem Statement**

Most of the previous researches have examined innovation triggers and the organizational conditions to support innovation thoroughly. Yet not many have

researched on the triggers and the conditions jointly. Furthermore, little research has been done in this region and in Dubai specifically to identify the major triggers and conditions that effectively support and foster innovations.

#### **1.4. Aim of the Dissertation**

The dissertation aims to enhance the level of innovation in the United Arab Emirates' organizations, and specifically in Dubai's organizations. This will be established through the identification of the main triggers and conditions that are associated with successful innovations in Dubai's organizations.

#### **1.5. Research objectives**

The objectives of this dissertation are to:

1. Investigate the internal and external factors that may trigger innovations in Dubai's organizations
2. Examine organizational conditions required to achieve successful innovations in Dubai's organizations
3. Assess the relationship between innovation conditions and innovativeness in Dubai's organizations
4. Outline the characteristics and determinants that identify innovative organizations
5. Propose a set of recommendations to guide organizations toward innovativeness

#### **1.6. Research Questions**

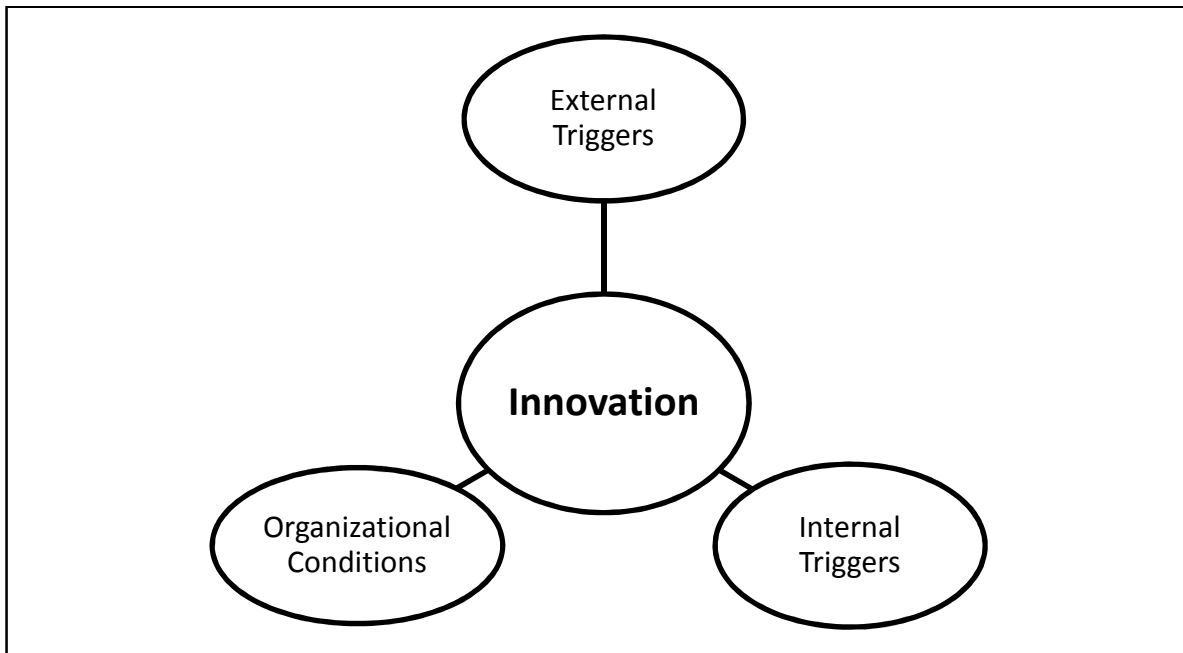
The following are the dissertation's research questions (RQ):

- RQ1. What are the environmental and market factors that may trigger innovation in an organization?

RQ2. What are the organizational factors that may trigger innovation in an organization?

RQ3. What are the elements and conditions that are required in an organization to ensure the success of the innovation in that organization?

The following diagram presents the links between the general dimensions.



**Figure 1 - The relation between the triggers, the conditions, and the innovation**

## **1.7. The Value of the Dissertation**

The dissertation provides a better understanding of innovation, and presents a broadened layout of the innovation triggers and conditions. Above all, the study distinguishes the effective innovation triggers and conditions to the organizations in Dubai specifically. This should encourage organizations to embark on innovations steadily in order to survive the current economic situations fruitfully.



## **1.8. Dissertation Structure**

The structure of the dissertation is as follows. Chapter 1, as above, is meant to present an overview on the innovation topic, the appeal of the dissertation, the statement of the problem, the aims, objectives, research questions, and finally the proposed value of the study. The literature review is presented in chapter 2, 3, and 4. Chapter 2 reviews the literature on innovation, as definitions, sources, motives, and types. Chapter 3 investigates the literature of innovation triggers such as market recess, market pull, organizational mimicry, and management's characteristics. Chapter 4 examines the literature on the organizational conditions required for a successful innovation, this includes organizational climate, organizational culture, organizational structures, innovation personnel, innovation champion, management style, staff empowerment, and employee training. Chapter 5 describes the methodology used in the dissertation, the sample studied, and the data collection methods and procedures. Chapter 6 presents and analyzes the results of the dissertation's field study, both quantitative and qualitative. And finally, chapter 7 summarizes the overall dissertation, and proposes a set of recommendations for Dubai's organizations.

## **Chapter 2: Conceptualization of Innovation**

Innovation is a topic that has been researched thoroughly since the early 1970s. Yet the research on this topic has grown substantially only in the last decade, along with the research awareness on organizational behavior, and change management. This chapter researches the literature to provide an understanding of the different definitions, sources, motives, dimensions of innovation, and explains the relation between innovation and each of the change management discipline and the credit crunch crisis.

### **2.1. Definitions of Innovation**

The literature includes a number of definitions of innovation. Following can be perceived as a comprehensive collection of innovation's definitions. Zhao (2005) defined innovation as "new products, new processes, new services (including new uses of established products, processes and services), new forms of organizations, new markets, and the development of new skills and human capital" (Zhao, 2005, pp.27,28). He also considered the act of launching a new subsidiary in the corporate office as an act of innovation, and it is an appropriate response to the market demand in different areas. Brown (1992, p.61) referred to product innovation as "a new product, process or system which has the potential to create an entirely new market, or change an existing one in a way which creates new patterns of competitive or customer behavior".

The National Audit Office of the United Kingdom (2006) defines innovation as injecting new concepts and methods into the organization in a way that will enhance its productivity. Innovation could be about changing or renovating an organizational process to perform more efficiently, resulting in new or improved processes (National.Audit.Office, 2006; Drucker, 2002). Drucker (2002) defines innovation as the condensed efforts of an organization to implement a change that may explore new financial benefits. Some scholars describe innovation as the result of human

thinking, whether it originates from the management, employees, or consultants; and that the novelty of innovation can be at the organizational level or the global level (Taatila et al, 2006 ).

Drucker (2002) also claims that for an innovation to be successful, it should be as simple, single-tasking, and as direct as possible. This is to minimize the confusion and resentment from the employees and customers when dealing with the change accompanied by the innovation.

## **2.2. Innovation Sources**

The literature review has shown that innovation may originate from several different sources. Zhao (2005) states that invention is only one origin between many other origins of innovation. He states that an innovation does not need to be technological; it can be a new process, or a new customer oriented service. Cooper (1998) also suggests that innovation does not need to be a result of a new invention. Instead, innovation could be through reusing or redeveloping an existing process, product or a tool in a more comprehensive manner making it more efficient (Cooper, 1998). He adds that an organization does not need to be the first to implement the technology or the process to be innovative. This means that the technology or process may have been used and proven successful in an industry, then an organization in another industry can apply it and succeed in doing so; resulting in another innovation in another industry.

Building on the concept that innovation is not only about new inventions, Drucker (2002) suggests in his research that innovation may originate by several other sources other than the classical invention source. He suggests that the sources may originate from within or outside the market. The suggested sources include possible improvements, flaws in current processes, changes in the market, and demographic changes (Drucker, 2002). Flaws and incompetencies in the current processes are considered a major source in Drucker's research. This can be found in the cases where the current processes are running with certain gaps in them, and their

improvement is constantly overlooked (Drucker, 2002). The innovation in this case arises when a special focus is dedicated to those processes, either by improving them or introducing new processes to complement them (Drucker, 2002).

### **2.3. Innovation and Change Management**

Damanpour (1987) has found that many scholars explain and research innovation as a part of the change management discipline; this is because of the many changes that are often associated with innovations. Damanpour considered innovation as the instrument through which organizations can change their internal processes and procedures. Introducing any new concepts means that the old processes have to be revised to incorporate the new processes (Ahmed, 1998 ; Damanpour, 1987). Hence, innovations are often associated with changes in the organization's processes. In a market that is as highly competitive as the current market, innovation can be considered as the tool through which change can be implemented successfully in organizations (Ahmed, 1998 ).

### **2.4. Motives to Innovate**

There are many benefits that encourage and motivate organizations to embrace innovations. Researchers have found that innovation is the best option for organizations to survive a rapidly changing market, a constant evolving technology, and to avoid being overwhelmed by the competition (Johne, 1999 ; Deppe et al, 2002; Cooper, 1998) . Kim and Mauborgne (2005) believed that innovation is about "creating uncontested market space and make the competition irrelevant" (Kim & Mauborgne, 2005, p.4). They emphasize that for organizations to outperform their competition, they should not benchmark their products against their competitors; instead, they should "make the competition irrelevant by creating a leap in value" for the customers and the organization as a whole (Kim & Mauborgne, 2005, p.12). Brown (1992) proposed that just a simple change in doing things could create a competitive advantage for the organization. Innovation also enables organizations to

maintain their market positions and market shares by re-establishing their position with the innovations they introduce (Cottam et al, 2001).

Innovations offer new or enhanced products with more features, better performance for the consumers, and at lower prices (Bellas & Nentl, 2007; Cottam et al, 2001; Damanpour, 1987). This should encourage higher market demand, and help the organization sustain its competitive advantage. Adding more features and better performance to the internal organizational products should assist the employees to be more productive in their jobs, and may motivate them to work more efficiently (Lee & Treacy, 1988). Innovation can also result in a better Service Level Agreements (SLA) for the customers with less response time, better quality, and more services to the customers and employees (National.Audit.Office, 2006).

### **2.5. Innovation and the “Credit Crunch”**

The previously mentioned global credit crunch crisis was predicted by the researcher Hayman Minsky in 1992 in his “Financial Instability Hypothesis”. Minsky predicted that highly stable and promising economic situations would be followed by a major economic catastrophe. Unfortunately, according to Lahart (2007), most of the economists at that time considered Minsky to be a pessimistic researcher with a negative view, and did not take his hypothesis seriously. Though Minsky passed away in 1996, in 1998 during the Russian financial crises, the economist Paul McCulley resurrected Minsky’s memory in one of his debates in the Pacific Investment Management Company foundation (PIMC) (Lahart, 2007). He related the Russian financial crisis to Minsky’s hypothesis, and accordingly named the crisis as “The Minsky Moment”. Lahart defined the Minsky moment as the moment when the market enters in a catastrophic economic situation after experiencing an unplanned unordered growth for a long time. He explains that when the market is stabilized and relaxed, investors tend to take more risks than usual, and relax the constraints on lending; the longer this phase lasts, the more risks they intake, until a crisis is unavoidable and resulting in the Minsky moment.

Whalen (2008) states that the current credit crunch crisis (the Minsky Moment) started in the United States in July 2007, and since then, has spread globally. He explained that in such a crisis, loans become difficult to get, lenders increase their liabilities constraints, and banks increase their loan interest rates significantly that business operations are affected and fall back (Whalen, 2008).

Provided that the market is undergoing a severe case of chaos and instability, and with the formerly mentioned motives of innovation such as competitive advantage and better performance, many scholars are suggesting that innovation will assist organizations to survive the chaos and gear the organizations towards the recovery phase (Whalen, 2008; Budros, 2000; Cottam et al, 2001; Schifferes, 2008; Roberts, 2003). Scholars recommend organizations to adopt innovations to maintain their stability in an environment that is chaotically changing, and stay ahead of the competition (Drucker, 2002; Cooper, 1998; Zhao, 2005).

At times of economic crises and instabilities, such as the current global credit crunch, many organizations tend to cut the costs on innovations, research and development (R&D), marketing, and human resources in order to survive the downturn (National.Audit.Office, 2006). Contrarily, many scholars have proved that while these cuts may lower the expenditures during the crises, they tend to substantially slow the recovery phase for the respective organization (Byrne, 2008; National.Audit.Office, 2006). One way to explain it, is that innovation may result in renovating certain processes to make them more efficient, and produce more with the few available resources in the organization, hence reducing operational cost (Byrne, 2008; National.Audit.Office, 2006). Another way to explain it, is that by not reducing the resources as heavily, this guarantees the resources when needed during the recovery phase (Drucker, 2002; National.Audit.Office, 2006).

## **2.6. Dimensions of Innovation**

In the innovation literature, researchers have divided innovation into different dimensions. Some have examined innovations from one set of dimensions, and

others have combined more than one set to draw the full picture of innovation in their empirical researches (Cooper, 1998). The suggested dimensions of innovation are Market Pull versus Technology Push, Radical versus Incremental, Administrative versus Technological, Product versus Process, and Market Innovation (Ireland et al, 2006; Damanpour, 1987; Kimberly & Evanisko, 1981; Johne, 1999 ; Zhao, 2005; Cooper, 1998; Kotelnikov, n.d.; Abrahamson, 1991; Prajogo & Ahmed, 2006; Deppe et al, 2002).

*Market Pull versus Technology Push:* Deppe et al. (2002) have found that innovation can be divided into two types according to the source of innovation. One type is “Market Pull”, and the other type is “Technology Push” (Deppe et al, 2002). On the one hand, market pull is the scenario in which the market is demanding certain tools, products, services, or more features in the existent products (Deppe et al, 2002). On the other hand, technology push is when the organization finds a new technology through their research, whether it was suggested by their suppliers, or by merging multiple new technologies into one new innovative product (Deppe et al, 2002; Drucker, 2002). Deppe et al. have found in their empirical research that market pull is the source of two thirds of the total innovations examined.

*Incremental versus Radical:* Innovations can be divided according to their strategy into incremental innovations and radical innovations. According to Kotelnikov (n.d.), incremental innovations are the ones that originate from “survival strategies”, these innovations are associated with a low degree of ambiguity. They are about changing and enhancing current solutions, and they aim to balance the organization’s position between competitors (Kotelnikov, n.d.). He suggests that radical innovations originate from “market leadership strategies”. These innovations are associated with a high degree of ambiguity, they are about creating new solutions, and are usually combined with substantial changes to the demand market (Kotelnikov, n.d.). Cooper (1998) found that radical and incremental innovations can be differentiated in an organization based on the extent of the “strategic and structural change” the organization has to go through to implement this innovation. The more change

required, the more radical the innovation will be (Cooper, 1998). Taatila et al. (2006) view an incremental innovation as a one that simply adds new features to an existent solution, while a radical innovation is a one that results in a total new solution at once.

*Administrative versus Technological:* Damanpour (1987, p.677) defines technological innovation as the ones that “occur as a result of the use of a new tool, technique, device, or system”. Technological innovation leads to a change in the current solutions, whether to the way they are operated or to what they produce (Damanpour, 1987; Drucker, 2002). Damanpour (p.677) defines administrative innovations as the ones that “change an organization’s structure or its administrative processes”. Administrative innovations could occur by introducing new organizational objectives, policies, or procedures, and accordingly change the organizational processes to incorporate the new introductions (Damanpour, 1987). Scholars have suggested that when an organization implements a technological innovation, the organization will most likely implement administrative innovations as a result (Kimberly & Evanisko, 1981). This is normally required in order to support the technological innovations and ensure their adoption by the organization. It is worth noting that the National Audit Office of the United Kingdom (2006) has declared that the cost of implementing technological innovations are significantly higher than the costs of implementing administrative innovations. This can be justified by the investments required to implement technological innovations including the cost of new technological infrastructures, development, support, training, and the entire cost of changing the internal organizational processes to accommodate and enforce this technological innovation.

*Process versus Product:* Rosenkranz (2003) defines process innovation as the internal organizational innovations that result in reducing the operational cost, and enhancing the products and services provided by the organization. Rosenkranz also defines product innovation as the innovations that produce new unique products with no apparent competition on the selected product criteria. On the one hand, Cooper



(1998) proposes that product innovation is likely to be a reaction to the demand of the market or the environment, while process innovation is a reaction to organizational needs. On the other hand, Rosenkranz proposes that the selection of the innovation type is according to the competition in the market. Product innovation is the direction organizations select in a competitive market, while process innovation is selected when the product is stabilized and positioned in the market, and it is at a stage that requires quality improvement and feature enhancements (Rosenkranz, 2003). Johne suggests that product innovations could be looked at as a profit engine in its early stages for the organization, while process innovation provides the ways to enhance quality and reduce costs at later stages (Johne, 1999 ).

*Market Innovation:* Johne (1999) identifies another type of innovation called market innovation. Johne agrees with Kim and Mauborgne(2005) who advocate in their research for the creation of new markets through providing new values for the market, or different market segmentation. The different market segmentation can be accomplished through researching into forgotten demographic data, life styles, or buying behaviors (Johne, 1999 ). An example of exploring new segments is when Japan noticed in the early 1990s that the population had started continuing their studies to higher education (Drucker, 2002). This, in the long term, meant that the number of “blue-collar” workers will reduce tremendously in manufacturers, hence the need to invest in robotics (Drucker, 2002).

## 2.7. Conclusion

To conclude this section, innovation can be summarized as developing or improving a product, process or a service. Innovation leads to great benefits for the desired audiences, whether they are consumers, employees, or the whole organization. The benefits vary between efficiency, effectiveness, market positioning, and surviving the competition. The literature showed that innovation could be linked to several topics such as the change management and credit crunch. Finally, innovations can be classified differently according to their origins and impacts. The described different

types were market pull versus technology push, incremental versus radical, administrative versus technological, process versus product, and market innovations.

## **Chapter 3: Innovation Triggers**

The first objective of the research is to investigate the innovation triggering factors, whether internal or external to the organizations. This is identified as the study of elements that cause the innovation to be stirred in organizations (Wolfe, 1994).

At any point of time, the innovation can be stirred by multiple factors; the more factors involved, the more likely the innovation will succeed in the organization (Cooper, 1998). The understanding of these factors assists in developing the set of hypotheses for the dissertation.

This chapter demonstrates the innovation triggering factors that can be external, deriving from outside the organization, or internal, originating from within the organization. The first section of this chapter identifies the external triggering factors, and the second section describes the internal triggering factors.

### **3.1. External Innovation Triggers**

The first research question of this dissertation derived from the first objective to be as follows:

RQ1. What are the environmental and market factors that may trigger innovation in an organization?

There are many factors that play a role in stirring and triggering innovation in organizations. This section examines the factors that arise from outside the organization, and hence, are out of the organization's controls. Those factors include market recess, market pull, and organizational mimicry.

#### **3.1.1. Market Recession**

Given the current economic situations being experienced by the global market, the common organizational reaction is to start downsizing the organization, cutting the

costs on: R&D, development of new products, innovational efforts, and marketing expenses (Roberts, 2003; Köksal & Özgül, 2007 ; Budros, 2000; Johannessen, 1994 ). Organizations implement those measurements in order to lower their expenditure to survive the economic downturn, and also to reduce their productions to be consistent with the new low market demands (Roberts, 2003). However, few scholars have researched further into this topic, to link between those cost reductions and the recovery from the economic crisis (Roberts, 2003; Köksal & Özgül, 2007 ; National.Audit.Office, 2006).

Roberts (2003) examined the reports of “Profit Impact of Marketing Strategies” (PIMS) to analyze the effects of investing capitals during economic crises, and how these investments affect the organizations’ recovery phase. Roberts has found that investments in innovations and R&D during recess phases help the organizations to progress faster during the market recovery phase. Investments in R&D along with new innovations – products or processes- are essential during the recess from two sides. From one side, innovations that generate process enhancements will lead to better quality production, reduction in operational cost, and subsequently, the organization will survive the economic downturns (Köksal & Özgül, 2007 ). From the other side, new product innovations lead to launching new products either during the recess phase, or in the early recovery phases (Roberts, 2003). This may reap more benefits rather than waiting for the development to start once the crisis is over, and yield the new products after the recovery with a significant period of time (Roberts, 2003). According to one of the major financial institutes, International Monetary Fund (IMF), crippling and cutting costs on innovation will not help the organization in the economic situations; instead it will only worsen the economic crises and hold back the recovery phase longer by not allowing new sources of possible liquidity to enter the market (Schifferes, 2008).

Gillette is an example of a company that benefited from launching new innovational product during recess phases. Gillette launched a new product during the early 1990s recession, as a result, during the recovery years they found that almost half of

the sales volume is attributed to the product that was launched during the recession (Roberts, 2003). Roberts (2003) adds that when the organization goes through massive downsizing, although it reduces the expenditures significantly, it will only cripple the organization during the recovery phase by not having adequate knowledgeable resources to accelerate productions and operations during the recovery phase.

### **3.1.2. Organizational Mimicry**

Many scholars have explained the adoption and initiation of innovations by the mimicry phenomena. This phenomena has received many other terminologies from different scholars, some of those terms are: institutionalism, isomorphism, imitation, social network, and homogeneity (Dimaggio & Powell, 1983; Mizruchi & Marquis, 2006; Gulati & Westphal, 1999; Strang & Meyer, 1993; Budros, 2000; Abrahamson, 1991; Wolfe, 1994; Kimberly & Evanisko, 1981; Haunschild & Miner, 1997).

Researchers have defined mimicry as the organizational process of reviewing competitors, institutes, organizations within the same industry, and organizations facing the same circumstance as the reviewer organization, this is followed by examining what are those organizations developing in terms of consumer products or internal processes, then accordingly, resemble those developments in their own organizations, whether it means developing the same products or internalizing the same processes (Dimaggio & Powell, 1983; Budros, 2000; Gulati & Westphal, 1999; Abrahamson, 1991; Klein & Sorra, 1996). This is exactly how an innovation may start with one organization, and then be spread and adopted by the rest of the organizations.

There are numerous reasons that cause organizations to go into the direction of mimicry; some are external factors and will be explained in this section, others are internal factors and will be explained in the following section.

Researchers have found that suppliers of operational input material, consultation services, and training services play an important role in mimicry between organizations (Dimaggio & Powell, 1983; Strang & Meyer, 1993). This can be explained by the technology push innovation that was mentioned in the previous chapter (Deppe et al, 2002; Abrahamson, 1991). Suppliers are always on an R&D quest, trying to find new technologies, techniques and processes; and then pushing and disseminating them to their clients (Deppe et al, 2002). Suppliers sometimes discontinue the previous resources to enforce their clients endorse the new resources. To link this with mimicry, scholars have argued that the more centralized the suppliers are for a certain type of resources, the more these centralized suppliers will disseminate the same resources to all their clients, resulting in a network of clients using and following the same resources, and as an end result, a clients network that resemble and mimic each other (Dimaggio & Powell, 1983; Strang & Meyer, 1993).

Another cause of mimicry is the forces from external organizations (Dimaggio & Powell, 1983), whether from governments, organizations within the same industry, or organizations that resides outside the examined organization's industry.

When the government enforces a new regulation, organizations have to implement it and confirm to it fast. To do such, they often mimic each other to confirm to this new regulation faster, resulting in a homogeneous market. Mimicry can also be indirectly enforced on organizations within the same industry through the means of mass media, by publicizing the new innovations of a certain organization repeatedly, leading other organizations to adopt the same (Budros, 2000). Budros (2000) studied innovation in the shade of mimicry, and though his article was published in year 2000, his main example in the study was about organizational downsizing, which is what the organizations globally are currently practicing due to the current credit crunch. Budros shows in his study that downsizing was negatively looked at when it first started in the late 1970s. As the situations were getting dreadful, the mass media was showing that the organizations that downsized are the ones that survived the

crisis longer, resultantly, more organizations started adopting the same (Budros, 2000). The mass media and the subsequent mimicry eventually legitimized the innovation of downsizing; pushing the rest of the organizations to follow the adopted innovation even if they did not need to, just to fit in the new popular organizational image (Budros, 2000; Abrahamson, 1991). This is repeated in the current credit crunch crisis. The media are publicizing repeatedly the downsizing undertaken by the organizations to survive the credit crunch, leading further organizations to adopt the same, in the hope of surviving the market through its downturn.

The mimicry often spreads from the large and more powerful corporations to the less powerful and small to medium enterprises (SME) (Abrahamson, 1991). The more organizations adopting the innovation, the higher is the pressure on the rest of organizations to adopt the same (Abrahamson, 1991). Some scholars have suggested that organizations within the same industry mimic each other's innovation much faster than when adopting from another industry, due to the possible uncertainties that may surround adopting an innovation which is not yet proven successful in their industry (Strang & Meyer, 1993). Building on the previous point, Strang and Meyer (1993) suggested that organizations in the same industry may mimic each other due to the fact that they are receiving the same pressures and forces from the surrounding environment.

“Interlock” explains mimicry that is caused by organizations residing outside the examined organization's industry (Gulati & Westphal, 1999; Mizruchi & Marquis, 2006). Interlock has been defined as

*“a unique formal mechanism linking top managers of large corporations; it provides an opportunity for leaders to exchange information, observe the leadership practices and style of their peers, and witness firsthand the consequences of those practices” (Gulati & Westphal, 1999, p.473).*

Interlocks occur when a top management member of one organization is a board member in another organization. In many cases, organizations would invite members

of their main supply chain companies, and their main stakeholders to their board of directors (Mizruchi & Marquis, 2006; Gulati & Westphal, 1999). This helps a lot in reducing uncertainties in the organizations dependencies, and ensures that participant members are acting in the favor of the entire board (Abrahamson, 1991; Mizruchi & Marquis, 2006). Mimicry results from interlocks in two cases: the first case is when the board members start to exercise pressures on the organization to follow the innovations that other organizations have followed successfully; whether those other organizations are part of the board or not (Mizruchi & Marquis, 2006; Gulati & Westphal, 1999). The second case occurs when the board members find the innovations being implemented at the board are worth implementing in their own organizations, resulting in a homogeneous market with significant mimicry (Gulati & Westphal, 1999).

Knowing all those aspects of mimicry, it is worth mentioning that mimicry defies one of the major motives of adopting innovation, which is the competitive advantage (Dimaggio & Powell, 1983; Abrahamson, 1991). When all the organizations mimic each other in the products their producing, they would no longer have the competitive edge product, because the rest of the market is producing the same, nevertheless, mimicking another organization's innovation takes away their competitive advantage (Abrahamson, 1991). However, this still means that in a mimicry market, the chances of enduring the market and surviving it are higher, due to the lack of differentiation between organizations (Dimaggio & Powell, 1983).

### **3.1.3. Market Pull**

The new governmental rules, governmental regulations, customer trends, social opinions, political directions, and society groups all force the organizations to develop new innovations that would suit the new demand in the market, resulting in market-pull innovations (Deppe et al, 2002; Budros, 2000; Abrahamson, 1991; Ireland et al, 2006; National.Audit.Office, 2006). Also the new emerging technologies force organizations to use these technologies in building and developing new products to



maintain their competitive edge, market shares, and market positions by constantly embracing new techniques and processes (Ireland et al, 2006).

#### **3.1.4. Consumer Behavior Research**

One of the reasons some innovations may have not reached the operational phase is because of the Consumer Behavior Research (Brown, 1992). Consumer behavior research is the research and analysis carried out to predict whether an examined product will succeed in the consumer market or not. Examples on innovations that were predicted as a failure with this research are “Post it” stickers and “Perrier” water (Brown, 1992). “Post it” was predicted to be a failure according to the research due to its insignificant value addition to the consumers (Brown, 1992). Perrier was predicted to be a failure “because the British would never pay for water.” (Brown, 1992, p.69). Despite of those research results, the respective companies decided to proceed with the products, and though consumers did not embrace the products directly, those products are now considered essential products in the market (Brown, 1992). Brown suggests that the consumer behavior research is not always accurate in its prediction, because it analyzes the current behavior rather than the future anticipated behavior of the consumers.

#### **3.1.5. General Environment factors**

Some scholars have suggested that the city’s characteristics play a role in the innovation adoption (Kimberly & Evanisko, 1981). One of those characteristics can be the location area of the organization, the more the location is modernized, the more likely the organization will innovate (Kimberly & Evanisko, 1981). Other scholars have attributed the adoption of innovation to factors as “globalization, deregulation, increasing competition, new technologies, and e-commerce” (Cottam et al, 2001, p.88). The more globalized the market is, the more it has to generate new innovations that appeal to all the emerging customer segments. Competition forces the organization to adopt more innovations, whether as product innovations by developing new products, or by process innovations to enhance their internal

processes and cope with the speed of competition (Kimberly & Evanisko, 1981). Similarly with new technologies, the more advanced they are, the more the organizations will adopt new innovations, internally such as new software that gets the tasks done faster with adequate accuracy, or externally by building on them to produce new innovational products to the consumer market, subsequently, maintaining the organization's competitive edge.

### **3.2. Internal Innovation Triggers**

Based on the first research objective and the previous section, the second research question is formulated as follows:

RQ2. What are the organizational factors that may trigger innovation in an organization?

This section exhibits the innovation triggering factors that are internal to the organization. Those factors are organizational mimicry, management's characteristics, and unexpected occurrences.

#### **3.2.1. Organizational Mimicry**

Mimicry was discussed in the previous section in details. However, it was mainly referred as an external triggering factor. DiMaggio and Powell (1983) argue that the ambiguity in organization's goals and objectives is the main reason organizations engage into mimicry. Deppe et al. (2002) emphasize the importance of having a clear vision to encourage the innovation process. Indecisive organization's vision urges organizations to mimic other organizations that are confident with their direction (Dimaggio & Powell, 1983). When organizations are not clear about their own direction, strategy, or the way they should respond to their environment, they tend to observe similar organizations in the same industry that are facing the same environmental forces, then mimic the innovations those organizations develop to survive the market's uncertainties (Weiss, 1997). The organization's vision should be

very clear, decisive, and it should stress over the importance of innovation and its values, subsequently, leading to a higher rate of innovation adoption in the organization (National.Audit.Office, 2006; Ahmed, 1998 ; Denison & Mishra, 1995).

### **3.2.2. Unexpected Occurrences**

In reference to Drucker's (2002) research on the sources of innovation other than invention, the "unexpected occurrences" source includes the cases of unsuccessful or weak internal processes in the organization. If these cases are spotted by intelligent visionary management, innovative solutions may result accordingly; redirecting the failure into a successful innovation that is highly adopted in the organization (Ireland et al, 2006; Drucker, 2002). Also in relevance to this point, Deppe et al. (2002) have found that one of the factors to promote innovation adoption is the acknowledgment of the problem in the first place. It motivates the organization to find innovative solutions and adopt them to amend these problems (Deppe et al, 2002). Hence, knowledge management is a relevant point to Drucker's sources, the knowledge of past failures and successes assist organizations to reach better judgments for new successful innovations (Prajogo & Ahmed, 2006; Drucker, 2002).

### **3.2.3. Management's Characteristics**

Management decision to adopt innovation is the main trigger for a large percentage of the adopted innovations in organizations (Klein & Sorra, 1996; Ireland et al, 2006). This means that organizations in general may adopt certain innovations merely because the management's decision was to adopt those innovations, not because other organizations adopted it, and not because of other clear reasons for the organization. They are just adopted because the management found this innovation worth adopting, and accordingly, made the decision for the organization to adopt it. DiMaggio and Powell (1983) found that when the corporate office of a largely branched organization adopts new innovations, the corporate office often forces the same decision on its owned subsidiaries; resulting in subsidiaries following the innovations adopted by the mother company. This often can lead to a mimicry

network between a corporate office and its owned subsidiaries, as mentioned in the previous section.

According to this point, the first hypothesis of RQ2 can be derived as follow:

RQ2: H1. Management decision plays a role in triggering innovation

There are certain aspects in the organization's management that support and encourage a higher adoption of innovations in their organizations (Kimberly & Evanisko, 1981; Weiss, 1997 ). Some of the researched aspects are: cosmopolitanism and educational background (Kimberly & Evanisko, 1981; Weiss, 1997 ). Cosmopolitan managers tend to be up to date with the new innovations in the market, and would constantly strive to adopt new ones (Kimberly & Evanisko, 1981; Weiss, 1997 ). Educational background is claimed to be positively related with innovation's adoption, the more advanced the management's level of education the more innovations will be adopted (Kimberly & Evanisko, 1981).

As a conclusion on the points above, the following two hypotheses will be derived:

RQ2: H2. Managers' educational background affects innovation

RQ2: H3. Managers' cosmopolitanism influences innovation

#### **3.2.4. Conclusion**

This section described the set of internal factors that may trigger innovations in organizations. These factors included organizational mimicry, unexpected occurrences, and management's characteristics such as their educational background and cosmopolitanism.

## **Chapter 4: Organizational Conditions of Successful Innovations**

Though the triggering factors mainly spark the initiation of innovations, innovations cannot be achieved without the existence of some organizational conditions that foster and support the innovation. The study of diffusion identifies the conditions that have to avail in the organization to support and foster the innovation, leading to the success of the innovation, and subsequently yielding all the possible benefits of that innovation (Wolfe, 1994; Strang & Meyer, 1993; Rogers, 1995).

Taatila et al. (2006) claim that some factors may play a role in triggering and diffusing innovations. They propose that the lines between those two different streams are often vague and not clearly identifiable (Taatila et al, 2006 ). Kimberly and Evanisko (1981) have found in their empirical research that the interaction between different triggering factors and diffusing conditions may determine the type of the resulting innovation.

The understanding of these factors assists in developing the set of hypotheses for the dissertation. The second objective of this dissertation is to examine the organizational conditions required for successful innovations. The third research question of the dissertation derives from this objective to be as follows:

RQ3. What are the elements and conditions that are required in an organization to ensure the success of the innovation in that organization?

This chapter examines the different organizational conditions required for a successful innovation, such as organizational culture, climate, structure, the allocation of innovation champion, management's style, employee empowerment, and employee development.

## 4.1. Organization's Culture and Climate

Scholars have found out that changing the organization's culture and climate is a fundamental step towards the success of the adopted innovation and adopting more (Cottam et al, 2001; Schneider et al, 1996; Johannessen, 1994 ; Ahmed, 1998 ; Klein & Sorra, 1996).

Hofstede (2001) suggests four cultural dimensions which according to Zhao (2005) affect the innovation adoption in organizations. Those four dimensions are: Power Distance, Uncertainty Avoidance, Individualism versus Collectivism, and Masculinity versus Femininity (Hofstede, 2001). Power distance refers to the accepted authority distance between the employees and their management in the organization (Hofstede, 2001). Uncertainty avoidance is the level to which the organization resents the vagueness of the internal and external environments (Hofstede, 2001). Individualism and collectivism refers to the level to which the employees prefer to work collaboratively (Hofstede, 2001). And finally, masculinity and femininity could be projected by the level of aggressiveness in achieving objectives (Hofstede, 2001).

According to Zhao's analysis of Hofstede's dimensions, power distance and uncertainty avoidance are considered negative conditions for the organizational innovation. Individualism is claimed to be a positive condition for the organizational innovation (Zhao, 2005). Moreover, a culture with high power distance is often represented by a mechanistic organization structure; which is known for crippling innovations in organizations – this will be explained in the next section- (Zhao, 2005).

Organizational culture is suggested to have certain traits that form another supporting condition for innovation. Those traits can include specialization, functional differentiation, professionalism, organizational size, slack, centralization, age, and administrative intensity (Damanpour, 1987; Bellas & Nentl, 2007; Kimberly & Evanisko, 1981; Nohria & Gulati, 1996).

Specialization represents the count of different specialties occupied by the team members, the higher is the specialization rate in the teams, the more innovations from different specialties are adopted (Kimberly & Evanisko, 1981; Damanpour, 1987). Functional differentiation is measured by the number of different departments and divisions in an organization (Kimberly & Evanisko, 1981). Different departments will demand different innovative products to serve their different needs (Damanpour, 1987). Professionalism is the “professional knowledge of organizational members, which requires both education and experience.” (Damanpour, 1987, p.679). Organizational size is generally represented by the headcount in the organization; the larger is the organizational size the more innovation it will eventually require to adopt (Damanpour, 1987; Kimberly & Evanisko, 1981; Bellas & Nentl, 2007). Organizational slack is measured by the amount of resources that are more than what the organization specifically requires in order to operate adequately, this can include resources as headcount, capital, and physical machines (Nohria & Gulati, 1996). Centralization of decision making in the organization hinders the innovation rather than supporting it, hence an organization needs to be decentralized but still be in control to be able to support innovations (Weiss, 1997). In Kimberly and Evanisko’s empirical research, it is claimed that the organization’s age is positively related to the innovation adoption rate in that organization (Kimberly & Evanisko, 1981). Administrative intensity refers to the percentage of the managers count to the non-managers count in the organization, administrative intensity is claimed to be positively related to innovation adoption (Blau & Schoenherr, 1971 cited in Damanpour, 1987).

Klein and Sorra (1996) among other scholars have found in their research that the two main factors to sustain innovation in an organization are the existence of a compatible organizational climate, and the extent to which the employees are accepting the values proposed by the innovation (Klein & Sorra, 1996; Schneider et al, 1996). According to Klein and Sorra, the climate of the organization refers to the common employees’ feelings towards the innovations in the organization, and the degree to which they perceive that the management expects and demands from the

organization to abide and support those innovations. The more the users of the innovation perceive the climate as supportive of innovation, and the more they find that the values proposed by the innovation are in line with their own values, the more successful of the innovation will be in that organization (Klein & Sorra, 1996).

Schneider et al. (1996) have presented four dimensions of a supportive organizational climate: “nature of interpersonal relationships”, “nature of the hierarchy”, “nature of work”, and “focus of support and rewards” (Schneider et al, 1996, p.10) . The Nature of interpersonal relations refers to the relationships between the staff and their management, or between different departments; whether the relationships revolve around competition between teams, or is collaborative in nature (Schneider et al, 1996). The nature of the hierarchy refers to the level of decision making in the organization authority, and the extent to which the staff are empowered to influence the decision making in the organization (Schneider et al, 1996). The nature of work represents the work in general, dynamic or routine, well defined in a job description or frequently changed, and the extent to which the tools used to produce the work are up-to-date (Schneider et al, 1996). And last, the focus of support and rewards is meant to represent the values and standards the employees perceive to be encouraged through the organization’s support and reward systems (Schneider et al, 1996; Ireland et al, 2006). For an organization climate to support innovation, it should be communicative, decentralized, dynamic, and emphasized towards rewarding innovation initiatives (Schneider et al, 1996).

Ahmed (1998) also agrees that organizational culture and its climate play a fundamental role in the innovation success in organizations. According to Ahmed, the climate is represented by what the organization’s employees perceive from the organization’s “practices, procedures and reward systems deployed” (Ahmed, 1998 , p.31). Schneider et al. (1996) also agree with Ahmed on the same definition of organizational climate. Accordingly, employees in the organization prioritize their projects and tasks according to what they perceive as important through the organization’s climate (Ahmed, 1998 ). Ahmed (1998) provides “3M” company as an



example of supportive innovation climate. 3M grants each of its employees a daily time period dedicated to creative initiatives on their own, whether the initiatives are regarding their own projects or not (Ahmed, 1998 ). To enable this organizational scheme, the organization manages a special budget to fund the creative works, and to ensure the time allocated does not affect the company's production (Ahmed, 1998 ).

The organizational culture can be driven towards innovation by training the users and educating them towards embracing change and accepting uncertainties (Ireland et al, 2006; Klein & Sorra, 1996; Denison & Mishra, 1995; National.Audit.Office, 2006; Zhao, 2005). The organizational climate can be enhanced through the use of revised reward systems to promote the innovation usage, whether as promotional packages for external customers, or other appreciation rewards for internal employees (Klein & Sorra, 1996). Also to strengthen the climate, management has to be in touch with the innovation usage, ensuring the importance of all the users concerns and feedback (Klein & Sorra, 1996).

Therefore, according to the above explanations on the relations between innovation and each of the organizational culture and climate, the following hypotheses can be derived:

RQ3: H1. The organizational culture is related to innovation in the organization

RQ3: H2. The organizational climate is associated with innovations in organizations

Mimicry can also play a role in spreading the innovation within all the users (Strang & Meyer, 1993). In a common social group of consumers or employees, the higher is the number of members using the innovation and utilizing it, the higher is the pressure on the rest of the group to use and utilize the same innovation to fit into the new accepted image (Brown, 1992; Strang & Meyer, 1993; Weiss, 1997 ).

## 4.2. Organization Structures

Organizational structures contribute significantly to the success of innovations in organizations. Academics argue that the innovation should not be confined by the current organizational structures, instead the structure should be amended to suit the innovation or allow the innovation to be fluid around it (Brown, 1992; Cottam et al, 2001). Most of the scholars have suggested that organic structures are more supportive to innovations success than the mechanistic structure (Deppe et al, 2002; Chakrabarti & Hauschildt, 1989; Ahmed, 1998 ). Drory and Zaidman (2007 ) cited Burns and Stalker (1961) in their research to define and explain the organic and mechanistic organizational structure. They have concluded that mechanistic structures are highly centralized, built on hierarchies, jobs are well defined and static, the environment in general, neither favors innovation nor empowerment; instead it increases the power distance dimension, hence this structure cripples innovations (Drory & Zaidman, 2007 ; Burs & Stalker, 1961). The organic structure is decentralized, jobs in it are more dynamic and versatile, it is more open, and communication with the management is frequent and warm, accordingly, producing successful innovations (Drory & Zaidman, 2007 ; Burs & Stalker, 1961).

Ahmed (1998 ) claims that mechanistic structures can cripple innovations by their formalities, strictness, rigidity, authoritativeness, and administration. Those aspects hinder the employees from getting in touch with the real value of the innovation, it distances the managers from getting in touch with what the employees really perceive from these innovations, and what actually hold them back from embracing it and producing more from it. Ahmed states that the organic structure supports organizational innovation by its informality, open doors management policy, fluent communication between management and the staff which builds trust and ensures constant support to the innovations.

Correspondently, the third hypothesis will be derived as follows:

RQ3: H3. An organic organizational structure coexists with successful innovations

### **4.3. Innovation Personnel**

One of the most interesting concepts found on the innovation topic was the concept of innovation personnel or departments in the organization (Cottam et al, 2001; Chakrabarti & Hauschildt, 1989). Cottam et al (2001) and Chakrabarti and Hauschildt (1989) have researched thoroughly this concept, and their research is summarized below.

Cottam et al. (2001) argue that innovation currently is exactly where Marketing was in 1970s. Marketing started to formulate as a functional existence in organizations only in the 1970s, it started with acknowledging the importance of a marketing oriented strategy to guide the business to marketing behavior and values, then organizations started to realize that they require junior personnel to execute and administer these strategies. That consequently led to a growth in the marketing discipline, and eventually more dedicated personnel were needed in order to manage the responsibilities associated with the marketing function within the organization (Cottam et al, 2001). They predicted that this is the approach innovation will evolve into eventually. Moreover, they found in their empirical research that almost 30% of the United Kingdom's most innovative organizations are starting to recruit dedicated innovation personnel into their organization crew (Cottam et al, 2001).

Cottam et al. have found in their research that organizations adopted different personnel approaches. Organizations either hired "Group Directors of Innovation", "Directors of Innovation", "Managers of Innovation", or "Cross-Functional Teams" (Cottam et al, 2001, p.90). The level of responsibilities varied between those positions.

Group Directors manage innovation at the corporate level of the organization to manage innovation for the entire subsidiaries and departments of the organization

(Cottam et al, 2001). Directors of Innovation manage at a departmental level, and they are responsible for executing the organizations' innovation projects (Cottam et al, 2001). Managers of Innovation manage at a departmental operational level, they supervise the change adoption and sustainability, and ensure the needed trainings are received by the employees to support the innovations (Cottam et al, 2001). Finally, the innovation teams are formed by members from versatile backgrounds and specialties (Cottam et al, 2001). They manage the daily operations of organizational innovation and ensure that the organization's culture and climate are changed to embrace the innovations (Cottam et al, 2001). Cottam et al. suggest that the higher are the assigned positions for innovation, the higher is the organization's commitment to support innovation. Innovation personnel are the way through which the organization's structure should be changed to suit innovation rather than confining the innovation within the existent structures (Cottam et al, 2001).

Chakrabarti and Hauschildt (1989) have found in their research that organizations should have dedicated resources and personnel to manage innovation adequately, and that those resources are separate from the R&D resources in the organization. They suggest three main personnel to manage organizational innovation: the expert, the sponsor, and the champion (Chakrabarti & Hauschildt, 1989, p.166).

The expert is the person with the required knowledge and expertise relevant to the selected innovation (Chakrabarti & Hauschildt, 1989). Generally he is the "brain behind the idea", the person that knows all the organizational processes, understands the gaps, and knows the innovative solutions that can fill those gaps (Chakrabarti & Hauschildt, 1989). The sponsor is the one that manages the needed financial and administrative issues, the decision maker, the one that understands the organization's vision and strategy, and guides the innovations to support this vision and strategy (Chakrabarti & Hauschildt, 1989). Finally, the champion is the connection bond between the innovation, the expert, the sponsor, and the whole organization. He has a unique way in communicating with people across the

organization, to ensure the buying, adoption, and sustainability of the innovation (Chakrabarti & Hauschildt, 1989).

#### **4.4. Innovation Champion**

Even in the absence of a specialized innovation department, scholars still promote the allocation of an innovation champion in the organization, considering this move a highly essential move that has to be taken by organizations to support the innovation path in the organization (Deppe et al, 2002; Wolfe, 1994; Ahmed, 1998 ; Cooper, 1998; Kimberly & Evanisko, 1981; Chakrabarti & Hauschildt, 1989). The champion has to be a visionary to be able to support and handle the innovation through the possible obstacles (Deppe et al, 2002). The allocation of a champion is fundamental because innovation execution is similar to project execution; hence, it requires being managed and guided through its execution in the organization (Cottam et al, 2001).

The organization has to find certain traits in the champion before granting him this role. These traits can vary between being experienced, energetic, confident, comfortable with ambiguity, communicative, and analytical thinker along with many other traits (Ahmed, 1998 ). The organization has to ensure that the champion is constantly being stimulated by exposing him to the different organizational situations; to grow their thinking and foster it (Ahmed, 1998 ). The organization has to ensure proper trainings are provided to the champion, not in technical issues only, but in business and general issues as well to broaden their mindset and fulfill it (Ahmed, 1998 ). This leads to a better ability in managing different possible obstacles (Ahmed, 1998 ). Nevertheless, Ahmed warned that the champion's experience may become an obstacle, because it may restrict the way the champion thinks and analyzes by the boundaries of his expertise.

It can be concluded from the above that the allocation of innovation champion is essential for the success of innovations. Hence, the following hypothesis is assumed:

RQ3: H4. The allocation of innovation champion is positively related to innovations in organizations

#### **4.5. Management Style**

Scholars suggest that managers have to have the right skills that incubate the innovation and support its growth and success (Cottam et al, 2001; Zhao, 2005). Management style in leading the team towards a steady change acceptance is very essential in innovation, because innovation is built on change and its acceptability (Johannessen, 1994 ). Managers have to be comfortable with accepting new ideas and suggestions from their subordinates (National.Audit.Office, 2006). This will allow the subordinates to come forward with their suggestions and concerns; helping the organization to adopt and succeed in new innovations (National.Audit.Office, 2006). The management's socialization with the staff and interaction with them further supports innovations in organizations (Kimberly & Evanisko, 1981). Deppe et al. (2002) suggest that it is essential for the management to communicate the value of innovation and emphasize the need of it in the organization. This leads the organization to understand and support innovations, and ensure those innovations stay on track with their implementation.

Management should demonstrate full support of the adopted innovations, the support can be: financially by granting the required funds and facilitating them, administratively by changing the needed processes, procedures, and regulations to support the innovation's sustainability, and spiritually by providing the supportive efforts and being involved with the staff throughout the lifecycle of the innovations (Brown, 1992; Ahmed, 1998 ; National.Audit.Office, 2006; Cottam et al, 2001; Denison & Mishra, 1995).

Management should be the role models of embracing the innovation; this encourages the adoption of the innovation within the organization (Schneider et al, 1996). Cottam et al. (2001) promote the importance of management's support of creativity. This can be accomplished by simulating the employees to brainstorm ideas for improvements,

new products, new internal or external processes, and putting in place a reward system to provide incentives for bright ideas (Ireland et al, 2006; Zhao, 2005). This encourages the employees to keep coming with new ideas because of the appreciation they get in reward (Cottam et al, 2001; Zhao, 2005; Ireland et al, 2006).

Accordingly, the following hypothesis is proposed:

RQ3: H5. Management style is correlated with innovations in organizations

#### **4.6. Staff Empowerment**

Academics have found out through their continuous research for the factors that may support and foster innovations, that empowerment is one of the main factors that psychologically supports the employees and encourage them directly and indirectly to embrace the innovation for longer periods (Strang & Meyer, 1993; Schneider et al, 1996; Cottam et al, 2001; Ahmed, 1998 ; Denison & Mishra, 1995; Zhao, 2005; Johannessen, 1994 ; Prajogo & Sohal, 2003).

Empowered employees feel more confident to innovate and would have a better sense of commitment and responsibility toward their work (Strang & Meyer, 1993; Ahmed, 1998 ; Denison & Mishra, 1995). Employees should be independent in performing their work, confident about their job decisions, and be supported by their managers on the decisions they make, this makes the employees feel that they are contributing to the organization, and subsequently allow them to innovate (Prajogo & Ahmed, 2006; Angelicchio, 2008).

According to the above, the staff empowerment seems to be an essential condition to successful innovations. Hence, the sixth hypothesis of the third research question will be formulated as below:

RQ3: H6. Empowerment encourages innovation in organizations.

## 4.7. Employees Training

Innovation scholars emphasize that continuous employees' training will enable them to be more creative, adapt to changes faster, and continue their embracement of innovations (Zhao, 2005; Klein & Sorra, 1996; Deppe et al, 2002; Cottam et al, 2001; Ahmed, 1998 ; Schneider et al, 1996; Kimberly & Evanisko, 1981; Weiss, 1997 ; Byrne, 2008; Ireland et al, 2006 ; Prajogo & Ahmed, 2006 ; National.Audit.Office, 2006). The National Audit Office of the United Kingdom (2006) stresses that training is needed the most during economic recession. However, the organizations tend to cut the costs and stop the trainings during those phases, to reduce their expenditures and survive the economical downturn. Employees need to be trained on how to react in such circumstances, be more innovative, and maintain the customer relations which will be beneficial in the recovery phases (National.Audit.Office, 2006).

Therefore, the final hypothesis to be researched is:

RQ3: H7. Training is combined with innovations in organizations

## 4.8. Conclusion

This chapter exhibited and explained the organizational conditions and elements that are associated with successful innovations. The examined conditions were organizational culture, organizational climate, organizational structure, innovation personnel, allocation of a champion, management's style, employee empowerment, and employee development. This chapter forms the basis for the empirical research of this study, identifying the set of factors to be examined in the field study.



## **Chapter 5: The Methodology**

This chapter presents an overview on innovation and the reviewed literature. Then it describes the research questions, the proposed hypotheses, and links them to the variables and factors that will be researched. This is followed by a justification of the research method used, and the way it was designed. Next, the chapter describes the population examined, and the sampling procedures used. Then the construction of the instruments is explained, the pilot survey results are identified, the protocol and procedures followed for the data collection are expressed, the initial data analysis performed are mentioned, the ethical issues faced are then declared, and finally, the limitations confronted are presented.

### **5.1. Overview**

The dissertation aims to enhance the level of innovation in the United Arab Emirates' organizations, and specifically in Dubai's organizations. This will be established through the identification of the main triggers and conditions that are associated with successful innovations in Dubai's organizations.

Testing organizational conditions alone was not enough to determine if their existence support innovations in the examined organizations. Hence, to support this purpose, innovativeness was jointly tested in the field study. Innovativeness is used in the dissertation to assess the relation between the organizational conditions and organization's innovation. It is often indicated by the number of innovations adopted or produced by the organization (Wolfe, 1994; Lee & Treacy, 1988; Damanpour, 1987; Kimberly & Evanisko, 1981; Weiss, 1997 ). However, this is more of a generic identifier and does not link innovation to the organization itself. Innovativeness, as cited by Ozsomer et al. (1997) from Miller and Friesen (1983), refers to the organization's capability and capacity to innovate and keep on innovating. The number of innovations adopted and produced by an organization is one aspect of its innovativeness, but is not the only indicator. There is a set of characteristics and

behaviors in the organization that determines its innovativeness (Wang & Ahmed, 2004; Ozsomer et al, 1997; Dobni, 2008). Those characteristics and identifiers will be described further in the following sections.

## **5.2. Research Questions and Hypotheses**

As mentioned in the previous chapters, the dissertation has three main research questions which are derived from the dissertation's objectives. The research questions are as follows:

- RQ1. What are the environmental and market factors that may trigger innovation in an organization?
- RQ2. What are the organizational factors that may trigger innovation in an organization?
- RQ3. What are the elements and conditions that are required in an organization to ensure the success of the innovation in that organization?

Accordingly, the research questions study three innovation dimensions: the external influences on innovation, the internal influences, and the organizational conditions that support and foster innovation. Innovativeness is the main central variable in the dissertation. Each of the research questions will assess the effect of certain independent dimension, variable, or factor on organizational innovativeness.

The first research question explores the external triggering factors. These cannot be considered as variables for this dissertation because they could not be measured on a scale. However, they are examined and explored through the field study.

The second research question reviews the internal innovation triggering factors. These were not considered as variables in this study, because they could not be measured on a scale either. However, the main factors under this dimension are tested to indicate their existence, and subsequently the effect they have on the

organization's innovativeness. The main internal triggering factors are represented in the following three hypotheses under RQ2:

RQ2: H1. Management decision plays a role in triggering innovation

RQ2: H2. Managers' educational background affects innovation

RQ2: H3. Managers' cosmopolitanism influences innovation

The third and last research question examines the organizational conditions, and assesses the relation between those organizational conditions and the organization's innovativeness as a result. Organizational condition in this dissertation is considered as an independent variable where innovativeness is assumed to be correlated with its existence. The main factors under this variable are: organization culture, organization climate, organization structure, champion allocation, management style, empowerment, and employee development. Following are the proposed hypotheses on those factors:

RQ3: H1. The organizational culture is related to innovation in the organization

RQ3: H2. The organizational climate is associated with innovations in organizations

RQ3: H3. An organic organizational structure coexists with successful innovations

RQ3: H4. The allocation of innovation champion is positively related to innovations in organizations

RQ3: H5. Management style is correlated with innovations in organizations

RQ3: H6. Empowerment encourages innovations in organizations

RQ3: H7. Training is combined with innovations in organizations

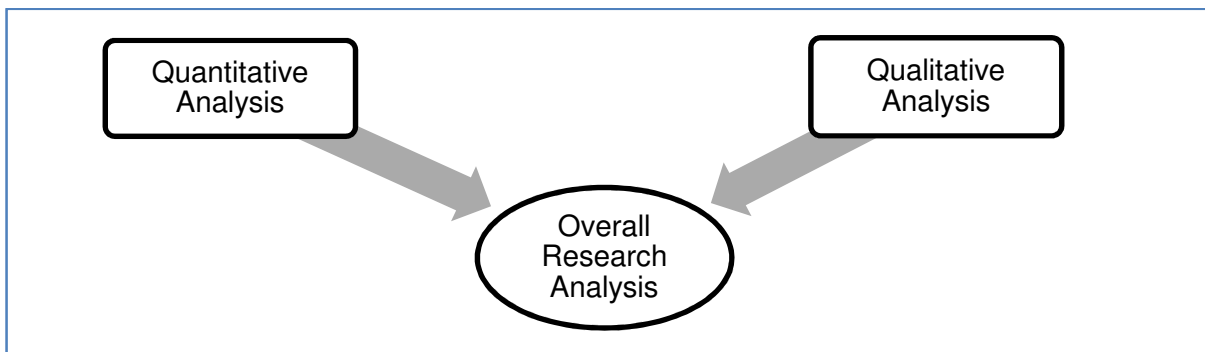
### **5.3. Selection of the Research Approach**

The questions and hypotheses of this dissertation are diverse in their nature. The first research question explores a dimension that cannot be measured quantitatively based on the research found in chapter 3. However, the second research question reviews a generic dimension with factors that are measurable to an extent, therefore

both quantitative and qualitative can apply for it Furthermore, the third research question and its hypotheses deal with measureable variables, hence quantitative methods could address them. In view of the above diversity of questions, the mixed method approach is the most suitable method with the questions and hypotheses of this dissertation.

The approach followed is the triangulation mixed method approach. In this approach, both quantitative and qualitative data are gathered concurrently. The quantitative data will be gathered using surveys to test the hypotheses of the second and third research questions, and assess the relationship between the examined variables and factors with organizational innovativeness. Qualitative data will be gathered through interviews to explore the three research questions. Following the analyses of the distinctive data types, analyses and discussions of the combined data will be exhibited to attend to the dissertation purpose as a whole.

The following diagram illustrates the design of the selected research method.



**Figure 2 - Triangulation Mixed Approach Design**

The following diagram exhibits the distribution of the research questions and hypotheses amongst the chosen research methods. The diagram shows that the quantitative method will mainly examine the hypotheses of the second and third research questions. The qualitative method will target broadly the total hypotheses as the quantitative method, and additionally examine the entire research questions of the dissertation. This provides a wider perspective on the topic overall.

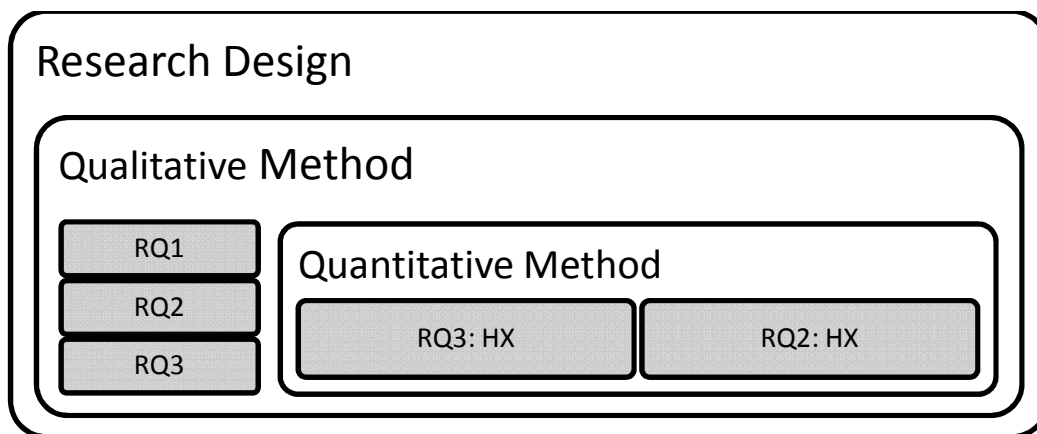


Figure 3 - Mixed Research Methods Design

## 5.4. The Target Population and Chosen Sample

The population examined for this dissertation includes Dubai’s organizations in general. Dubai is one of the fast moving cities in the world with versatile sectors and a great multicultural environment. Therefore, the dissertation will study the organizations across industries and sectors.

### 5.4.1. Quantitative Data Sampling

The surveys in the quantitative data targeted random middle management members of 5 different organizations. The sectors included government, semi-government, and private sectors. The targeted industries were telecom, real estate, and technology providers industries. The table below shows the sectors and industries represented by the surveyed organizations.

Table 1 - Sectors and Industries of Organizations Represented in the Quantitative Research

Organization	Sector	Industry
A	Private	Real estate
B	Government	-
C	Private	Telecom
D	Semi-Government	Marine Trading
E	Private	Technology providers

The organizations that were selected represented the targeted sectors and industries, and were specifically selected because of the existence of a cooperative gatekeeper in them. Creswell and Clark (2007) argue the importance of a gatekeeper in the studied organizations, to secure and support the access to the targeted personnel, and ensure their cooperation in responding to the surveys. The middle management level was targeted because they are aware of the organizational strategy, and tend to have an objective view of the organization with minimal negativity. The sample size selected of 80 participants was accounted to be sufficient enough for the statistical measures. Additionally, this sample size is considered adequate due to the supporting qualitative data for this dissertation.

#### 5.4.2. Qualitative Data Sampling

The participants for the qualitative data are purposely sampled. Ten personnel were selected from the top executive level. This included organization founders, Managing Directors (MD), Chief Executive Officers (CEO), Chief Information Officers (CIO), and Directors from 6 organizations across different sectors and industries. The response from the personnel will be explained further in section 5.8. The below table presents the targeted personnel’s sector, industry, and management’s level. Some of the personnel represented organizations that were surveyed as well, as shown through the organizations’ symbols.

**Table 2 - Sectors and Industries of Organizations Represented in the Qualitative Research**

Organization	Sector	Industry	Level	Responded
A	Private	Real Estate	MD	
A	Private	Real Estate	CEO	
A	Private	Real Estate	MD	
E	Private	Technology Provider	Director	
A	Private	Real Estate	CIO	√
A	Private	Real Estate	Group IT Director	√
F	Private	Commercial Trading	CIO	√
G	Private	HR Consultancy	Founder	√
C	Private	Telecom	Director	√
D	Semi-Government	Marine Trading	Director	

The participants were selected from that level of the organization to provide a higher level, in-depth view of the organizational innovation. Participants from such level have an understanding of the market as a whole, and an understanding of the organizational tactics in specific. The selected personnel were chosen based on previous personal interactions or recommendations from other known contacts, this ensured that the personnel are reachable and cooperative. The recommendable sample size of such study is 4 to 10 (Creswell & Clark, 2007), hence the selected sample size is considered adequate.

## 5.5. Construction of Instruments Used

### 5.5.1. Quantitative Instruments

The quantitative data was gathered through the means of survey questions. They were meant to attend the hypotheses of the third research question, and indicate the existence of the three main factors of the second research question. A sample of the survey is attached in Appendix A.

The survey was divided to 2 main sections:

The first section was to gather profiling data of the respondents. This section was constructed in a way that would gather information about the respondents maintaining their anonymity; hence their names and actual job titles were not captured. This section is constituted of 9 multiple answer questions, to shorten the time required to answer the survey. The below table shows the profiling questions asked to the respondents.

**Table 3 - Profiling section of the Survey**

<b>PART ONE: GENERAL INFORMATION</b> <i>(please circle the applicable choice)</i>		
1	Gender	(1) Male (2) Female
2	Marital Status:	(1) Married (2) Single
3	Nationality:	(1) UAE National (2) Arab National (3) American (4)European (5) south and east Asia (6)others
4	Education:	(1) High school (2) Diploma (3) Higher Diploma

		(4) Bachelors (5) Masters or above
5	Age:	(1) Less than 25 (2) 25 - 34 (3) 35 - 44 (4) 45 -54 (5) 55 or above
6	No. of years worked in current organization:	(1) less than 2 years or above (2) 2-5 (3) 6-10 (4) 10
7	Total Years of experience:	(1) less than 2 years or above (2) 2-5 (3) 6-10 (4) 10
8	Job Status:	(1) Top Management Management (2) Middle Management (3) Lower level
9	Industry	(1) real estate (2) telecom (3) Marine (4) government (5) Technology providers (6) others, specify _____

The second section of the survey was developed to provide the needed data to analyze the hypotheses in this dissertation. The section is composed of 33 rating questions measured on the 5 point Likert scale:

1. Strongly Agree
2. Agree
3. Neither agree nor disagree
4. Disagree
5. Strongly disagree

The 5 point Likert scale was chosen over larger scales to avoid the possibility of subjectivity in having more levels of rating the questions (Glenn, 2007). The survey attempts to assess the hypotheses of the second and third research questions. This corresponds to the 3 main factors of the internal triggers, 7 main factors of organizational conditions, and the factors included in the innovativeness variable. Though most of those variables and factors are appraised with more than one question, the questions were randomly distributed to eliminate predictability of the flow. Four out of the 33 questions were reversed to keep the respondents attentive while answering the survey –the questions reversed are: 7, 15, 22, and 23-.

The second research question has the following 3 hypotheses:

RQ2: H1. Management decision plays a role in triggering innovation



RQ2: H2. Managers' educational background affects innovation

RQ2: H3. Managers' cosmopolitanism influences innovation

Those hypotheses could not be measured as a variable; instead, they were considered as factors and were inspected for existence. Question 10 indicates the magnitude of the last adopted innovations strictly due to the management decision. Questions 9 and 21 determine the management's educational level, and whether they are considered as cosmopolitans and up-to-date with the market trends.

The third research question examined the existent organizational conditions in the surveyed organizations. The hypotheses in this research question are:

RQ3: H1. The organizational culture is related to innovation in the organization

RQ3: H2. The organizational climate is associated with innovations in organizations

RQ3: H3. An organic organizational structure coexists with successful innovations

RQ3: H4. The allocation of innovation champion is positively related to innovations in organizations

RQ3: H5. Management style is correlated with innovations in organizations

RQ3: H6. Empowerment encourages innovations in organizations

RQ3: H7. Training is combined with innovations in organizations

The first hypothesis inspects organizational culture as the variable. According to Neiva et al. (2005) change acceptance is a factor under organizational culture that may be related to innovation in the organization. In their research they used questions 15 and 19 to measure this factor. Behavioral attitude is another factor shown by Zdunczyk and Blenkinsopp (2007) as a part of organizational culture that is related to organizational innovation. They used questions 17 and 22 to evaluate this factor in their study.

The second hypothesis investigates organizational climate as a variable associated with innovativeness in organizations. Schneider et al. (1996) and Ahmed (1998 )

argue that organizational climate includes the following three factors: the vision, strategy, the policies and procedures, and the reward systems. Questions 8 and 16 were used by Zdunczyk and Blenkisopp (2007) and Dobni (2008) respectively in their research to assess the vision and strategy in organizations. Question 12 was used by Schneider et al. (1996) to appraise the policies and procedures in the organization. Questions 13, 14, and 18 were used by Ahmed (1998) in his research to evaluate the organization's reward system.

The third hypothesis assumes a relationship between innovation and the organizational structure. Questions 20 and 23 were used by Ahmed (1998) and Ozsomer et al. (1997) to appraise the organizational structure. These questions aim to locate the organization on the organic-mechanistic spectrum.

The fourth hypothesis proposes that the allocation of a champion is related to the success of innovations in the organizations. According to Ahmed (1998) and Ungan (2004), this can be evaluated in the organization by determining the existence of a champion for the selected innovations. This is evaluated through question 24.

The fifth hypothesis proposes that positive management style is correlated with innovations in organizations. According to the researched literature in this dissertation, there are four factors under this variable: supportive management, suggestions tolerance, management's socialization, and management skills. Questions 30, 31, 32, and 33 were used in the research of Dobni (2008) and Kimberly and Evanisko (1981) to appraise those factors.

The sixth hypothesis suggests that empowerment encourages innovations in organizations. Breaugh (1989) established questions 11, 25, and 26 as part of his constructs on measuring empowerment in organizations.

The seventh hypothesis assumes that training is combined with innovations in organizations. Questions 27 and 28 assess this hypothesis as used by Dobni (2008) in his research.

As mentioned before, to examine the actual influence of the variables and factors above, innovativeness variable had to be inspected so that the relationships can be drawn accordingly. Questions 1-7 are proven as successful constructs of innovativeness by the research of Wang and Ahmed (2004) and Ozsomer et al. (1997). It is worth noting that there was very little research that established constructs to measure innovativeness in organizations.

The following table demonstrates the mapping between the survey questions in the second section and each of the dimensions, variable, factors, research questions, and hypotheses.

**Table 4 - Survey Mapping to Research Questions, Hypothesis, and Variable**

Q. Index	Dimension/ Variable	Factor	Element	Research Question and Hypothesis
1	Innovativeness	-	-	All
2	Innovativeness	-	-	All
3	Innovativeness	-	-	All
4	Innovativeness	-	-	All
5	Innovativeness	-	-	All
6	Innovativeness	-	-	All
7	Innovativeness	-	-	All
8	Organizational Conditions	Organization Climate	vision	RQ3: H2
9	Internal Triggers	Management Education	-	RQ2: H2
10	Internal Triggers	Management Decision	-	RQ2: H1
11	Organizational Conditions	Empowerment	-	RQ3: H6
12	Organizational Conditions	Organization Climate	policies and procedures	RQ3: H2
13	Organizational Conditions	Organization Climate	reward system	RQ3: H2
14	Organizational Conditions	Organization Climate	reward system	RQ3: H2

15	Organizational Conditions	Organization Culture	change acceptance	RQ3: H1
16	Organizational Conditions	Organization Climate	vision	RQ3: H2
17	Organizational Conditions	Organization Culture	behaviors	RQ3: H1
18	Organizational Conditions	Organization Climate	reward system	RQ3: H2
19	Organizational Conditions	Organization Culture	change acceptance	RQ3: H1
20	Organizational Conditions	Organization Structure	-	RQ3: H3
21	Internal Triggers	Management Cosmopolitan	-	RQ2: H3
22	Organizational Conditions	Organization Culture	behaviors	RQ3: H1
23	Organizational Conditions	Organization Structure	-	RQ3: H3
24	Organizational Conditions	Innovation Champion Allocation	-	RQ3: H4
25	Organizational Conditions	Empowerment	-	RQ3: H6
26	Organizational Conditions	Empowerment	-	RQ3: H6
27	Organizational Conditions	Training	-	RQ3: H7
28	Organizational Conditions	Training	-	RQ3: H7
29	Organizational Conditions	Organizational Slack	-	omitted
30	Organizational Conditions	Management Style	supportive	RQ3: H5
31	Organizational Conditions	Management Style	suggestion tolerance	RQ3: H5
32	Organizational Conditions	Management Style	socialization	RQ3: H5
33	Organizational Conditions	Management Style	Skills	RQ3: H5

Question number 29 was omitted from the analysis because it was realized that it did not fit into the examined hypotheses.

### 5.5.2. Qualitative Instruments

For the purpose of this dissertation, semi-structured interviews were used to gather data on the major innovation dimensions and research questions of the dissertation,

allowing for follow up questions to emerge during the interviews, and to ask for a feedback on certain factors to understand their impacts as per the interviewees' experience. The qualitative data is planned to aid the three research questions of this dissertation, and add value to innovation and innovativeness. The interview questions adapted the same approach of the interview questions used by Mazzarol et al. (2007) in their research. The interview questions are attached in Appendix B.

The first question is an introductory question. It aims to reach for the interviewees and get them into the context of the topic. The question requests the interviewee to identify a new product, process, or a tool that was introduced to the internal staff or the external customers. Then the interviewee was requested to elaborate on the new aspects of this new introduction, and the novelty introduced with it. The word "Innovation" was avoided as and when possible in order to objectively focus the interview, and not diverge into the misconception that innovation is strictly a new invention. The following questions were asked in relevance to the identified new introduction in the first question.

The second question inquired the perceived causes that were external to the organization and led to the new introduction identified in the first question. Follow up questions were asked to determine if the factors found in the literature were present. The factors followed up on are: market recess, credit crunch, and governmental rules. The third question inspected the factors that are within the organization which may have led to the new introduction identified in the first question.

The fourth question aspired to understand the conditions that availed within the organization to assist the identified new introduction in succeeding. This success can be during the execution and delivery of the new introduction, and the success can be through the constant endorsement of the new introduction with minimal rejection. The follow up questions probed the influence of the existing organizational culture, organizational structure, communication across levels, champion allocation, training, and empowerment.

The final question sought to identify the interviewees' perspective of innovative organizations. To identify the characteristics within the organization, and the characteristics that can be identified from outside the organization as evidence of the organization's innovativeness. Innovativeness was explained as the capability of the organization to succeed in producing innovations, and keep generating more of those innovations (Köksal & Özgül, 2007 ).

## **5.6. Pilot Surveys**

Pilot surveys were distributed to 4 employees in one of the organizations. The purpose of this pilot was to confirm the readability of the questions, to receive feedback and improvement suggestions, and to ensure that the surveys does not require a long response time, which may discourage the respondents from completing the surveys.

Three out of the 4 employees responded to the survey. The average time taken was 8.8 minutes, which is relatively short, and suggests a high response rate. The respondents thought of the survey overall as understandable. Some feedback was received in terms of unifying the response type required, whether it is ticking or circling the selected choice. One question was suggested to be rephrased. The last feedback pointed a better choice for one of the profiling questions. All the feedback was incorporated, and then the survey was launched.

## **5.7. Research Protocol and Procedure**

For the quantitative data, surveys were sent via email to some of the targeted audiences. The survey was printed and handed to the rest of the respondents at their desks during office hours, and were assured that the average response time is 10 minutes according to the pilot survey.

For the qualitative data, the respondents were contacted over the phone or email, and then after their acceptance, they were sent the interview questions on their

official emails. The interviews were scheduled according to the interviewees' convenience. Some interviews were scheduled during working hours in their offices or in their official meeting rooms. Other interviewees preferred after working hours in public locations. Interviews were voice recorded after the consent of the interviewees, which was granted in all cases except one, who preferred notes to be taken without voice recording. The interviews were scheduled for an hour, but most of them were finished within half an hour.

The interviews and surveys were initiated and completed within one week concurrently.

## 5.8. Data Collection

For the quantitative data, 80 surveys were sent to the targeted middle management personnel in the targeted organizations, as described in the previous section. Fifty one surveys were received back formulating a response rate of about 63%. Some organizations refused distributing the surveys on the targeted employees, claiming that they would be too busy to respond within 3 days.

The following table illustrates the response from the organizations mentioned in subsection 5.4.1.

**Table 5 - Quantitative Response**

Organization	Sent	Received
A	20	19
B	15	9
C	20	9
D	15	12
E	10	2
Total	80	51
percentage		63.75

For the qualitative data, 10 top executive level personnel were approached, 7 of which initially agreed. However, 5 interviews eventually were conducted due to the

withdrawal and unavailability of 2 more personnel. Four of the 5 interviews were voice recorded. Notes taking were allowed in all interviews. The following table illustrates the response from the organizations mentioned in subsection 5.4.2.

**Table 6 - Qualitative Response**

Organization	Level	Responded
A	MD	X
A	CEO	X
A	MD	X
E	Director	X
A	CIO	√
A	Group IT Director	√
F	CIO	√
G	Founder	√
C	Director	√
D	Director	X

### 5.9. Initial Data Analysis

For the quantitative data, the surveys were coded into a data analysis software – SPSS-. The variables and factors were defined and mapped to the questions of the surveys. The analyses included preliminary descriptive analysis on the respondents profiling, reliability tests to confirm the consistency of the results, and finally, correlation and regression to validate the hypotheses of the dissertation.

For the qualitative data, the recorded interviews were transcribed. During the interviews, interviewees had a little mixing between internal and external innovation triggers. Hence initial coding was carried out on the transcribed text, to code the essential usable responses with a code corresponding to the question it answers. Further coding was carried out to classify the responses into different themes for each question.



## **5.10. Ethical Issues**

To ensure a higher level of response on both the quantitative and qualitative methods, the anonymity of the respondents had to be maintained. Survey respondents feared their responses and point of views would be presented to their management, and the possibility of a resulting penalty. The interviewees were also concerned about revealing their identity while exposing information that may be considered as confidential to their organization. Accordingly, the identities of the respondents of both data were maintained anonymous.

## **5.11. Limitations**

One of the main limitations pointed by a number of the respondents during the survey distribution was their confusion with regard to the most appropriate choice of answers, specifically to the questions on employee training and reward systems (refer to questions: 13, 14, 18, and 27 in appendix A). Their concerns were that: at previous times, they would have responded with “strongly agree” to the above mentioned questions, as their organizations used to provide adequate training programs and reward systems. However, due to the current credit crunch crisis, those training programs and reward systems were put on hold due to cost cutting measures; accordingly, those respondents stated that it was more viable to respond with “disagree”. In addition, the newly joined employees are not aware of the previous positive situations, hence, were driven into negative rating due to the cost cutting measures.

## **5.12. Summary**

As demonstrated in this chapter, the research questions and hypotheses aim to examine and study the external and internal innovation triggers, and the organizational conditions that play a role in supporting innovations. Because the research questions and hypotheses are different in nature, the mixed research

approach was found more suitable to answer those questions and hypotheses. The research targeted middle management level personnel for the surveys, and high management level personnel for the interviews. The research maintained the anonymity of the respondents throughout the dissertation.

## **Chapter 6: Analyses and Discussions of the Findings**

This chapter presents and analyzes the data collected from the quantitative research. This is followed with the analyses of the qualitative research findings. The chapter is concluded with a discussion on the combined research results, quantitative and qualitative, to answer this dissertation's questions and hypotheses.

### **6.1. Quantitative Analysis Results**

This section presents and analyzes results of the statistical analysis on the survey data, after being coded and inserted into SPSS. First, descriptive analyses of some of the main profiling questions are described. Then reliability tests are transacted to ensure the consistency of the chosen survey questions. This is followed by explaining the results of the correlation tests between the dissertation's variables and factors. And finally, multiple regression tests are examined to investigate the dependency between the dissertation's variables and factors. Some of those tests are carried on the overall respondents, and then are carried out on each of the sectors separately. The real estate, telecom, and technology provider industries in this research were represented by private companies; hence they will be combined in one sector as the private sector.

#### **6.1.1. Descriptive analysis on Profiling**

This subsection presents the results of selected profiling questions, which are the tenure length, job level, and the industry. The descriptive analyses of the rest of the profiling questions are attached in Appendix D.

The first table shows the tenure length of the survey respondents.

**Table 7 - Tenure Length for the Survey respondents**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid less than 2 years	20	39.2	39.2	39.2
2-5 years	12	23.5	23.5	62.7
6-10 years	6	11.8	11.8	74.5
10 years or above	13	25.5	25.5	100.0
Total	51	100.0	100.0	

As explained in the methodology chapter, one of the limitations highlighted by the respondents in the quantitative research is that they had to respond negatively to some of the questions. This was caused by the cost cutting measures associated with the current credit crunch crisis. This is apparent especially with the shorter tenure staff because they did not witness the wealthy phases of the organizations. The previous table shows that the participants with less than 2 years tenure constitute around 40% of the sample. Hence, a large percentage of the survey respondents are newly employed in their organizations. This may cause a level of distortion in the results due to the negative perception of the newly employed in the current credit crunch, as explained earlier.

The following table summarizes the job level of the survey respondents.

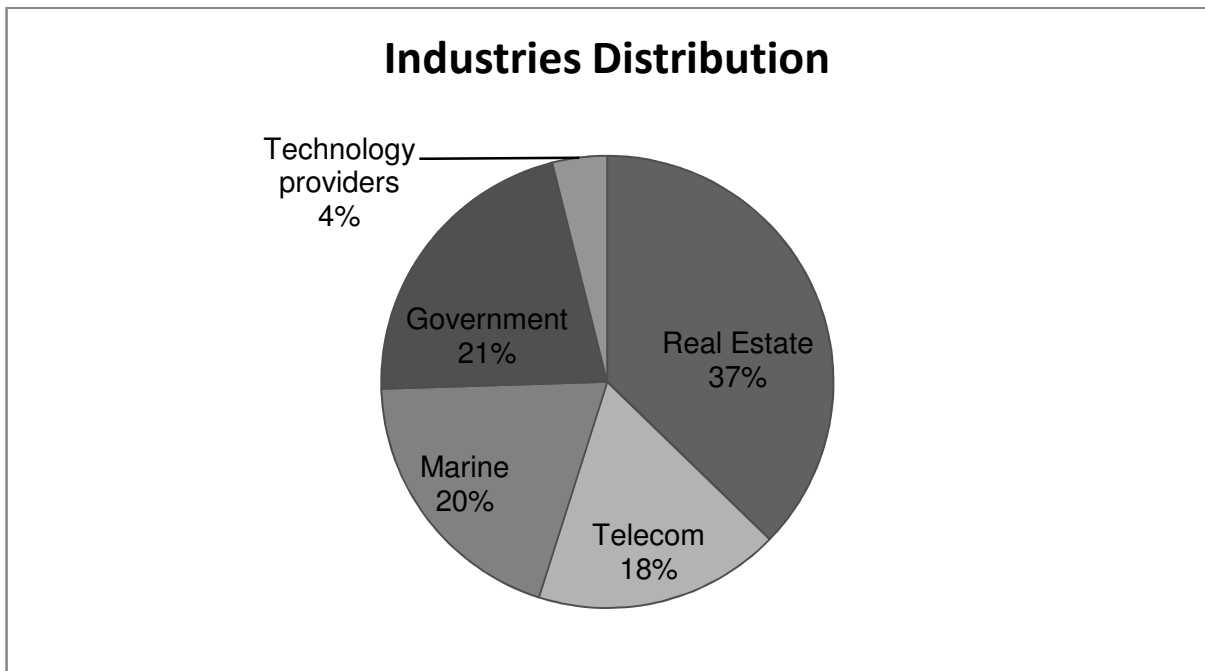
**Table 8 - Job level of the Survey Respondents**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Top Management	8	15.7	15.7	15.7
Middle Management	41	80.4	80.4	96.1
Low Level	2	3.9	3.9	100.0
Total	51	100.0	100.0	

The middle management personnel were the main target of the survey. The above table illustrates that middle management composed around 80% of the sample, top management composed around 16%, and finally, the lower level composed around 4%. The middle management personnel were targeted purposely to get an objective response with an understanding of the organizational direction, and minimal

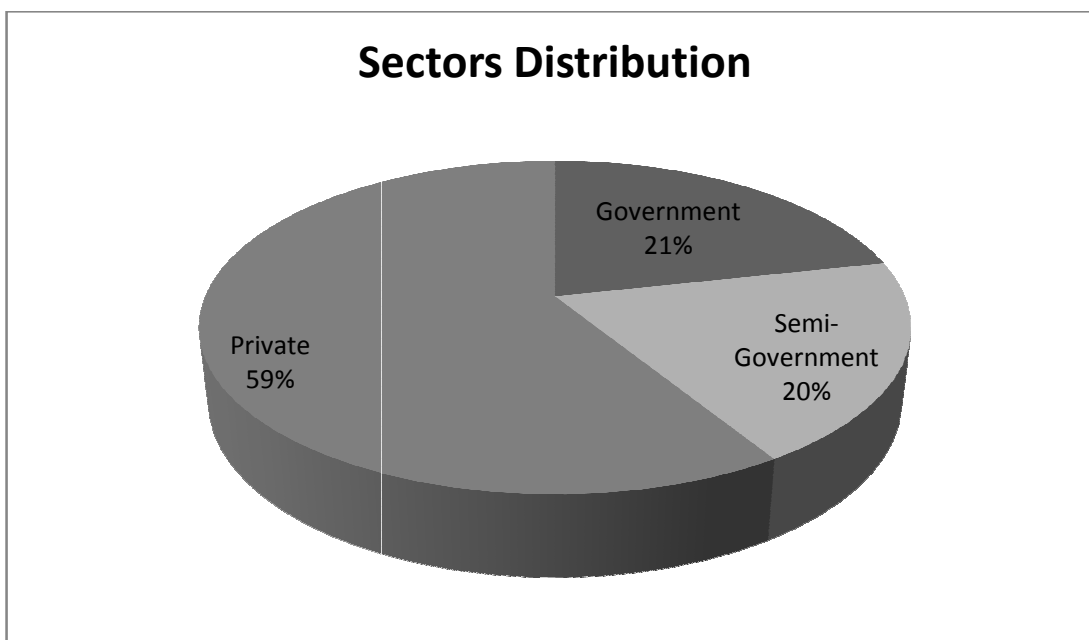
negativity. The middle management and above formed around 96% of the selected sample, hence the target was met.

The next table presents the distribution of industries represented by the survey respondents.



**Figure 4 - Surveyed Industries Distribution**

For the purpose of a thorough study of Dubai's organizations, the respondents were classified according to the sector their organizations belong to. The surveyed Marine firm is a semi-government firm. The real estate, telecom, and technology provider firms are private sector firms. The following diagram represents the distribution of those surveyed sectors.



**Figure 5 - Surveyed Sectors Distribution**

The private sector constituted the largest percentage of the survey respondent. However, the study will examine each sector on its own, after examining Dubai’s organizations in general.

### 6.1.2. Reliability Tests on the Survey Variables

Reliability tests were carried out on the variables experimented in the survey to ensure the consistency of the results. The variables tested for reliability are innovativeness, organizational conditions, and internal triggers.

**Table 9 - Reliability Test Results**

Variables	Cronbach's Alpha	N of Items
Innovativeness	0.848	7
Organizational Conditions	0.890	22
Internal Triggers	0.673	3

The reliability tests performed on innovativeness and the organizational conditions aimed to confirm the consistency and reliability of the used factors in the survey questions. The results of those tests given in table 9 resulted in “Cronbach's Alpha”

values higher than 0.7, which shows reliable and consistent results. In the methodology chapter, it was explained that internal triggers are not considered as variables; instead they would only be tested to indicate their existence. The reliability test for these resulted as 0.67, which to some measures may be considered as reliable, but not highly reliable. For the purpose of the existence indication, they are incorporated in the research.

### 6.1.3. Correlation

This section includes correlation tests between innovativeness and each of the organizational conditions as a whole, organizational condition factors – this includes: organization culture, organization climate, organization structure, employee empowerment, employee training, management style, and Champion allocation -, and internal triggers– which includes: management’s education, management’s cosmopolitanism, management’s decision -. First, these tests are carried out on Dubai’s organizations in general, then on government, semi-government, and private sectors separately.

#### 6.1.3.1. Correlation between Innovativeness and Organizational Conditions (as a whole)

The following table displays the results of the correlation test between innovativeness and organization conditions as a whole in Dubai’s organizations overall.

**Table 10 - Correlation between Organization Conditions and Innovativeness in Dubai's organizations overall**

		Innovativeness	Organization Condition
Innovativeness	Pearson Correlation	1	.829**
	Sig. (2-tailed)		.000
	N	51	51
Organization Condition	Pearson Correlation	.829**	1
	Sig. (2-tailed)	.000	
	N	51	51

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 10 shows that in Dubai’s organizations generally, the correlation between innovativeness and general organization conditions scored a significance of “0.000”. This score implies a highly significant correlation between innovativeness and the organizational conditions in Dubai’s organizations generally.

The following table shows the results of this test in the government sector specifically.

**Table 11 - Correlation between Innovativeness and Organization Conditions as a whole in Government Sector**

		Innovativeness	Organization Condition
Innovativeness	Pearson Correlation	1	.869**
	Sig. (2-tailed)		.001
	N	11	11
Organization Condition	Pearson Correlation	.869**	1
	Sig. (2-tailed)	.001	
	N	11	11

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 11 shows that in Dubai’s government sector, the correlation between innovativeness and general organization conditions scored a significance of “0.001”. This score implies a highly significant correlation between innovativeness and the organizational conditions in Dubai’s government sector.

The following table shows the results of this test in the semi-government sector specifically.

**Table 12 - Correlation between Innovativeness and Organization Conditions as a whole in Semi-Government Sector**

		Innovativeness	Organization Condition
Innovativeness	Pearson Correlation	1	.965**
	Sig. (2-tailed)		.000
	N	10	10
Organization Condition	Pearson Correlation	.965**	1
	Sig. (2-tailed)	.000	
	N	10	10

\*\* . Correlation is significant at the 0.01 level (2-tailed).



Table 12 shows that in Dubai’s semi-government sector, the correlation between innovativeness and general organization conditions scored a significance of “0.000”. This score implies a highly significant correlation between innovativeness and the organizational conditions in Dubai’s semi-government sector.

The following table shows the results of this test in the private sector specifically.

**Table 13 - Correlation between Innovativeness and Organization Conditions as a whole in Private Sector**

		Innovativeness	Organization Condition
Innovativeness	Pearson Correlation	1	.759**
	Sig. (2-tailed)		.000
	N	30	30
Organization Condition	Pearson Correlation	.759**	1
	Sig. (2-tailed)	.000	
	N	30	30

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 13 shows that in Dubai’s private sector, the correlation between innovativeness and general organization conditions scored a significance of “0.000”. This score implies a highly significant correlation between innovativeness and the organizational conditions in Dubai’s private sector.

The results of these correlation tests for Dubai’s organizations overall are in table 10, for the government sector in table 11, for the semi-government sector in table 12, and for the private sector in table 13. All 4 of the tables show that the correlation between innovativeness in the organizations and the overall organizational conditions is positively significant at the level 0.01. This probes that in all Dubai’s sectors, combined and separated, the overall organizational conditions are positively related to the innovativeness in those organizations. This probes that as the organizational conditions become satisfactory, so will the innovativeness in those organizations.

#### 6.1.3.2. Correlation between innovativeness and organizational condition factors

This part exhibits and explains the results of the correlation tests between innovativeness and each of the examined organizational conditions: organization

culture, organization climate, organization structure, employee empowerment, employee training, management style, and Champion allocation. The tests are carried on Dubai's organizations overall, then on each of Dubai's sectors separately.

*Dubai's organizations*

The following table presents the correlation between the organizational conditions and innovativeness in Dubai's organizations overall.

Table 14 - Correlation between Organization Condition Factors and Innovativeness in All Sectors

		Innovativeness	Organization Culture	Organization Climate	Organization Structure	Empowerment	Training	Management Style	Champion
Innovativeness	Pearson Correlation	1	.530**	.772**	.420**	.704**	.602**	.621**	.600**
	Sig. (2-tailed)		.000	.000	.002	.000	.000	.000	.000
	N	51	51	51	51	51	51	51	51
Organization Culture	Pearson Correlation	.530**	1	.586**	.458**	.614**	.579**	.492**	.426**
	Sig. (2-tailed)	.000		.000	.001	.000	.000	.000	.002
	N	51	51	51	51	51	51	51	51
Organization Climate	Pearson Correlation	.772**	.586**	1	.273	.532**	.631**	.470**	.591**
	Sig. (2-tailed)	.000	.000		.053	.000	.000	.001	.000
	N	51	51	51	51	51	51	51	51
Organization Structure	Pearson Correlation	.420**	.458**	.273	1	.503**	.251	.477**	.294*
	Sig. (2-tailed)	.002	.001	.053		.000	.076	.000	.036
	N	51	51	51	51	51	51	51	51
Empowerment	Pearson Correlation	.704**	.614**	.532**	.503**	1	.479**	.552**	.562**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000
	N	51	51	51	51	51	51	51	51
Training	Pearson Correlation	.602**	.579**	.631**	.251	.479**	1	.570**	.413**
	Sig. (2-tailed)	.000	.000	.000	.076	.000		.000	.003

## Triggers and Conditions for Innovations in Dubai

	N	51	51	51	51	51	51	51	51
Management Style	Pearson Correlation	.621**	.492**	.470**	.477**	.552**	.570**	1	.478**
	Sig. (2-tailed)	.000	.000	.001	.000	.000	.000		.000
	N	51	51	51	51	51	51	51	51
Champion	Pearson Correlation	.600**	.426**	.591**	.294*	.562**	.413**	.478**	1
	Sig. (2-tailed)	.000	.002	.000	.036	.000	.003	.000	
	N	51	51	51	51	51	51	51	51

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

The above table shows the correlation test results between innovativeness and each of the organizational condition factors in Dubai's organizations overall. The table showed that each of the factors is correlated positively and significantly with innovativeness. This implies that in Dubai's organizations generally, there is a relationship between innovation and each of the examined conditions, and the relation is of a positive association nature. So, as each of those conditions grows, so would innovativeness. Similarly as innovativeness grows in the Dubai's organizations overall, so will the examined conditions.

### *Government Sector*

The following table presents the correlation between the organizational conditions and innovativeness in government sector specifically.

**Table 15 - Correlation between Innovativeness and Organization Conditions factors in Government Sector**

		Innovativeness	Organization Culture	Organization Climate	Organization Structure	Empowerment	Training	Management Style	Champion
Innovativeness	Pearson Correlation	1	.822**	.893**	.219	.805**	.433	.472	.968**
	Sig. (2-tailed)		.002	.000	.518	.003	.184	.142	.000
	N	11	11	11	11	11	11	11	11
Organization Culture	Pearson Correlation	.822**	1	.743**	.106	.853**	.602	.501	.761**
	Sig. (2-tailed)	.002		.009	.755	.001	.050	.117	.007
	N	11	11	11	11	11	11	11	11
Organization Climate	Pearson Correlation	.893**	.743**	1	.016	.814**	.559	.279	.846**
	Sig. (2-tailed)	.000	.009		.964	.002	.074	.406	.001
	N	11	11	11	11	11	11	11	11
Organization Structure	Pearson Correlation	.219	.106	.016	1	-.104	-.008	.361	.139
	Sig. (2-tailed)	.518	.755	.964		.761	.980	.276	.683
	N	11	11	11	11	11	11	11	11
Empowerment	Pearson Correlation	.805**	.853**	.814**	-.104	1	.550	.366	.809**
	Sig. (2-tailed)	.003	.001	.002	.761		.080	.268	.003
	N	11	11	11	11	11	11	11	11
Training	Pearson Correlation	.433	.602	.559	-.008	.550	1	.431	.349
	Sig. (2-tailed)	.184	.050	.074	.980	.080		.185	.293
	N	11	11	11	11	11	11	11	11
Management Style	Pearson Correlation	.472	.501	.279	.361	.366	.431	1	.485
	Sig. (2-tailed)	.142	.117	.406	.276	.268	.185		.130

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	N	11	11	11	11	11	11	11	11
Champion	Pearson Correlation	.968**	.761**	.846**	.139	.809**	.349	.485	1
	Sig. (2-tailed)	.000	.007	.001	.683	.003	.293	.130	
	N	11	11	11	11	11	11	11	11

\*\* . Correlation is significant at the 0.01 level (2-tailed).

This test was performed on the government sector respondents specifically as illustrated in the previous table. Though all the factors were positively associated with innovativeness, only organizational culture, organizational climate, employee empowerment, and champion allocation were significantly associated with innovativeness, while organization structure, employee training, and management's style are not significantly associated with innovativeness in this sector. This suggests that for organizations in Dubai's government sectors, as organization's culture, organization's climate, employee empowerment, and champion allocation flourish, so would the innovativeness in this sector. Likewise, as innovativeness is flourished in this sector, so would those particular organizational conditions.

### *Semi-Government Sector*

The below table presents the correlations between the organizational conditions and innovativeness in Dubai's semi-government sector specifically.

**Table 16 - Correlation between Innovativeness and Organization Conditions factors in Semi-Government Sector**

	Innovativeness	Organization Culture	Organization Climate	Organization Structure	Empowerment	Training	Management Style	Champion
Innovativeness	Pearson Correlation	1	.846**	.817**	.837**	.843**	.915**	.688*
	Sig. (2-tailed)		.002	.004	.003	.002	.000	.028

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	N	10	10	10	10	10	10	10	10
Organization Culture	Pearson Correlation	.846**	1	.741*	.985**	.716*	.844**	.828**	.510
	Sig. (2-tailed)	.002		.014	.000	.020	.002	.003	.132
	N	10	10	10	10	10	10	10	10
Organization Climate	Pearson Correlation	.817**	.741*	1	.762*	.404	.739*	.734*	.447
	Sig. (2-tailed)	.004	.014		.010	.248	.015	.016	.195
	N	10	10	10	10	10	10	10	10
Organization Structure	Pearson Correlation	.837**	.985**	.762*	1	.694*	.883**	.860**	.506
	Sig. (2-tailed)	.003	.000	.010		.026	.001	.001	.135
	N	10	10	10	10	10	10	10	10
Empowerment	Pearson Correlation	.843**	.716*	.404	.694*	1	.851**	.874**	.688*
	Sig. (2-tailed)	.002	.020	.248	.026		.002	.001	.028
	N	10	10	10	10	10	10	10	10
Training	Pearson Correlation	.915**	.844**	.739*	.883**	.851**	1	.972**	.654*
	Sig. (2-tailed)	.000	.002	.015	.001	.002		.000	.040
	N	10	10	10	10	10	10	10	10
Management Style	Pearson Correlation	.952**	.828**	.734*	.860**	.874**	.972**	1	.671*
	Sig. (2-tailed)	.000	.003	.016	.001	.001	.000		.034
	N	10	10	10	10	10	10	10	10
Champion	Pearson Correlation	.688*	.510	.447	.506	.688*	.654*	.671*	1
	Sig. (2-tailed)	.028	.132	.195	.135	.028	.040	.034	
	N	10	10	10	10	10	10	10	10

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

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This correlation test was transacted on the semi-government respondents separately as presented in the above table. The results present that all the examined organizational conditions are positively and significantly related with innovativeness in this sector without exception. This proposes that in Dubai's semi-government organizations, as any of the examined organizational conditions are elevated, so will the innovativeness in those organizations. Correspondingly, as innovativeness is elevated in those organizations, so will the examined organizational conditions.

### *Private Sector*

The below table presents the correlations between the organizational conditions and innovativeness in Dubai's private sector specifically.

**Table 17- Correlation between Innovativeness and Organization Conditions Factors in Private Sector**

		Innovativeness	Organization Culture	Organization Climate	Organization Structure	Empowerment	Training	Management Style	Champion
Innovativeness	Pearson Correlation	1	.262	.715**	.336	.669**	.508**	.797**	.477**
	Sig. (2-tailed)		.162	.000	.070	.000	.004	.000	.008
	N	30	30	30	30	30	30	30	30
Organization Culture	Pearson Correlation	.262	1	.489**	.266	.479**	.426*	.454*	.224
	Sig. (2-tailed)	.162		.006	.155	.007	.019	.012	.234
	N	30	30	30	30	30	30	30	30
Organization Climate	Pearson Correlation	.715**	.489**	1	.276	.574**	.637**	.774**	.591**
	Sig. (2-tailed)	.000	.006		.141	.001	.000	.000	.001
	N	30	30	30	30	30	30	30	30



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Organization Structure	Pearson Correlation	.336	.266	.276	1	.623**	.053	.436*	.268
	Sig. (2-tailed)	.070	.155	.141		.000	.780	.016	.152
	N	30	30	30	30	30	30	30	30
Empowerment	Pearson Correlation	.669**	.479**	.574**	.623**	1	.334	.776**	.436*
	Sig. (2-tailed)	.000	.007	.001	.000		.071	.000	.016
	N	30	30	30	30	30	30	30	30
Training	Pearson Correlation	.508**	.426*	.637**	.053	.334	1	.635**	.357
	Sig. (2-tailed)	.004	.019	.000	.780	.071		.000	.053
	N	30	30	30	30	30	30	30	30
Management Style	Pearson Correlation	.797**	.454*	.774**	.436*	.776**	.635**	1	.572**
	Sig. (2-tailed)	.000	.012	.000	.016	.000	.000		.001
	N	30	30	30	30	30	30	30	30
Champion	Pearson Correlation	.477**	.224	.591**	.268	.436*	.357	.572**	1
	Sig. (2-tailed)	.008	.234	.001	.152	.016	.053	.001	
	N	30	30	30	30	30	30	30	30

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Finally, this test was computed with the private sector respondents as demonstrated in the previous table. The results demonstrated that although all the examined organizational conditions are positively correlated with innovativeness; the factors that are significantly correlated with innovativeness are: organizational climate, employee empowerment, employee trainings, management style, and champion allocation, while organization's culture and structures are not significantly correlated with innovativeness in this sector. This could entail that in the majority of Dubai's private sector, innovativeness will be fostered as the organizational climate, employee empowerment, employee trainings, management style, and champion allocation are fostered. Respectively, when innovativeness is cultivated in those organizations, so will those specific organizational conditions cultivate.

### *Summary*

The selected organizational conditions for this research generally seem to correlate positively with innovativeness in Dubai's organizations. However, not all of those conditions correlate significantly with innovativeness in each of the independent sectors. Organizational climate, employee empowerment, and champion allocation appear to be significantly associated with innovativeness in each of the selected sectors, combined and separated. The government sector tends to significantly relate organizational culture with innovativeness, in addition to the common identified conditions. The private sector is more likely to have employee training and management skills significantly related to innovativeness, beside the common identified conditions. Furthermore, semi-government sector differs from both previous sectors. The semi-government sector seems to significantly correlate all the examined organizational conditions with innovativeness.

#### 6.1.3.3. Correlation between Innovativeness and Internal Triggers

The reviewed literature review proposed the following as a subset of internal triggering innovation factors: management's level of education, management's role in deciding which innovations to be adopted, and the cosmopolitanism of the managers.

The review of the literature suggested that the examined set of internal triggers correlate positively with innovativeness in organizations. This was explained by linking the managers' higher level of education with more attempts to adopt advanced innovations to their organizations, linking the management's role in deciding on the adopted innovations with a higher rate of innovations adoption rather than only depending on bottom-top innovation ideas, and linking the managers' cosmopolitanism with a higher rate of innovation adoptions due to the managers' constant pursuit of new approaches.

This part exhibits and explains the results of the correlation tests between innovativeness and each of those internal triggers. The tests are carried on Dubai's organizations overall, then on each of Dubai's sectors separately.

*Dubai's Organizations Overall*

The below table shows the correlations between the internal triggers and innovativeness in Dubai's organization overall.

**Table 18 - Correlation between Internal Triggers Factors and Innovativeness, In All Sectors**

		Innovative ness	Management Education	Management Decision	Management Cosmopolitan
Innovativeness	Pearson Correlation	1	.513**	.519**	.685**
	Sig. (2-tailed)		.000	.000	.000
	N	51	51	51	51
Management Education	Pearson Correlation	.513**	1	.441**	.476**
	Sig. (2-tailed)	.000		.001	.000
	N	51	51	51	51
Management Decision	Pearson Correlation	.519**	.441**	1	.298*
	Sig. (2-tailed)	.000	.001		.034
	N	51	51	51	51
Management Cosmopolitan	Pearson Correlation	.685**	.476**	.298*	1
	Sig. (2-tailed)	.000	.000	.034	
	N	51	51	51	51

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

The Table 18 shows that generally in Dubai’s organizations, innovativeness does correlate significantly with each of the examined internal triggers. This indicates that in Dubai’s organizations overall, as any of the examined internal triggers grow, so would the innovativeness in those organizations. Similarly, as innovativeness grows in those organizations, so would the examined internal triggers. Therefore, the emphasis on those internal triggers tends to reflect higher innovativeness in the respective organizations.

*Government Sector*

The below table provides the correlations between the internal triggers and innovativeness in Dubai’s government Sector.

**Table 19 - Correlation between Innovativeness and Internal Triggers factors in Government Sector**

		Innovativeness	Management Cosmopolitan	Management Education	Management Decision
Innovativeness	Pearson Correlation	1	.541	.212	.593
	Sig. (2-tailed)		.086	.531	.054
	N	11	11	11	11
Management Cosmopolitan	Pearson Correlation	.541	1	.645*	.215
	Sig. (2-tailed)	.086		.032	.525
	N	11	11	11	11
Management Education	Pearson Correlation	.212	.645*	1	.416
	Sig. (2-tailed)	.531	.032		.203
	N	11	11	11	11
Management Decision	Pearson Correlation	.593	.215	.416	1
	Sig. (2-tailed)	.054	.525	.203	
	N	11	11	11	11

\*. Correlation is significant at the 0.05 level (2-tailed).

The above table exhibits the results of this test performed in Dubai’s government sector specifically. The results illustrate that even though all the internal triggers are

positively related with innovativeness, none of those internal triggers are significantly related to innovativeness in the government organizations. This suggests that a rise in any of those triggers does not necessarily relate with a rise in innovativeness in those organizations.

*Semi-Government Sector*

The following table displays the correlations between innovativeness and the internal triggers in Dubai’s semi-government sector.

**Table 20 - Correlation between Innovativeness and Internal Triggers Factors in Semi-Government Sector**

		Innovativeness	Management Cosmopolitan	Management Education	Management Decision
Innovativeness	Pearson Correlation	1	.959**	.708*	.622
	Sig. (2-tailed)		.000	.022	.055
	N	10	10	10	10
Management Cosmopolitan	Pearson Correlation	.959**	1	.629	.557
	Sig. (2-tailed)	.000		.052	.094
	N	10	10	10	10
Management Education	Pearson Correlation	.708*	.629	1	.310
	Sig. (2-tailed)	.022	.052		.383
	N	10	10	10	10
Management Decision	Pearson Correlation	.622	.557	.310	1
	Sig. (2-tailed)	.055	.094	.383	
	N	10	10	10	10

\*\* . Correlation is significant at the 0.01 level (2-tailed)

\* . Correlation is significant at the 0.05 level (2-tailed).

The above table reports the results of this test in Dubai’s semi-government sector in particular. The results indicate that the internal triggers are positively accompanied with innovativeness in this sector. However, only management’s cosmopolitanism and educational background are significantly accompanied with innovativeness in

this sector. This assumes that as the management’s cosmopolitanism and educational background are enriched, so would innovativeness in this sector. Likewise, this assumes that as innovativeness is enriched in this sector, the management’s cosmopolitanism and educational background are likely to be higher.

*Private Sector*

The below table provides the correlations between internal triggers and innovativeness in Dubai’s private sector.

**Table 21 - Correlation between Innovativeness and Internal Triggers Factors in Private Sector**

		Innovative ness	Management Cosmopolitan	Management Education	Management Decision
Innovativeness	Pearson Correlation	1	.616**	.638**	.492**
	Sig. (2-tailed)		.000	.000	.006
	N	30	30	30	30
Management Cosmopolitan	Pearson Correlation	.616**	1	.415*	.274
	Sig. (2-tailed)	.000		.023	.143
	N	30	30	30	30
Management Education	Pearson Correlation	.638**	.415*	1	.484**
	Sig. (2-tailed)	.000	.023		.007
	N	30	30	30	30
Management Decision	Pearson Correlation	.492**	.274	.484**	1
	Sig. (2-tailed)	.006	.143	.007	
	N	30	30	30	30

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

The above table illustrates the results of this test in Dubai’s private sector particularly. The results illustrate that each of the internal triggers are positively and significantly associated with innovativeness in this sector. This proposes that as any of the management’s cosmopolitanism, decision, and educational background are elevated, so would the innovativeness in is sector. Respectively, this proposes that as innovativeness is elevated in this sector, the management’s cosmopolitanism, decision, and educational background may be elevated as well.

### *Summary*

The correlation results between innovativeness and the innovation internal triggers showed that the correlation is positive and significant in Dubai's organizations overall, and in the private sector particularly. However, Dubai's semi-government sector seemed to significantly correlate innovativeness with management's cosmopolitanism and educational background, while the government sector does not appear to have significant correlation with any of those triggers. Nevertheless, the non-significant correlations are positive correlations overall.

#### **6.1.4. Multiple Regression Tests**

Multiple regression tests aim to examine the extent of dependency between variables, and experiments if one variable can predict the other. The following tables exhibit the multiple regression tests carried out between innovativeness and each of the organization conditions as a whole, organization conditional factors, and the innovation internal triggers. The test was done on Dubai's organizations overall, and then on each sector separately. However, the multiple regression test results of organizational conditions for separate sectors are not included in this chapter due to insignificant results. The full multiple regression test results are attached in Appendix E. When the significant value in the last column of the tables is less than 0.05, then the innovativeness is significantly dependent on the examined factor.

##### **6.1.4.1. Regression Test between Innovativeness and Organizational Conditions for Dubai's organizations overall**

The next table shows the test results with innovativeness as a dependent variable and the overall organizational conditions as an independent variable. The results below are the same for each of the sectors, accordingly, only the results of Dubai's organizations overall are presented below and can be generalized for each of Dubai's sectors.

**Table 22 - Coefficients of the Regression Test between Innovativeness and Organizational Conditions Factors**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.345	1.596		-.216	.830
Organization Condition	.292	.028	.829	10.360	.000

The results given in the above table indicate that generally, organizational conditions as a whole can significantly predict innovativeness in organizations. Organizational conditions influence the innovativeness substantially (with a beta coefficient of 0.829). This implies that as organizational conditions are fostered in Dubai's organizations overall, this directly leads to a substantial growth in innovativeness in Dubai's organizations.

#### 6.1.4.2. Regression Tests between Innovativeness and Organizational Conditions Factors in Dubai's Organizations

The below table shows the test results of the innovativeness as a dependent variable and each of the organizational conditions as independent factors.

**Table 23 - Coefficients of the Regression Test between Innovativeness and Organizational Condition Factors**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.712	1.931		.887	.380
Organization Culture	-.311	.224	-.154	-1.388	.172
Organization Climate	.534	.119	.511	4.472	.000
Organization Structure	.206	.294	.066	.702	.486
Empowerment	.660	.219	.339	3.013	.004
Training	.216	.334	.072	.648	.520
Management Style	.204	.121	.179	1.696	.097
Champion	.213	.560	.039	.380	.706



Table 23 exhibits the results of the multiple regression test in Dubai’s organizations overall. The results propose that among the examined organizational conditions, innovativeness is significantly dependent on organizational climate and employee empowerment. This proposes that nurturing and attending organizational climate and employee empowerment specifically can predict higher innovativeness in Dubai’s organizations overall. While the rest of the factors are just associated with innovativeness, and cannot predict it in the organizations as such.

6.1.4.3. Regression test results between Innovativeness and Internal Triggers

The below tables shows the test results with innovativeness as a dependent variable, and the internal trigger factors as independent factors. This is tested on Dubai’s organizations overall, then on each of Dubai’s sectors separately.

*Dubai’s organizations overall*

**Table 24 - Coefficients of the Regression Test between Innovativeness and Internal Triggers in Combined Sectors**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.715	1.679		1.617	.112
Management Education	.566	.520	.124	1.088	.282
Management Decision	1.767	.607	.305	2.910	.006
Management Cosmopolitan	2.777	.557	.535	4.989	.000

The above table illustrates the results of this test performed on Dubai’s organizations overall. The results probe that in Dubai’s organizations generally, innovativeness is dependent on management’s decision and cosmopolitanism, and that those two factors can significantly predict innovativeness in Dubai’s organizations. This implies that management’s decision and cosmopolitanism directly affect innovativeness in Dubai’s organizations.

*For Government Sector***Table 25 - Coefficients of the Regression Test between Innovativeness and Internal Triggers in Government Sector**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.633	3.255		1.116	.301
Management Cosmopolitan	3.409	1.272	.751	2.681	.031
Management Education	-1.738	.957	-.546	-1.816	.112
Management Decision	2.489	.889	.659	2.799	.027

Table 25 demonstrates the test results transacted on Dubai's government sector in particular. The results suggest that management's decision and cosmopolitanism significantly regulate innovativeness in Dubai's government sector. This suggests that in the government sector, innovativeness can be anticipated by the level of the management's decision taking and their cosmopolitanism.

*For Semi-Government Sector***Table 26 - Coefficients of the Regression Test between Innovativeness and Internal Triggers in Semi-Government Sector**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.539	2.341		-.230	.825
Management Cosmopolitan	4.257	.740	.767	5.755	.001
Management Education	1.412	.900	.183	1.570	.167
Management Decision	1.060	.836	.138	1.268	.252

The test results of Dubai's semi-government sector given in the above table propose that innovativeness in this sector is significantly liable to management's cosmopolitanism specifically. This proposes that innovativeness can substantially be elevated when the management members are cosmopolitans in this sector.

*For Private Sector***Table 27 - Coefficients of the Regression Test between Innovativeness and Internal Triggers in Private Sector**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
	1 (Constant)	3.166	2.401		
Management Cosmopolitan	2.169	.742	.407	2.923	.007
Management Education	1.693	.696	.372	2.433	.022
Management Decision	1.296	.934	.201	1.388	.177

The above table shows the test results of the private sector particularly. The results indicate that innovativeness in this sector is significantly dependent on management's education and cosmopolitanism. This assumes that innovativeness can considerably be predicted through the level of the management's educational background and cosmopolitanism in the private sector, the higher they are, they higher innovativeness will be in this sector.

*Summary*

To summarize the above, in Dubai's organizations generally, innovativeness seems to be substantially dependent on management's decision making and cosmopolitanism. However, management's cosmopolitanism tends to be the most influencing factor on innovativeness in each of Dubai's sectors. Government sector is dependent on management's decision in addition to cosmopolitanism, while private sector is dependent on management's educational background beside management's cosmopolitanism.

**6.2. Qualitative Analyses Results**

The interviews were voice recorded – except in one case in which only notes were taken-. The interviews were transcribed, and then coded in to the questions they

answer, then further coding was carried out to classify the responses into different themes for each questions. As was mentioned in the previous chapter, the semi-structured interviews had 5 main questions. The responses for each of those questions are examined and linked to the literature. The full transcribed text of the meetings is attached in Appendix C.

### 6.2.1. The Definition of Innovation

The first question of the interview requested from the interviewees to identify the last new product, process, or tool introduced by their organizations, whether it was to the internal or external customers. The interviewees were asked to describe the newness of the introduction, and what do they presume as the new additions in it. This question aimed to identify a broader definition of innovation.

Some of the inputs from the interviewees were common, such as saying that innovation is a “new process to do the same thing or a new thing”, when the process is to operate a current process, then it is meant to improve it, else it is introducing a new process to the organization. This is supported by literature, where it has been stated that innovation is about new processes or improving existing ones (National.Audit.Office, 2006; Zhao, 2005). Other common input is that the innovation is about “borrowing something that someone has done, but we do it differently”. This was discussed by Kim and Mauborgne (2005), as they argued that innovation could occur by reproducing a known product with a new aspect or to a new market, which leads to a whole innovation on its own.

One of the interviewees stated that his organization’s innovation was new because they “developed a product that was tailor made to suit this region specifically”, were changing their operations to be able to use the available products, so his organization developed a similar product that is customized to this region. This was argued by Drucker (2002). He argued that innovation can be inspired from flaws in the current processes or products (Drucker, 2002). Another input from the interviewees was about venturing into new markets, and starting new subsidiaries as

their organization's innovations. This in principle was advocated for by Brown (1992) and Kim and Mauborgne (2005).

Therefore, concluding from the literature review and the field study of this dissertation, the suggested definition of innovation is as the following:

Innovation is not only about introducing new products, services, methodologies, and processes. It is also about looking beyond the traditional boundaries by defining new markets, starting new business lines within the same organization, improving existing processes, combining multiple products into a new one, and finally, adopting an innovation from another industry or region and tailoring it to a different industry or region.

### **6.2.2. Innovation's External Triggers**

The second question of the interview attempted to point the main external factors that trigger innovations in Dubai's organizations. The interviewees were asked to identify the external triggering factors for the innovations pointed out earlier in their organizations. The interviewees generally pointed that the customer is a main external factor that triggers innovation. This varies between customers demanding a specific product or service from one side, and the organization's pursuit for a better customer experience and satisfaction from the other side. And accordingly, new or improved products and services are introduced. Though this was not thoroughly exhibited in the literature review chapters, it is broadly defined in the literature as "Market Pull", this includes all innovations that are triggered because of the market demand, whether the demand was from regular customers, new social opinions, or new political direction (Budros, 2000; Deppe et al, 2002; Abrahamson, 1991; National.Audit.Office, 2006).

Another factor according to the interviewees is related to the government. Some of the innovations were triggered according to His Highness Sheikh Mohammed Bin

Rashid Al Maktoum's Dubai strategic plan 2015, in which he stated that his vision for Dubai is to be positioned as a "globally leading Arab city"; consequently, his highness always prompted the large organizations to bring forward new innovations that would distinguish Dubai on the world map (AlMaktoum, 2007a). This led Dubai's organizations to constantly bring forward more innovations, as all of them are pursuing the same goal of putting Dubai on the world map. Additionally, an interviewee stated that some innovations that relate to internet services are successions on His Highness Sheikh Mohammed's e-Government initiative and strategy. His Highness mandated on all the governmental organizations to implement their entire services online (Anon., 2006). This indirectly led the private sector to look into this direction as well.

Interviewees affirmed that emerging new technologies formed another factor. This can be defined by the term "Technology push", in which new technologies would be pushed to the customer by the producers or to the company by its suppliers, this was suggested by Deppe et al. (2002) in their research. Other factors were market conditions, competitive market, new industries that could be targeted, gaps in the current market offerings that could be invested in. All of those are factors that were also found in the literature review (Drucker, 2002; Ireland et al, 2006; Cottam et al, 2001), which indicates that they are similarly applicable in this region.

Therefore, concluding from the interviews, the below appear to be a list of the probable external triggers for innovation in Dubai's organizations:

1. The role of customer. This is described by the customer demand, and the organization's pursuit of better customer satisfaction and experience
2. The role of government. This is perceived by the government's vision and strategy of the city, and what the leaders of the country may be advocating
3. The effect of new emerging technologies
4. The presence of certain market conditions:
  - a. Competitive market
  - b. The entrance of new businesses with potentials to tailor for them

- c. Declining financial circumstances
- d. The existent market offerings have some gaps that could be fulfilled

### 6.2.3. Innovation's Internal Triggers

The third question of the interview sought to classify the set of internal factors that trigger innovations in organizations. The interviewees were asked to identify the internal triggering factors for the innovations pointed out earlier in their organizations. Most of the interviewees accounted the role of the top management in a way or another as a main triggering factor for innovation in organizations. The word "passionate" was commonly used when describing the top management's vision and leadership. The top management in those organizations defined a certain vision to the organization which they passionately believed in, consistently led in their organizations, and constantly motivated their staff to embrace. Leaders themselves triggered a number of innovations by their decision to adopt them. Challenging targets posed by the leaders compelled innovations in the organizations, especially when the targets were challenging to the extent of generating a level of discomfort. As quoted by one of the interviewees "setting unreachable deadline is essential so that you really have to do things very differently. And hopefully by doing that, you come closer to the goal, you may not reach it but at least you are much nearer than before". This forces the organizations to do things differently to achieve the targets, which could lead to innovation. This is partially found in the literature, Deppe et al. (2002) emphasize that the organization's vision needs to be clear in order to encourage innovations. Ireland et al. (2006) and Klein and Sorra (Klein & Sorra, 1996) argued that management decision plays a significant role in adopting more innovations in the organizations.

Though customer satisfaction may be a part of the external triggers, it would not trigger organizations to innovate if they do not set customer satisfaction as one of their objectives. One of the organizations is very committed to customer satisfaction which led them to form a group called Very Important Clients (VIC). They collaborate strongly with their VIC, regularly meeting with them to understand their concerns. And

to ensure they do not miss input from the rest of their clients, they developed a mechanism that captures all inputs from their clients, and from their client facing staff to understand what the market requires. Finally, generating revenues and new businesses are additional goals that trigger innovation in organizations. In relevance to the latter, Johne (1999 ) and Kim and Mauborgne (2005) argue that innovations if successful may generate considerable revenues to the organizations.

Henceforth, it can be concluded from the interviews that the following list of internal factors is likely to trigger innovation in organizations, especially in Dubai:

1. Organizations have to have a clear vision and mission. Most successful innovation comes from a vision that leaders are passionate about.
2. Management are often the decision makers of adopting new innovations
3. Management sets challenging organizational targets
4. The organization should pursue values such as:
  - a. Maintain high customer satisfaction
  - b. Generate more revenues
  - c. Improve processes on a constant basis

### **6.2.4. Organizational Conditions for Successful Innovation**

The fourth question of the interview aimed to determine the conditions that were present in the organization, which helped their innovations succeed, and the conditions that helps in the constant success and adoption of these innovations.

There were many commonalities between the responses of the interviewees. Most of the interviewees referred the success of the innovation to the management's communication of the vision, guidance, follow-up, and support. The interviewees emphasized that the leaders of the organization were very supportive of the selected innovations, constantly were following up and guiding the implementation of them, and have always motivated and supported those innovations. The literature proposes



that managements' support of innovation is an important condition for its success (Ahmed, 1998 ; Brown, 1992; Cottam et al, 2001).

One of the interviewees expressed that the top management in his organization took the role of executive champion, he constantly supports innovation, and meet his staff on regular basis to listen to their ideas and help them in formulating and structuring the ideas, so that they could be taken further to the next level. The literature asserts the role of executive champion in fostering innovations, because this gives the innovation more credibility and power within the organization (Hoffman & Hegarty, 1993; Papadakis & Bourantas, 1998).

Collaboration and integration between teams across the organization is claimed to be one of the essential conditions for innovation, as quoted by one of the interviewees: "the collaboration between the team is 'part and parcel' of the innovation's implementation". The teams understand that they are all working for the same goal, and hence, they share knowledge and ideas. The teams also need to learn how to collaborate together. This will not only help in achieving the innovation project in hand, but will also help in the future projects because the collaboration is a "part and parcel" of all projects. Whitaker (2009) asserts this by explaining that collaboration is required to help organizations achieve better performance.

The interviewees argued that the internal organizational systems, processes, procedures, projects, and targets have to be constantly aligned with the organization's vision to enable doing things differently. The literature tackled this issue as Ahmed (1998 ) argued that to enforce any new innovation, the policies and procedures of the organization have to be changed to incorporate and enforce the new innovations.

According to the interviewees, their organizations have suggestion schemes in place. They reward the successful ideas and celebrate them. The suggestions are included from employees across levels even to the areas beyond their function. The interviewees believe that taking calculated risks is vital for any new innovation,

because the sense of risk is inevitable in any new introduction. Empowerment and delegations were seen as fundamental steps in their organizations. The employees need to be able to decide on how to go about their direct responsibilities, and in some situations they should be allowed to impact areas beyond their responsibilities as well. Organic organizational structure is present, in which there are open-door policy, flexible structures, and open channel communications, especially during innovation implementation phases. This is supported by the literature. The scholars argue the importance of the suggestion scheme, reward systems, risk taking, empowerment, and organizational structures (Ahmed, 1998 ; Schneider et al, 1996; Deppe et al, 2002; Wang & Ahmed, 2004; Ozsomer et al, 1997).

Concluding from the interviews, the following list of organizational conditions tends to be the most associated conditions with innovations in Dubai's organizations:

1. Top management members are championing, supporting, and committing towards the selected innovations
2. The top management clearly communicate the vision across the organization
3. The organization's policies and procedures are continuously updated to be aligned with the organization's vision and the new implemented innovations
4. The organization's teams are collaborative and integrated across the organization
5. The organization has an active suggestion scheme, which filters the suggestions, implements the potential suggestions, and encourages the employees to come forward with new ideas
6. The organization ensures that the employees are systematically rewarded when they achieve their targets or when they suggest new ways of doing things.
7. The management encourages taking risks that are studied and have potential of success in them.
8. The organization empowers their staff and ensures jobs are delegated and distributed between the staff

9. The organization structure is organic, with open and flexible communications across levels.

#### **6.2.5. Characteristics and Determinants of Innovativeness**

The final question of the interview intended to identify the set of determinants and characteristics that identifies organizations with continuous successful innovations. It intends to enable identifying an organization as innovative with a set of determinants that could be spotted from outside or within the organization.

The track record of the organization and the number of new products, processes, or services introduced by the organization is one of the most vivid determinants of an innovative organization. The interviewees believed that this is how they can identify an organization as innovative from the outside. This is one of the most common identifiers used in the literature in identifying an innovative organization (Wolfe, 1994; Lee & Treacy, 1988; Damanpour, 1987; Kimberly & Evanisko, 1981; Weiss, 1997 ). The interviewees also stated that the time factor of the organization's production was an important indicative factor. The life cycle between initiation and launching a new innovation should be systematic and short in time, so that they can introduce more innovations in a shorter time, and outshine their competitors.

Innovative organizations according to the interviewees have a very clear vision and inspiring leaders who are willing to take difficult decisions. The top management members are supportive of new ideas, and in some cases they take the role of executive champions to promote the new ideas, and remove the obstacles from their path. Innovation scholars believe that innovations are more likely to be successful when the top management champions them (Hoffman & Hegarty, 1993; Papadakis & Bourantas, 1998).

The interviewees considered organization's Cryptonomics as an important determinant of innovative organizations. Cryptonomics was explained as the unwritten rules that unofficially govern the organization. It is the mutual perception of

the people in the organization about the required behaviors that need to be adopted or avoided to survive the organization's politics. It is not about the official set of objectives, policies and procedures, it is the actual reality in the organization. Innovative organizations have positive Cryptonomics that are aligned with the official written rules, objectives, policies and procedures of the organization. Cryptonomics is a rather new direction in the literature that started few years back. The literature argues that Cryptonomics influences the organization's performance and achievements in an undeniable manner (Marshal, 2005).

The interviewees recognized innovation as a "behavioral symptom" rather than an organizational objective. They found that organizations do not aim to be innovative. They have other set of objectives which they try to achieve, and they become innovative along the way. An innovative organization consists of happy people who want to be in the organization and feel a sense of ownership in their contribution to the organization. Innovative organizations have a number of talented people who tackle challenges in a particular manner and know how to utilize their skills in the organization. In line with the above, innovation scholars suggest that the behavioral attitudes and perceptions define a dimension of innovativeness determinants (Wang & Ahmed, 2004; Dobni, 2008).

Innovative organizations as affirmed by the interviewees allow innovation to be generated from all levels. They believe that "the management needs to know that they do know it all, the folks on the ground many times know more than what the management knows, so their inputs should be values". Though the top management has the strategic vision, the employees that deal directly with the customers and operations are the ones that may come with more practical innovations that would easily be adopted and be successful.

To the interviewees, innovative organizations must have an appetite and tolerance of risk taking because that is, in essence, what innovation is about, trying new things and accepting their risks. They also agreed that the amount of expenditures and investments in R&D is a noticeable indicator on the organization's innovativeness.

This shows that the organizations are willing to try new things and take risks. They agree that sometimes, it takes the organization to fail few years or lose a considerable amount of money before they finally generate the successful idea that would compensate all their losses, and that those losses only lead to better learning and expertise. The literature review supported this and indicated that risk taking and the R&D investments form important determinants of innovativeness in organizations (Wang & Ahmed, 2004; Dobni, 2008; Ozsomer et al, 1997).

Interviewees asserted that employees' development was a very important determinant of innovative organizations. One of the interviewees gave examples of Oracle and Microsoft companies to have their own colleges for their staff, and that Motorola is tied with some universities to provide MBA courses for their employees. They asserted that training develops the employees to think "outside the box", adopt a business mindset, and polish their skills. An innovative organization has a fast pace career growth chances for their employees. Dobni (2008) agree that employees' training is one of the determinants of innovative organizations. Additionally, an innovative organization takes the time to recognize and award the employees responsible for success, and celebrate their devotion. Such organizations ensure a delegation mechanism in place, and that their employees are empowered to perform their work adequately. The literature review demonstrated the emphasis on empowerment and rewards to encourage innovation in organizations (Ahmed, 1998 ; Dobni, 2008).

Finally, some of the interviewees presumed that innovative organizations maintained a close contact and consultation with their customers. They have mechanisms in place to ensure direct and indirect connections that collect all the inputs and concerns of their clients. This allows organizations to introduce better innovations that will be adopted faster by the customers.

It is worth adding as a point that the interviewees - who came from organizations that are perceived as innovative - have displayed an interest in reading current studies on organizational behavior and management, and have referenced few articles in their

discussions. This may have led them to manage their role successfully, and may have played a role in promoting more innovations in their organizations.

To conclude from the interviews, below is a summary of the determinants suggested to identify an innovative organization:

1. The organization has an extensive track record, and a large number of new introduced products, processes and services.
2. The organization has a clear vision, and consistent leadership from the management
3. The top management are supportive of the new innovations introduced
4. The organization has positive Cryptonomics that are aligned with the organization's official approach
5. The staff exhibits satisfied behavioral attitudes, as they are happy and committed to the organization.
6. Innovation is not restricted to certain level or department. It comes from all the levels across the organization
7. The organization has relatively high R&D expenditures
8. The organization has a high risk tolerance
9. The organization has an active suggestion scheme, which filters the suggestions, implements the potential suggestions, and encourages the employees to come forward with new ideas
10. The organization plans progressive development programs for their employees
11. The organization empowers their staff and ensures jobs are delegated and distributed between the staff
12. The organization maintains close customer interactions, and establishes a feedback capturing system to constantly capture the requests and suggestions from the clients

Below is a diagram that shows the overall concluded model of the qualitative research:

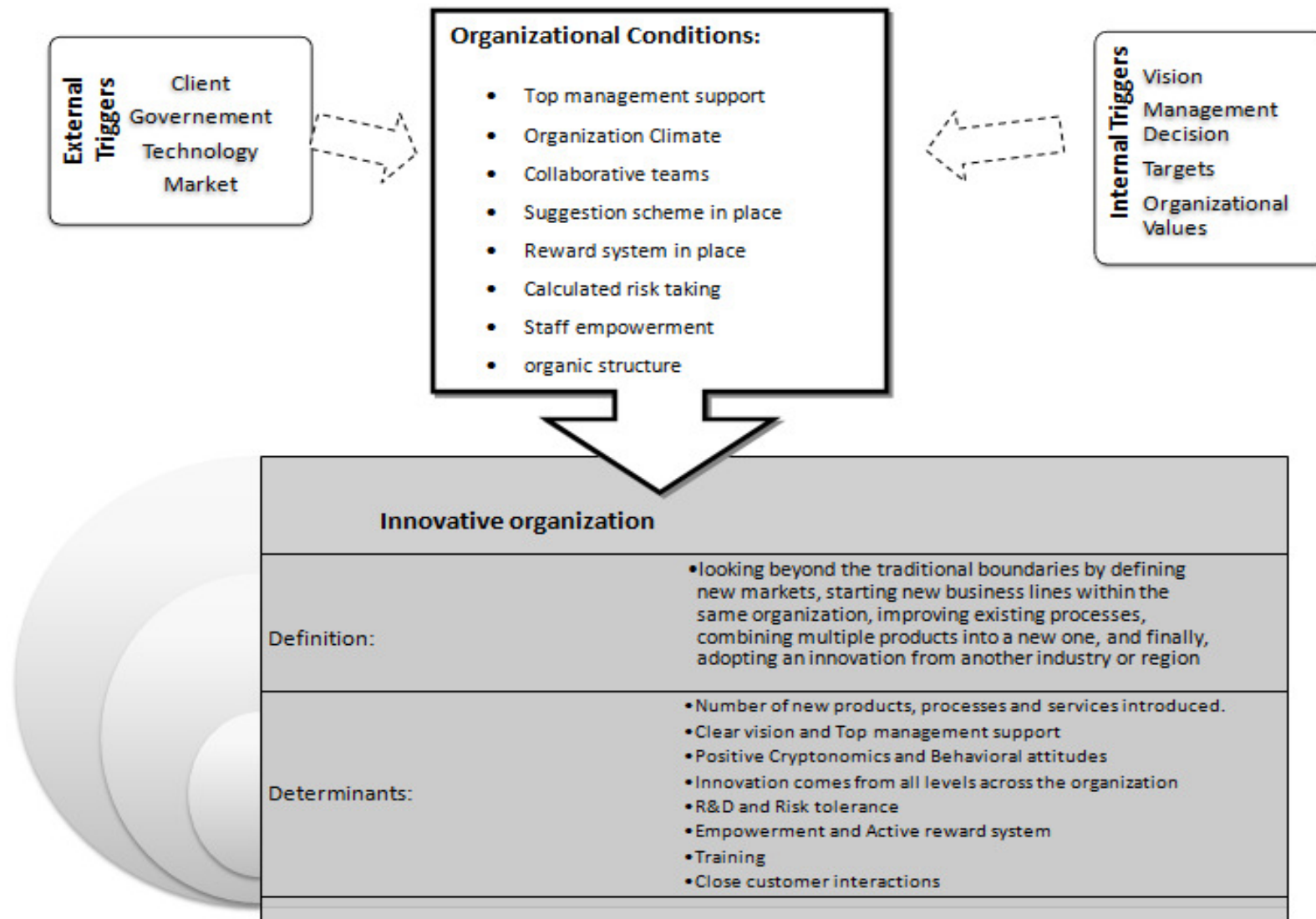


Figure 6 - Qualitative Research Summary

### **6.3. Discussion of the Overall Findings**

This section will explain and answer the dissertation's questions and hypothesis by combining and concluding on both, quantitative and qualitative results. It will first define innovation, then investigate the innovation triggers, examine organizational conditions required for a successful innovation, and finally, outline the set of characteristics and determinants that identify an innovative organization.

#### **6.3.1. Innovation**

The dissertation aimed to examine the topic of innovation and understand its different themes. This was achieved in the first chapter of the literature review (chapter 2). Moreover, the interviews aimed to define innovation broadly according to the perceived understandings of the interviewees and in conformity with the literature review. Concluding from the literature and the research, the suggested definition of innovation is as follows:

Innovation is not only about introducing new products, services, methodologies, and processes. It is also about looking beyond the traditional boundaries by defining new markets, starting new business lines within the same organization, improving existing processes, combining multiple products into a new one, and finally, adopting an innovation from another industry or region and tailoring it to a different industry or region.

#### **6.3.2. External Triggers**

The first objective of the research was to investigate the external and internal triggers of innovations in Dubai's organizations. This was explored in the literature review. The first research question of the dissertation derived from that objective to be:

RQ1. What are the environmental and market factors that may trigger innovation in an organization?



As this question was not measurable, it was targeted in the qualitative research rather than the quantitative research. The qualitative method aimed to gather realistic list of external triggering factors for innovation in Dubai's organizations. Section 6.2.2 examined the different views from the interviewees, and linked those views with the supportive literature. Consequently, the answer of this research question within the context of Dubai's organizations is proposed to be:

1. The role of customer. This is described by the customer demand, and the organization's pursuit of better customer satisfaction and experience
2. The role of government. This is perceived by the government's vision and strategy of the city, and what the leaders of the country may be advocating
3. The effect of new emerging technologies
4. The presence of certain market conditions:
  - a. Competitive market
  - b. The entrance of new businesses with potentials to tailor for them
  - c. Declining financial circumstances
  - d. The existent market offerings have some gaps that could be fulfilled

### 6.3.3. Innovations' Internal Triggers

The second research question and its hypotheses also derived from the first objective of the dissertation which was investigating the triggers of innovation. The second research question and its hypotheses are:

RQ2. What are the organizational factors that may trigger innovation in an organization?

- H1. Management decision plays a role in triggering innovation
- H2. Managers' educational background affects innovation
- H3. Managers' cosmopolitanism influences innovation

The literature review identified few internal organizational factors that were assumed to trigger innovations in organizations. The hypotheses were formulated on these

identified factors. It was viable to test those hypotheses through the quantitative research. However, the dissertation intended to establish a list of the internal triggers that are perceived to be the most triggering factors for innovations within organizations, especially in Dubai.

Subsection 6.1.3 describes the results of the correlation tests computed between innovativeness and innovation's internal triggers. The results indicate that Dubai's organizations generally seemed to associate each of the examined internal triggers with innovativeness. However, when each of the sectors was examined separately, differences appeared to indicate that while private sector associates innovativeness with each of the examined internal triggers, semi-government sectors seemed to associate management's cosmopolitanism and higher level of education with innovativeness, whereas the government sector did not significantly associate innovativeness with any of the examined internal triggers. Moreover, subsection 6.1.4 depicts multiple regression tests between innovativeness and each of the hypothesized internal triggers. This test aimed to analyze the extent of innovativeness dependency on each of those factors. The tests suggested that generally, in Dubai's organizations, innovativeness seemed to be significantly dependent on management's decision and management's cosmopolitanism. Nevertheless, when this test was carried on each sector separately, innovativeness seemed to be dependent on management's cosmopolitanism in each of Dubai's sectors independently. Additionally, government sector's innovativeness is additionally dependent on management's decision. Private sector's innovativeness is also dependent on management's educational background. Hence management's cosmopolitanism and management's decision are highly influential on triggering innovations in Dubai's organizations.

Subsection 6.2.2 explained in details the interviewees input on their perceived internal triggers. The initial answer to RQ2 from the qualitative research is:

1. Organizations have to have a clear vision and mission. Most successful innovation comes from a vision that leaders are passionate about.

2. Management are often the decision makers of adopting new innovations
3. Management sets challenging organizational targets
4. The organization should pursue values such as:
  - a. Maintain high customer satisfaction
  - b. Generate more revenues
  - c. Improve processes on a constant basis

It is worth mentioning again, that the interviewees exhibited an interest in reading current studies in organizational behavior and management. This was assumed to be a determinant of innovativeness. But according to the above findings, it is more likely to be considered a part of the management's cosmopolitanism. Hence, cosmopolitanism seems to be a very strong internal factor that triggers innovations in organizations.

According to the concluded results, the list of internal factors that trigger innovations in Dubai's organizations and the answer to RQ2 is as follows:

1. The organization's management members should be cosmopolitans in nature, this implies that they are constantly looking outward for new innovations to try in their own organizations.
2. Most of the adopted innovations in Dubai's organizations are adopted because the management decided it is the best option for the organization to do so.
3. The organizations adopt more innovations when the organization has a clear vision and mission. This provides a direction for the organization to successfully adopt innovations that are aligned with the organization's direction.
4. Organizations are likely to adopt more innovations when the management sets challenging targets. This stimulates the organization to come forward with new ideas to be able to achieve the set targets within the set timelines.
5. Organizations with management members of a high educational background may adopt more innovations. Higher educational background prompts the

managers to adopt new school of thinking, and hence, would adopt new innovations.

6. The organization should pursue values such as:
  - a. Maintain high customer satisfaction
  - b. Generate more revenues
  - c. Improve processes on a constant basis

The hypotheses under RQ2 test the dependency of innovativeness on each of the examined internal factors, rather than just the association.

RQ2: H1. Management decision plays a role in triggering innovation

According to the regression test results, this hypothesis is ascertained true within the tested sample, generally in Dubai's organizations, and specifically in the government sector. The rest of the sectors showed a present correlation between this factor and innovativeness, but not significant. This probes that in Dubai, this hypothesis is legitimate in general, and in government sector in specific.

RQ2: H2. Managers' educational background affects innovation

This hypothesis was confirmed true only in private sector within the tested sample, but did not seem to be applicable in the other sectors. However, innovativeness is still correlated with this factor in the other sectors within the sample. This can suggest that H2 is valid significantly in Dubai's private sector only.

RQ2: H3. Managers' cosmopolitanism influences innovation

The final hypothesis of RQ2 was proven true in Dubai's organizations in general, and in each of the examined sectors independently. This can be generalized to imply that management's cosmopolitanism influences innovations in Dubai's sectors and organizations.

#### 6.3.4. Organizational Conditions for Innovation

The second dissertation objective was to examine the organizational conditions required to achieve successful innovations in organizations. The third research question of the dissertation originated from this objective as follows:

RQ3. What are the elements and conditions that are required in an organization to ensure the success of the innovation in that organization?

Moreover, the third objective was set to assess the relations between the organizational conditions and innovativeness. Hence, after a thorough investigation in the literature review, the following hypotheses were formulated:

RQ3: H1. The organizational culture is related to innovation in the organization

RQ3: H2. The organizational climate is associated with innovations in organizations

RQ3: H3. An organic organizational structure coexists with successful innovations

RQ3: H4. The allocation of innovation champion is positively related to innovations in organizations

RQ3: H5. Management style is correlated with innovations in organizations

RQ3: H6. Empowerment encourages innovations in organizations

RQ3: H7. Training is combined with innovations in organizations

RQ3:H6 is different from the rest of RQ3's hypotheses in its nature. It does not test the association of the factors as the rest of RQ3's hypotheses; instead it tests the dependency of innovativeness on the tested factor.

RQ3 could have been explored through the quantitative research. However, the dissertation aspired to consolidate a larger list of organizational conditions that are essential for innovativeness in Dubai's organizations. Hence, both quantitative and qualitative researches examined this research question and its hypotheses. This

planned to find additional conditions that may have been overlooked in the literature review.

Subsections 6.1.3 and 6.1.4 include the results of correlation and multiple regression tests between innovativeness and each of the selected organizational factors in the quantitative study. Correlation tests indicate association between factors. Multiple regression tests indicate the dependency between factors. The correlation tests showed that Dubai's organizations overall significantly associate each of the organizational conditions with innovativeness. When this test as carried on the individual sectors; organizational climate, employee empowerment, and champion allocation factors seemed to commonly associate significantly with innovativeness in each of the sectors separately. Governmental sector associates innovativeness with organizational culture additionally. Whereas, the private sector additionally associate employee training and management style with innovativeness. In semi-government however, all the examined factors seemed to significantly associate with innovativeness. The multiple regression tests showed that organizational conditions in general are essential predictors of innovativeness in Dubai's organizations. Furthermore, the tests were computed for each of the organizational conditions which showed that organizational climate and employee empowerments are significant predictors of innovativeness in Dubai's organizations in general. Therefore, organizational climate, employee empowerment, innovation champion are the most essential organizational conditions to support successful innovations in Dubai's organizations.

The subsection 6.1.4 analyzes the qualitative results, and links them to the supportive literature. The identified list through the interviews is:

1. Top management members are championing, supporting, and committing towards the selected innovations
2. The top management clearly communicate the vision across the organization
3. The organization's policies and procedures are continuously updated to be aligned with the organization's vision and the new implemented innovations

4. The organization's teams are collaborative and integrated across the organization
5. The organization has an active suggestion scheme, which filters the suggestions, implements the potential suggestions, and encourages the employees to come forward with new ideas
6. The organization ensures that the employees are systematically rewarded when they achieve their targets or when they suggest new ways of doing things.
7. The management encourages taking risks that are studied and have potential of success in them.
8. The organization empowers their staff and ensures jobs are delegated and distributed between the staff
9. The organization structure is organic, with open and flexible communications across levels.

Based on the literature and as supported in chapter 4, organizational culture includes the behaviors and the unwritten guidelines of the organization. And organizational climate includes the official written set of vision, mission, strategy, policies, procedures, and reward systems of the organizations. The organization's condition list will be classified accordingly.

According to the concluded results of the dissertation, the organizational conditions required for successful innovations in Dubai's organizations and the answer to RQ3 are:

1. Organizations have to have a positive culture. This includes:
  - a. Teams that are collaborative and integrated across the organization
  - b. A culture that tolerates taking risks, after being studied and assured for having success potentials in them
2. The organization maintains a supportive climate in which:
  - a. The organizational vision is clearly communicated.

- b. The organization's policies and procedures are constantly updated and aligned with the new organizations direction and innovations
  - c. The organization has a systematic reward system, which is continuously updated to encourage the staff to adopt the new innovations, and succeed in them
3. The organization has an organic structure in which:
  - a. The communication is open, relaxed, and flexible across levels.
4. The organization's top management members champion, support, lead, and commit towards the selected innovations
5. The organization empowers their staff and ensures jobs are delegated and distributed between the staff
6. The organization ensures a champion is assigned to manage and promote the selected innovation across the organization.
7. The organization has an active suggestion scheme, which filters the suggestions, implements the potential suggestions, and encourages the employees to come forward with new ideas.
8. The organization plans progressive development programs for their employees.

The hypotheses results are as follows:

RQ3: H1. The organizational culture is related to innovation in the organization

This hypothesis was proven within the sample as valid in Dubai's organizations in general, and specifically in the government and semi government sectors. While in private sector the relation is not as significant. This implies that organizational culture is significantly related to innovation generally in Dubai, and mainly in government and semi-government sectors. Hence, as one is cultivated, so would the other.

RQ3: H2. The organizational climate is associated with innovations in organizations



The hypothesis was confirmed as authentic in Dubai's organizations generally, and in each sector separately. This means that organizational climate is likely to be associated with innovativeness in each sector of Dubai's organizations. Moreover, organizational climate is associated with innovativeness on an extended level. Innovativeness in Dubai's organizations generally is dependent on organizational climate, so a positive organizational climate is likely to lead organizations to more innovations

RQ3: H3. An organic organization structure coexists with innovation in the organization

Though in the overall correlation test organic structure correlated positively with innovativeness; when this test was carried separately on each sector it declined the significance of this hypothesis. Basically, organic structure is coexistent with innovation in Dubai's organizations in general, but not significantly in the independent sectors.

RQ3: H4. The allocation of a champion is positively related to innovation in the organization

The hypothesis was affirmed as legitimate generally in Dubai's organizations, and in each sector tested separately. This indicates that allocating an innovation champion is positively related with innovations in Dubai's sectors and organizations. So, as the organization commits to allocation innovation champion, this is likely to be associated with successful innovations in Dubai's organizations.

RQ3: H5. Management style is correlated with innovations in the organization

This hypothesis according to the tested sample is found valid in Dubai's organizations overall, and in semi-government and private sectors in specific, but not in the government sector. Hence, it is likely that supportive management's style is correlated with innovativeness generally in Dubai, but specifically in the semi-government and private sectors of Dubai.

RQ3: H6. Empowerment encourages innovations in organizations

Employee empowerment was shown to be significantly correlated with innovativeness in Dubai's organizations generally, and in each of the tested sectors. It is also concluded from the multiple regression test that empowerment is considered as a controlling variable for innovativeness in Dubai's organizations in general. This implies that empowerment does encourage innovations in Dubai's organizations in general. Accordingly, enriching empowerment leads to more successful innovations in Dubai's organizations.

RQ3: H7. Training is combined with innovations in organizations

Finally, this hypothesis according to the tested sample is found true in Dubai's organizations in general, in semi-government and private sectors in specific, but not in the government sector. Hence, it appears that training is positively combined with innovativeness in Dubai generally, and in Dubai's semi-government and private sectors. Hence, when the employee training is properly planned, this may associate with successful innovations in Dubai's organizations generally, and in semi-government and private sectors specifically.

### 6.3.5. Innovativeness Determinants

The fourth objective of this dissertation intended to identify the characteristics of innovativeness. This was intended because it was thought there were not any established constructs of innovativeness. However, in the process of establishing the survey instrument, few researches were found that presented constructs for innovativeness. Ozsomer et al. (1997) proposed a model that leads to firm innovativeness, in which he proposed that risk taking and change of production methods are factors of firm innovativeness. Dobni (2008) suggested that innovative culture is an indicator on innovativeness. He suggested that organizational learning, creativity, empowerment, and organizational behavior are some of the factors in this innovative culture. Wang and Ahmed (2004) divided their innovativeness construct to

five orientations: behavior, product, process, market, and strategic orientations. Innovativeness variable was adapted from those models, and tested in the quantitative research to indicate the innovativeness in the organizations examined.

Given the above, the dissertation aimed to add to this knowledge by complementing these factors with additional characteristics of innovative organizations. This was determined by the qualitative research, in which the interviewees were asked to define the characteristics of an innovative organization. The summarized list of characteristics from the qualitative research is:

1. The organization has an extensive track record, and a large number of new introduced products, processes and services.
2. The organization has a clear vision, and consistent leadership from the management
3. The top management are supportive of the new innovations introduced
4. The organization has positive Cryptonomics that are aligned with the organization's official approach
5. The staff exhibits satisfied behavioral attitudes, as they are happy and committed to the organization.
6. Innovation is not restricted to certain level or department. It comes from all the levels across the organization
7. The organization has relatively high R&D expenditures
8. The organization has a high risk tolerance
9. The organization has an active suggestion scheme, which filters the suggestions, implements the potential suggestions, and encourages the employees to come forward with new ideas
10. The organization plans progressive development programs for their employees
11. The organization empowers their staff and ensures jobs are delegated and distributed between the staff

12. The organization maintains close customer interactions, and establishes a feedback capturing system to constantly capture the requests and suggestions from the clients

As mentioned previously, organizational culture includes the behaviors and the unwritten guidelines of the organization. And organizational climate includes the official written set of vision, mission, strategy, policies, procedures, and reward systems of the organization. The set of points concluded from the qualitative research will be classified accordingly. It is worth noting that the innovativeness scholars identified the number of new products, organizational culture, risk taking, empowerment, and training as main factors of innovativeness. These were also identified through the qualitative research which shows that the results are likely to complement the determinants found in the literature.

The fourth objective of this dissertation may be actualized from the dissertation through the following list of innovativeness determinants:

1. The organization has an extensive track record, and a large number of new introduced products, processes and services.
2. The organization has a supportive culture:
  - a. The organization has positive Cryptonomics that are aligned with the organization's official approach
  - b. The staff exhibits satisfied behavioral attitudes, as they are happy and committed to the organization.
3. The organizational has a supportive climate in which:
  - a. The organizational vision is clearly communicated across the organization
  - b. A powerful reward system in which achieving employees are rewarded, their success is shared and celebrated across the organization.
4. The organization's top management members support new ideas, and they are consistently leading and guiding the organization to embrace new ideas.

5. The organization empowers their staff and ensures jobs are delegated and distributed between the staff
6. Innovation is not restricted to certain level or department. It comes from all the levels across the organization
7. The organization plans progressive development programs for their employees
8. The organization advocates and supports their R&D and has relatively high R&D expenditures.
9. The organization tolerates taking risks, after being studied and assured to have success potentials.
10. The organization maintains close customer interactions, and establishes a feedback capturing system to constantly capture the requests and suggestions from the clients

#### 6.4. Summary

The below table summarizes the findings and conclusions on the dissertation objectives, and questions.

**Table 28 - Summary of the Dissertation Objectives and Questions Results**

Obj	RQ	Item	Resolution
-	-	Definition of innovation	Innovation is not only about introducing new products, services, methodologies, and processes. It is also about looking beyond the traditional boundaries by defining new markets, starting new business lines within the same organization, improving existing processes, combining multiple products into a new one, and finally, adopting an innovation from another industry or region and tailoring it to a different industry or region.

1	1	External Triggers	<ol style="list-style-type: none"> <li>1. The role of customer. This is described by the customer demand, and the organization's pursuit of better customer satisfaction and experience</li> <li>2. The role of government. This is perceived by the government's vision and strategy of the city, and what the leaders of the country may be advocating</li> <li>3. The effect of new technologies</li> <li>4. The presence of certain market conditions:             <ol style="list-style-type: none"> <li>a. Competitive market</li> <li>b. The entrance of new businesses with potentials to tailor for them</li> <li>c. Declining financial circumstances</li> <li>d. The existent market offerings have some gaps that could be fulfilled</li> </ol> </li> </ol>
1	2	Internal Triggers	<ol style="list-style-type: none"> <li>1. The organization's management members are cosmopolitans in nature.</li> <li>2. Most of the adopted innovations in Dubai's organizations are adopted because of management decisions</li> <li>3. Organizations adopt more innovations when the organization has a clear vision and mission.</li> <li>4. Organizations are likely to adopt more innovations when the management sets challenging targets.</li> <li>5. Organizations with management members of a high educational background may adopt more innovations.</li> <li>6. The organization should pursue values such as:             <ol style="list-style-type: none"> <li>a. Maintain high customer satisfaction</li> <li>b. Generate more revenues</li> <li>c. Improve processes constantly</li> </ol> </li> </ol>

2	3	Organizational Conditions	<ol style="list-style-type: none"> <li>1. Organizations have to have a positive culture. This includes:             <ol style="list-style-type: none"> <li>a. Teams that are collaborative and integrated across the organization</li> <li>b. A culture that tolerates taking risks</li> </ol> </li> <li>2. The organization maintains a supportive climate in which:             <ol style="list-style-type: none"> <li>a. The organizational vision is clearly communicated.</li> <li>b. The organization's policies and procedures are constantly updated and aligned with the new organizations direction and innovations</li> <li>c. The organization has a systematic reward system</li> </ol> </li> <li>3. The organization has an organic structure in which:             <ol style="list-style-type: none"> <li>a. The communication is open, relaxed, and flexible across levels.</li> </ol> </li> <li>4. The organization's top management members champion, support, lead, and commit towards the selected innovations</li> <li>5. The organization empowers their staff and ensures jobs are delegated and distributed between the staff</li> <li>6. The organization ensures a champion is assigned</li> <li>7. The organization has an active suggestion scheme</li> <li>8. The organization plans progressive development programs for their employees.</li> </ol>
4		Innovativeness	<ol style="list-style-type: none"> <li>1. The organization has an extensive track record, and a large number of new introduced products, processes and services.</li> <li>2. The organization has a supportive culture:             <ol style="list-style-type: none"> <li>a. The organization has positive Cryptonomics that are aligned with the organization's official approach</li> <li>b. The staff exhibits satisfied</li> </ol> </li> </ol>

			<p>behavioral attitudes, as they are happy and committed to the organization.</p> <ol style="list-style-type: none"> <li>3. The organizational has a supportive climate in which:             <ol style="list-style-type: none"> <li>a. The organizational vision is clearly communicated across the organization</li> <li>b. A powerful reward system in which achieving employees are rewarded, their success is shared and celebrated across the organization.</li> </ol> </li> <li>4. The organization's top management members support new ideas, and they are consistently leading and guiding the organization to embrace new ideas.</li> <li>5. The organization empowers their staff and ensures jobs are delegated and distributed between the staff</li> <li>6. Innovation is not restricted to certain level or department. It comes from all the levels across the organization</li> <li>7. The organization plans progressive development programs for their employees</li> <li>8. The organization advocates and supports their R&amp;D and has relatively high R&amp;D expenditures.</li> <li>9. The organization tolerates taking risks, after being studied and assured to have success potentials.</li> <li>10. The organization maintains close customer interactions, and establishes a feedback capturing system to constantly capture the requests and suggestions from the clients</li> </ol>
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The following table illustrates the validations of the dissertation's hypotheses in Dubai's organizations in general, and in each of Dubai's sectors in specific.



**Table 29 - Summary of the Hypotheses Results**

Index	Factor	Dubai overall	Government Sector	Semi-Government Sector	Private Sector
RQ2:H1	Management's Decision	√	√		
RQ2:H2	Management's Education				√
RQ2:H3	Management's Cosmopolitanism	√	√	√	√
RQ3:H1	Organizational Culture	√	√	√	
RQ3:H2	Organizational Climate	√	√	√	√
RQ3:H3	Organizational Structures	√		√	
RQ3:H4	Champion Allocation	√	√	√	√
RQ3:H5	Management Style	√		√	√
RQ3:H6	Staff Empowerment	√	-	-	-
RQ3:H7	Employee Development	√		√	√

## **Chapter 7: Conclusions and Recommendations**

This chapter first provides an overview of the dissertation in general, then concludes on the dissertations finding. Then, the chapter presents a set of recommendations suggested to improve the organizational conditions that seemed to be required for successful innovations in Dubai's organizations.

### **7.1. Dissertation Overview**

The dissertation aimed to examine the innovation topic, understand its different themes, investigate the factors that trigger the initiation of innovation in organizations; whether external or internal to the organizations, and to examine the organizational conditions that need to be available in the organizations to support innovation. The dissertation aspired to improve innovation's success in Dubai's organizations. This is through inspecting the triggers and conditions that are more likely to be associated with innovation in Dubai's organizations. The dissertation proposed a set of hypotheses that assumed the relation between certain triggers and conditions with successful innovations.

The questions and hypotheses of the dissertation were different in nature. They intended to consolidate a list of innovation triggers and conditions, and test the association between some of the triggers and conditions with innovation. To strengthen the findings of the dissertation, it was designed in a mixed research methods approach, the triangulation approach specifically. This ensured that aside from experimenting the association between the selected factors from the literature, additional collection of triggers and conditions are aggregated. The experimenting of the factors association was achieved through the quantitative research, and the aggregation of additional triggers and conditions was obtained through the qualitative research. The quantitative research surveyed 51 respondents from different sectors in Dubai. It included profiling questions, and questions inspecting the organizational

conditions and innovativeness in Dubai's organizations. The qualitative research interviewed 5 personnel from the top management level of different organizations. The semi-structured interviews included questions about innovation, triggers, conditions, and innovativeness determinants.

The dissertation described innovation as the process of introducing new or improved products, services, processes, market segments, or subsidiaries. Reusing an innovation in a new industry or region was also considered an innovation act. The dissertation identified the roles of client, government, new technologies, and market conditions as the common external triggers for innovation in Dubai's organizations. The factors that were classified as innovation triggering factors from within Dubai's organizations were: management's cosmopolitanism, management's decision, management's educational background, clear vision and mission, challenging targets, and organizational values. The research results indicate that management's cosmopolitanism is a highly influential factor on innovation in Dubai's organizations. The results also pointed that innovation is dependent on management's decision in Dubai's organizations in general, but in the government sector in specific, while management's educational background seemed to affect innovations in the private sector only.

The dissertation recognized a set of organizational conditions that tend to be associated with successful innovations in Dubai's organizations. The recognized set included supportive organizational culture, supportive organizational climate, organic organizational structure, top management support and commitment, staff empowerment, innovation champion allocation, active suggestion scheme, and employee training and development. The research tested the association between innovation and organizational culture, organizational climate, organizational structure, champion allocation, staff empowerment, employee training, and management style. The results suggested that each of those factors are notably associated with innovation in Dubai's organizations overall. The dissertation also suggested that innovation is quite dependent on the presence of a supportive organizational climate

and staff empowerment in Dubai's organizations generally. This implicates that aligning the organizational climate with innovations and nurturing staff empowerment leads to successful innovations in Dubai's organizations.

The associations between the selected organizational conditions were further examined in each sector of the sample. The results implied that organizational climate, staff empowerment, and champion allocation are significantly paired with innovation in each of the government, semi-government, and private sectors of Dubai. In addition to these three factors, organizational culture seemed to be fairly related with innovations in government sector, while for the private sector; the additional factors considerably combined with innovation were management style and employee development. Semi-government, probed to remarkably correlate innovation with all the selected organizational conditions. It should be noted that the sample size for each of the sectors separately was not high enough to generalize over the sectors, but the above was the assumed generalization according to the selected sample.

The dissertation proposed a set of organizational determinants that may distinguish an innovative organization, in other words, innovativeness determinants. The set of those determinants were: the length of the track record of the organization, number of new innovations, organizational culture in which the Cryptonomics are aligned with the organization's direction, the staff behaviors are joyful and committed to the organization, organizational climate with clear vision and active reward system, supportive management and leadership, staff empowerment, innovation comes from all levels, progressive employee development, appropriation of R&D investments, risk tolerance, and close customer interaction.

## **7.2. Recommendations**

The dissertation findings emphasized the importance of staff empowerment, organizational climate, innovation champion, organizational culture, staff development, and management's skills in supporting and achieving successful

innovations. This section will provide recommendations on how to nurture these factors to achieve successful innovations in organizations.

### 7.2.1. Staff Empowerment

As staff empowerment seemed to play a defining role in the innovation equation, the below is a set of guidelines suggested by Ahmed (1998 ) to implement empowerment in a way that would leverage on organization's innovations the most:

1. The employees need to be informed with the scope of their empowerment, the priority of their work, and need to be aware of what type of actions they can take on their own without requiring the management's approval. This gives the employees a sense of trust and confidence in what they do, and encourages them to find ways to perform their work ideally.
2. The organization needs to define the level of liabilities the employees can intake without being penalized for being over independent. From one side, this enlightens the employees that there is a buffer through which they can act on their own without jeopardizing their work. From the other side, this advises the employees with the limit up to which they have to stop, and require the action from the management instead. This entrusts the staff to take risks, and bear with the uncertainties of their own decisions.
3. As new innovations are implemented in organizations, the teams would be tempted to act on impulse and respond to different aspects of the innovation, but in the end, none of those teams are officially assigned for those actions. As new innovations are introduced to the organization, the teams' roles and responsibilities have to be re-established to include what past roles and responsibilities that would still be assigned, and the newly assigned roles and responsibilities related to the new innovation.

### 7.2.2. Organizational Climate

The climate consists of the organization's vision, mission, processes, policies, procedures, and reward systems. These according to the dissertation findings contributed highly to the success of innovations. According to Schneider et al. (1996), the climate has to be constantly relooked at and renewed to be aligned to the new introduced innovations in the organizations. What often happens in organizations is that they introduce new products and processes, but they forget to revise their written organizational rules to enforce the new additions. There is neither an integration between the climate elements nor an integration across the organization itself. This sometimes leads the staff to be torn between following the written rules, and adopting the new introductions.

Cash et al. (2008) suggest the formation of an organizational group to be called "Enterprise Integration Group" (DIG). This group looks at the organization holistically and horizontally. Their responsibility is to overview the organization's processes, initiatives, and projects; to find potential ways of integrating them all together, and by that gain the most out of them. The group is responsible to report to the management on the changes that need to take place in the processes, policies, and the way things get done in the organization to ensure the innovation's adoption. The existence of this group ensures the constant alignment between the organization's direction and the organization's climate.

### 7.2.3. Innovation Championship

For any innovation to be successful and endorsed by the organization, it needs to be extremely supported by the top management so that the organization can perceive its importance. This can be manifested through several innovation champion approaches. One approach is through assigning an innovation champion from the organization. However, for this to be successful, this person should be supported with another innovation champion who is the executive champion. The executive champion and the senior champion work hand in hand to ensure the success of the

innovation implementation (Smith, 1994). The senior champion is assigned by the executive champion to handle the overall introduction and implementation of the innovation in the organization, he promotes the innovation, and gets the buying from the different stakeholders (Smith, 1994). The executive champion empowers the senior champion throughout the organization, guides the organization to the bigger picture, and interferes to support the senior champion when the organization's resistance and narrowness gets out of control (Smith, 1994). Amabile and Khaire (2008) suggest that the executive champion acts as the innovation "shepherd", he supports the senior champion against the possible resistance and antagonism from the organization, and he ensures the change in the organizational climate to support the endorsement of the innovation.

The other approach to manifest innovation champion is suggested by Cash et al. (2008). Cash et al. suggested the formation of the "Distributed Innovation Group" (DIG) in the organization. This group reports directly to the top management, to ensure the appropriate support and empowerment is granted. DIG is not responsible for creating and generating innovation ideas, because the ideas should flow from all the levels of the organization. They are responsible for hunting the innovative ideas across the organization, provide a center that nurtures the idea of the innovative ideas by assisting the finders of the ideas in structuring and polishing the ideas, and by accommodating the finders with the preliminary resources needed for the pilot development or the proposal to the management (Cash et al, 2008). DIG shares the ideas across the organization, to inspire new ideas to be generated (Cash et al, 2008).. It is recommendable to follow either of the champion approaches even if on a lower scale as a start, to foster innovations and demonstrate their support by the top management.

### **7.2.4. Organizational Culture**

The culture in the organization needs to be a positive one to support the innovation in the organizations. As mentioned earlier, the Cryptonomics of the organization need to be aligned with the organizational climate. Marshal (2005) suggested the first step

into this alignment is to discover the actual existent Cryptonomics in the organization. This can be done through organizing group interviews and anonymous surveys that delve into understanding the inner perceptions of the staff towards the actual operations in the organization, the employees first have to be ensured that they are safe and not threatened by disclosing such information (Marshal, 2005). The next step is to examine the responses and analyze if the organizational climate has to be changed to ensure a better alignment, or the managers have to change some of their behaviors to reduce the negativity and nurture positivity (Marshal, 2005).

### 7.2.5. Management's style

As indicated by the research results, management's cosmopolitanism plays an important role in introducing and supporting innovations. Management in general should be encouraged to read more often the new publications in organizational behaviors and management. Perhaps, this can be through enrolling the managers with journals subscriptions, and ensuring they attend the management seminars invitations. This may enable the managers to be up to date with the current researches, possibly, they would try to experiment some of the positive findings, introduce new processes to the organization, or be able to improve and enhance their managerial skills.

### 7.2.6. Employee Development

Employee development was advocated by the scholars and by the interviewees. This enlightens the staff with new developments, better ways of tackling issues, thinking "outside the box", adapting a business mindset, and sometimes, the break from the day to day job operations on its own can be refreshing for the staff. Employee development includes outlining a whole training and career development plan for the staff. This ensures to the staff that their future trainings, and career aspirations are planned for, and eventually will be met.



### **7.3. Dissertation Limitations**

The dissertation in general had few limitations:

- The surveys took place during the credit crunch crises. During which, the staff expressed that the situations are not as pleasant as they once were, and hence had to respond negatively on some of the questions due to the cost cutting measures taken by the organizations, such as cutting costs on trainings and rewards. Also, the management style may have changed to an extent. This may have affected the results of the quantitative research.
- The sample size of the survey was relatively adequate for the overall generalization. However, the sector specific respondents within the sample were relatively low, between 10 and 20 for each sector. This does not ensure the generalization of the results on each of the sectors; it only suggests the possible associations.

### **7.4. Suggestions for Future Research**

The suggested future researches to follow on this dissertation are:

- A research to examine the innovation triggers and conditions of a specific type of innovation, such as product or process innovation.
- An expanded research with a larger sample size to confidently examine the difference between the triggers and conditions of innovation in each sector in Dubai.
- This research identified a set of innovativeness determinants. A future research can develop a construct of those determinants, and test their validity in assessing innovation in organizations.

## 7.5. Concluding Remarks

Innovation is a very important aspect of the business life, and it is very powerful once achieved and established in organizations. Innovation is essentially needed nowadays, as it is hoped to guide the organizations toward the survival in this global credit crunch crisis. However, organizations should still embrace innovational culture even after the crisis is over, because it constantly leads organizations through the competitiveness in the market, achieve the targeted revenues, and position themselves in the market. Innovation can be fostered in organizations through the constant realignment of the organizational climate towards the organization's direction, empowering the staff, and establishing the existence of innovation champion in the organizations.

In the end, we would not be where we are today if it was not for the innovations that took place in the past, and we certainly do not want to stay idle where we are today by not striving for new innovations.

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## APPENDICES

### Appendix A – Survey Sample

#### Organizational Conditions Survey – Dissertation Purposes-

PART ONE: GENERAL INFORMATION <i>(please circle the applicable choice)</i>	
1	Gender (1) Male (2) Female
2	Marital Status: (1) Married (2) Single
3	Nationality: (1) UAE National (2) Arab National (3) American (4) European (5) south and east Asia (6) others
4	Education: (1) High school (2) Diploma (3) Higher Diploma (4) Bachelors (5) Masters or above
5	Age: (1) Less than 25 (2) 25 - 34 (3) 35 - 44 (4) 45 -54 (5) 55 or above
6	No. of years worked in current organization: (1) less than 2 years (2) 2-5 (3) 6-10 (4) 10 or above
7	Total Years of experience: (1) less than 2 years (2) 2-5 (3) 6-10 (4) 10 or above
8	Job Status: (1) Top Management (2) Middle Management (3) Lower level

9	Industry	(1) real estate Technology providers	(2) telecom	(3) Marine	(4)government	(5)
		(6)others, specify_____				

**PART TWO: Organizational Specific Measures**

Please rate the following statements according to your experience in the organization by circling the appropriate number

1 : *Strongly Agree*      2 : *Agree*      3: *Neither*      4 : *Disagree*      5: *Strongly Disagree*

1	In comparison with our competitors, our company has introduced more new products and services during the past five years	1	2	3	4	5
2	We are constantly improving our business processes	1	2	3	4	5
3	During the past five years, our company has developed many new management approaches	1	2	3	4	5
4	When we cannot solve a problem using conventional methods, we improvise on new methods	1	2	3	4	5
5	We get a lot of support from our managers when we want to try new ways of doing things	1	2	3	4	5
6	Key executives of my organization are willing to take risks to seize and explore potential growth opportunities	1	2	3	4	5
7	When we see new ways of doing things, our organization is the last in adopting them	1	2	3	4	5
8	I have a thorough understanding of the company's mission and vision	1	2	3	4	5
9	My management have a high level of educational background ( MSc and/or PHD)	1	2	3	4	5
10	Most of the last new processes, products, or tools introduced in my organization are introduced due to management directions	1	2	3	4	5
11	I am allowed to decide how to go about getting my job done with the way I find appropriate	1	2	3	4	5
12	The policies and procedures are regularly changed to enforce the new processes and products	1	2	3	4	5

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	in the organization	
13	We have a suggestion scheme in place to encourage idea generation	1 2 3 4 5
14	Within our suggestion scheme, the implemented ideas are rewarded and celebrated	1 2 3 4 5
15	In processes of change, access to information is usually restricted so that there is no opposition to the changes	1 2 3 4 5
16	The management is able to effectively cascade the message of innovation throughout the organization	1 2 3 4 5
17	In my organization, we are encouraged to talk and learn from each other	1 2 3 4 5
18	The top management acknowledges and rewards the employees who achieve the organization's objectives and goals	1 2 3 4 5
19	Change generates opportunities for employees who know how to take advantage of it	1 2 3 4 5
20	The organization is built on open channels and face to face communication	1 2 3 4 5
21	My management is up to date with the new trends in the market, and is constantly introducing new changes to our processes and tools	1 2 3 4 5
22	We resolve our conflicts through email exchanges	1 2 3 4 5
23	The organization structure is based on hierarchy and centralized decision making	1 2 3 4 5
24	When a new product or process is introduced, there is an organizational member that advocates for it, motivates the usage, and has influence on the management	1 2 3 4 5
25	I have some control over what I am supposed to accomplish compared to what my supervisor sees as my job objectives.	1 2 3 4 5
26	I have a say in the decision making in my function	1 2 3 4 5



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27	Everyone in my organization is entitled to receive training	1	2	3	4	5
28	There is an expectation from the employees to develop new skills, capabilities and knowledge that is directed toward supporting innovation in my organization	1	2	3	4	5
29	We have an abundance of resources to accomplish our work	1	2	3	4	5
30	My management helps break down barriers that stand in the way of projects execution	1	2	3	4	5
31	As an employee I can suggest to my manager new ideas of doing things.	1	2	3	4	5
32	Managers in my organization participate in the social events and interact with the staff in them	1	2	3	4	5
33	The managers in my organization have the appropriate leadership qualities to support innovation	1	2	3	4	5

## Appendix B – Interview Questions

1. Looking back at the last year in your organization, give examples on new ideas, products, or processes introduced? In what aspect were they new?
2. In the new establishments mentioned in the question above, are there any factors or forces from outside the organization that may have driven those establishments?
3. Are there any elements, processes, forces within the organization that have led to the mentioned establishments?
4. Given your above mentioned external and internal factors that may have led to the establishments, what are the conditions, ingredients, or elements that needs to be existent in the organization itself to allow the establishment to manifest and succeed?
5. In your opinion, what are the pattern of thoughts and actions in an organization that constantly renews itself and is highly productive? Or how would you characterize or identify such organization?

## Appendix C – Transcribed Interviews

For the purpose of maintaining the anonymous identities of the respondents; the personnel will be denoted by the letters A, B, C, D, and E. A is a CIO in a large holding company. B is a Group Information Technologies (IT) director in a large holding company. C is a CIO in a business trading firm. D is a director of training in a training academy. And finally, E is a founder of a Human Resources (HR) consultancy agency and a board member of an established IT solutions company.

### Interviewee “A”

1. Looking back at the last year in your organization, give examples on new ideas, products, or processes introduced? In what aspect were they new?

Any innovation that we talk about needs to understand the company and the culture that is within the company, the treatment of the innovation is taken differently from company to a company, there can be 2 companies within the same industry and they could look at innovation and what fosters it differently.

Our company itself is a focused company, by focused I mean that they tend to simplify the kind of issues they are trying to drive to us, and the objectives that they have. And because of that simplification, it leads itself to a highly motivated organization. it's an organization that not anyone can join and thrive in because this company drives on speed, like riding a bicycle, once you stop you fall, the more fear of speed you have the slower you ride so the harder it is to maintain the momentum, so it's like a paradox. So the faster you ride the faster you move forward the faster you reach the goal, the solutions are found along the way, to me that itself is a very important aspect of innovation, by itself. but the fact that they emphasize so much on speed to get to the objective first; that itself is a very innovative concept. everyone wants speed, but everyone is normally very careful about moving very fast, for our company

they put it very differently, we want to get there very fast, along the way they invent your ways of getting there, this forces a lot of innovation that you have to come up with to keep up in order to maintain the speed. For those who can't keep up are more likely that they get can get defocused and they leave the organization, so those who can't will lack behind. So the culture drives mainly on speed, blindly fast, so by the way you look at speed you need to be very innovative. It's not so much of the right or wrong way of doing things, it's the way things are, it's part of the company, to me that's a huge part of the innovation that will foster a lot of things, as in whether you come with newer process to do the same things or you invent new process to deal with particular business challenge, eService is one example, the example that I will use, that itself was born out of mandate, it started off when the company started by trying to approach it and look at eService, so the typical way of approaching it is to look at in the holistic way, you look at the requirements and so on, unfortunately it took more than a year to take that kind of study, and yet there is no motivation to get it started because of it's a new area, lots of fear and anxiety, so we have to be very cautious, so we're doing all the right things but we lose the focus of why the company wanted it that way, so until the mandate comes in, it changes the whole equation, it puts the whole thing the other way around, we have to get this at this date, now how to make sure this happens, and a lot of the odds are quite impossible to deal with, the timeline is almost impossible, it's not a question of laying a realistic timeline, but laying down what the business need to make happen, and the team needs has to ask themselves what needs to happen in order to achieve that, so actually that is an essence of innovation, innovation is not about doing something in a very comfortable manner, innovation implies that you have to cause a bit of discomfort, because otherwise you can't be creative, so innovation has a lot of creativity, doing things differently, how can you do things differently if you are very comfortable doing what you are doing today, so it implies that it needs certain level of discomfort generated within the organization in order to force innovation to appear. If you are not pushing them

out of their boundaries of comfort most likely you will not have innovation coming forward. Sometimes we do go overboard, we expect impossible deadlines we expect impossible results, because it's such a fine line to decide what is tolerable what is not tolerable. Inevitably in a company like ours, most of the time will always drive at an almost unreachable deadline so that you really have to do things very differently and hopefully by doing that you come close to the goal, you may not reach it but at least you are much nearer than before.

Eservices as the innovation example

2. In the new establishments mentioned in the question above, are there any factors or forces from outside the organization that may have driven those establishments?

The reason we started comes very simply from the customer point of view, what things we can offer to the customer so that we give him a great since of experience with us. In this modern world almost everything have to leverage on technology, it's so progressive that any solution is unlikely not to have technology element in it, so naturally we talk about enabling things getting them done through the internet. The banks have done it for so long, many years, and it become as a must for anyone who does banking. In the property industry as well as other there is a website writing information, but transaction conducted via a website of a property developer is very rare, hardly any. So it's very natural to extend the capability to the customer to allow the customer to have a lot of self service.

Self service is a powerful concept, in the past we believed that we want people to do things for us, but we actually want to do things for ourselves so that we feel that we are in a better control, because of the information, when you do it yourself you feel you are in control, you will not imagine to let someone to go and touch your savings or current account, it's the same concept, property

information and all that are very personalized, so having the customer and enabling them to do everything on their own make it simple enough I think is a very simple but a powerful concept. The challenge is really how to make it happen, I don't think it's the issue of available technology, but it's a mindset to break in this company, ERP has taken such a big part of the organization, and you're trying to take the ERP team and say you need to enable a lot of the information they put into the system to the outside world, there is a lot of fear, we realize along the way that a lot of data are not clean, very messed up data, not a lot of rules and processes to ensure clean data goes in, but is that something new, not really, having good data in the system is something we learnt in school, in that last 15 or 20 years, how come all of a sudden it's a surprise to the organization, the fact that human beings are always, never look at investment in a sense, that when you invest several hundred dollars in such a powerful system it's not a natural progression that therefore you get, whatever results out of the ERP, there is an effort that has to constantly go in, you can say that can form another form of innovation, but e-enabling all this information out into the internet, you force innovative way of now how you'll transact with the system now, you will be much careful in terms of what you put in, because whatever you put in is now exposed, so putting garbage will be exposed to the customer, and you give the wrong key or information to the customer the customer will see it right away and will correct you in a very painful way.

Market recess or credit crunch?

Not really, the eService is really about increasing the level of customer experience, that's how it all started with, the credit crunch can put some setbacks in terms of the investment, if we haven't already invested we would have more difficulty in continuing the investment, but the fact that it started is because of the customer as a starting point.

3. Are there any elements, processes, forces within the organization that have led to the mentioned establishments?

Only very selective people understand the value of eService, so I think the trigger is less from bottom up, its top to bottom, unfortunately it takes the management to dictate for this to be done, and I suspect that the reason is that everybody is so busy just handling what they are doing on day to day they then forget to look outside the world and see how the world is changing and also look at what the customer are facing and experiencing, if you look at all this is very obvious that if you don't do this very soon it will be obsolete, people don't realize that Our company arrive at whatever stage today not by accident, but because the name of our company by itself just popped up and is just blessed by Sheik Mohammed and that we become powerful and strong company in a day, it isn't the case. It takes powerful vision and very strong motivation to keep going so fast, to make that happen, so the grow of the company is driven top down, so that's today's gap, between what the management wants to see happening and what the operational management and people understand how to get there. Actually this is a tool to get what they want, because you get to e-enable too many things, you get to do so many less of the mundane things and move on to do the more interesting things, the hard part is to get over the harder one, because in the short time you will be much busier, restrict yourself a bit more in order to put the system in place, and then the rewards will come later.

4. Given your above mentioned external and internal factors that may have led to the establishments, what are the conditions, ingredients, or elements that needs to be existent in the organization itself to allow the establishment to manifest and succeed?

I think given the current circumstances with economic situations it may not be as easy to look at innovation as something we trying to accomplish in the organization, instead it's forced. Maybe because everyone is so anxious about their job about the company, so they obey the orders faster. So it's unfortunate

that this can be a great opportunity to look at innovation as a process in order to overcome a lot of seemingly impossible obstacles that we are facing today. talking about cost cutting, why can't we challenge the organization to look at it, why not use the technology and be able to derive meaningful cost savings, the direct cost is the traditional of saving money is by cutting cost, by cutting accounts cutting investments, those are traditional , now the none-traditional ways the innovative ways, are why can't we look at technology to drive a bigger cost cutting exercise, why isn't that possible, that's the question, of course you'd require some effort to find out whether it is we have any meaningful answers, but it's the same way we started eServices, why can't we look at eServices as a way to bring the customers closer to the organization, and so that we are able to dive into further technology, it's the same thing. The fact that people may have not done it frequently a lot does not imply that it cannot be done, the hard part is how to get the people to still think very clearly that this is a meaningful problem to solve, so am hopeful to find the company can always whether its good or bad times they should always look at every twist and turn of the organization as an opportunity to innovate. And being in IT department and IT practitioner, they should always ask themselves how can the technology help the company to overcome the obstacles whether the obstacle is cost cutting or acquiring more customers. You can't find text book answers, innovation does not come from reading a text book and doing what the people have done before, it doesn't mean inventing new ways, but sometimes it means borrowing something that someone have done but we do it differently. But you will always have this thing; you must believe that it's worthwhile to try.

They all play different parts in the whole process of getting the eService implemented. Most projects are not always implemented in the so called particular manner, most of the times you will see erupt changes along the time, but the basic fundamentals should still apply, when you start the general plan you should understand what is the general scope you are trying to do,



you need to have some milestones, milestones can change but you need to have them and work towards them. You need to have a basic project plan with a timeline, the timeline can change but the fact that it changed doesn't mean you don't have it.

The dynamics of the team obviously are one of the bigger challenges that the team faces, with the oversees vendors, technology providers, within the organization there are the users, steering committee users, and then within the IT team there is the different project teams that works, that itself actually is in essence what the project management means, it's about how to collaborate with different stakeholders so that at the end of the day everyone will work toward the same objective and I think that people understand and learn from that then it has achieved its purpose to me, it's not so much whether we put eService in place, it's about how we collaborate, we want to look at new initiative, we want to look at what are the things that we normally look at and overcome and address it in a better way in the next exercise where it can be a different technology. So a project complexity of this size because of the speed because of so many different stakeholders including external customers, the biggest learning lesson is how to collaborate in a better way, it's not whether we would set up a plan everyday in the exact same way its less about that, because human beings do not work that way, people need to understand that its part and parcel of the implementation I think they have arrived at the milestones cause this is what project implementation means getting along with your team, with all having different ideas different understanding different views of how the project will be carried out and a person who can overcome that and accept that it's a part of the part and parcel implementation then that person is going to learn something, it's less about technology, it obviously got a technology side to it, it's about the collaboration, cause if you can understand that; implementing the technology is less of the problem.

5. In your opinion, what are the pattern of thoughts and actions in an organization that constantly renews itself and is highly productive? Or how would you characterize or identify such organization?

I think the organization does not look at innovation as an objective by itself, they don't, because it's like innovation is a symptom, you don't look at symptom as an objective to achieve, it's a behavioral exhibition out of some of the things you are doing, I see our company, the way they are growing the organization is to set very very demanding objectives, having a clear vision what they want to achieve, with a certain timeline and by that starting point you would necessitate innovation that would take place, because there is no other way you will achieve it in the normal business as usual way, because it's impossible, you can't do it that way this does not mean that everything will happen nicely and easily, it doesn't, as I said innovation must imply that there is a lot of generated discomfort in the organization for that to take place, you must be challenged so much with pressure of survival, pressure of competition, pressure of obsolesce that force you to take very necessary steps in order to protect the survival, and if you take the step that innovation will be the result, it's not an objective. This means the organization will not focus on survival as an objective, the survival will be the kind of an instinct that will create the sense of innovation, because you cannot innovate and be very very relaxed, I don't see the two things together, it doesn't work that way.

So you have to set impossible odds, the chairman is smart in the sense he sent a very lofty objectives, which has a purpose, not because of innovation, but because he wants to differentiate, he does not want to be another great property company, he wants to be such a different company in terms of the speed that is one and only, so how do you do the one and only. You must come with very very, not ambitious, but something that is expounding and creates such a big impact on a difference. And the rest will believe that it worked out on itself, the organization will take care of all the little details, his

job is to charter where the team will go, and he has to keep going after that, that is his main objective every day. Then he believes the right organization will follow him, this is how the leader should always see himself. So there is no way that our company can continue its goal without innovative spirit within its organization, so it's a two way out, if you do not have enough people that are doing this, then the organization will fade out.

## Interviewee “B”

1. Looking back at the last year in your organization, give examples on new ideas, products, or processes introduced? In what aspect were they new?

For the company itself, it ventured into new market malls group, sports complex group. International education is something not many companies that I see not here at least is doing very well. So our company as a company has taken the decision to go into it, which is looking outside the box and very futuristic looking. Looking at new subsidiaries, and how we focus at some subsidiaries, looking at hospitality group for that manner, one of our special hotels is looking into a different set of customers all together, not the traditional hotel customers, they are really looking into the luxury customers, and the ones at the CXO level who are willing to pay the money and who are desiring to be served very very personally, so that's a very different area, our company is encouraging to look beyond whatever traditional business is doing. So the malls are having the exclusive features, the tower is the tallest, the hospitality we want to focus on different set of customers. So that will make a lot of difference to how we look at the business models. If you look at traditional way people will not look outside the box of the hotel business, they will probably just build a hotel with 100 rooms and that's about it. Our special hotel is not going that round, they are going to personalized services; you'd have your personal butler if you want to manage your whole itinerary.

Look beyond where our boundaries, look beyond our experiences, and have a vision, in terms of how the implementation of the vision then that's where the strong leadership will come in.

2. In the new establishments mentioned in the question above, are there any factors or forces from outside the organization that may have driven those establishments?

It's more of the competition side. On the hospitality side there are a lot of markets, a lot of grands in the market like the Shangri-La group, the Marriott group, you name it, there are a lot of international brands in the market, so how do we differentiate ourselves. So it's very much derived by the market conditions, the competitiveness of the market, we need to differentiate ourselves, we need to have branding for ourselves, so it would help us stand out. This is where a lot of companies, our company being one is trying to shine out of the best not to be one of them, to position ourselves above them, in terms of the pricing yes we may be more expensive, but there are a different niche of the market, a niche that are willing to pay, look at Burj Al Arab, people are willing to pay for that much, so how do we make ourselves different as well. For the health care group we are trying to create something that's great and big, that would be a clinic which will include all the MRI machines as well, it is a clinic on a scale of a hospital. So we're trying to differentiate ourselves in terms of facilities and services that we are providing, we have to be the best. So there will a lot of expenditures, a lot of investment but at the end of the day we are looking at a different segment of the market, people who deserve and desire to be treated differently. Of course that's top of the tier, we do have tiers we are going to hit into on competition with the rest of the companies but how we stand out is probably by differentiating.

So in terms of when you refer to external factors, it's probably the market conditions, competitiveness of the market, and then also where Dubai is concerned, our company is being looked at as a leader in terms of innovation,

that means we always need to show and lead the rest of the industry on where it needs to go.

3. Are there any elements, processes, forces within the organization that have led to the mentioned establishments?

The vision of the leaders, the vision of the chairman for one is definitely a high shining factor, he probably has a vision for the next 10 years, and he does share his vision very publically I think that where he's driving a lot of people, especially people who work for him at the CXO level to try to embrace the vision. I think the vision is very important. The other thing is the communication of the vision itself.

The mindset to put Dubai on the world map, Dubai I think for the past 10 years ago no body heard about it, I think that's where the vision is, to put it on the world map, that's what internally is driving it.

Also for some of the leaders, actually are taking the challenge to make a difference by coming in to the company, for their own career development, they make a big decision to upload themselves from another location that is probably more established, most of our leaders come from a very established backgrounds to upload themselves to work here, so what do they want, they probably want to make a difference to their own career, so internally to make a difference to the country, make a difference to the company, and make a difference to themselves by making a difference to their own career growth. It's all driven by a vision.

4. Given your above mentioned external and internal factors that may have led to the establishments, what are the conditions, ingredients, or elements that needs to be existent in the organization itself to allow the establishment to manifest and succeed?

I think very open communication needs to be there, that in one way has been good from the chairman perspective, but when it comes down, trigger down to the lower level to the chain of commands within the organization, the communication the direction the strategic direction needs to be shared with all the staff so everybody can move towards the same goal, so communication I say again is very important.

The workforce needs to be very motivated and committed, that's where we have certain room for improvement. At different levels there are a lot of commitment and motivation. Look at the group CFO, he comes from a very stable environment, yet again he comes to a very challenging environment and he keeps on pushing people around and decision is being made every day, very critical decisions that affects the workforce. In order to be successful, motivation and commitment of the people still needs to be there.

Environment for innovation needs to be there, many of the times, the situation where people are being penalized for trying. If you talk about innovative company, people should not be penalized for trying, and instead people should be rewarded for trying and being successful. A lot of entrepreneurs fail hundred times, they just need to be successful onetime and it makes the day, that's how they become very successful entrepreneurs. It applies to us at well, the company the culture should be encouraging people to give suggestions, should be encouraging people to try, to take certain calculated risk and then if the guy fails, at least he tried, not to penalize him immediately, at least he tried, he showed the result. For people who are able to make it true and bring success to the table, those are the people who should be dramatically rewarded, and that would be a culture for encouraging innovation, otherwise, if everybody knows the result of a failure is a penalty, it's more of a kill of innovation straight away.

And at this moment I think innovation should come from all levels, ground up, for the matter that management setting on top may set the vision but they may

not know down to the ground the day to day operations, so the guy that is really talking to the customer in the sales are the ones that really knows exactly what a customer needs and wants, we should value these input from those people, in fact those suggestions from those people will be the most practical and most applicable to the customers.

Yes, empowerment, suggestions and rewarding systems are essentials.

The management also needs to know that they do not know all; the folks on the ground many times may know more than what the management knows, so value their inputs.

5. In your opinion, what are the pattern of thoughts and actions in an organization that constantly renews itself and is highly productive? Or how would you characterize or identify such organization? From a financial point of view, it's how much do we spend on our R&D. companies like Microsoft and Google spend a big amount of their revenue on R&D, money that may be going down the drain, but money that may be able to generate 1 or successful ideas that makes the company. Money could be spend on hundreds projects that doesn't generate anything, but it's a learning experience, but if they just need to have one or two successful results, it will be the product that helps the company in the next 5 to 10 years, they just need 1 or 2 products, the rest of the money could be just down the drain. So one of quantitative factor is the amount of money spent on the R&D.

People development, companies should be very focused on people development, it helps the employees to look outside the box, and then to adopt the business mindset to be able to look beyond what they do on a daily. How you do that is by giving the stuff some exposure. Oracle has its universities, Microsoft has its universities, Motorola is tied up with some universities to give their staff MBA courses, the fact of the matter is that their staff to be business man to think aloud, to be more innovative.

Companies that has a short time to deliver to the market, because if you can innovate other companies can innovate as well, so from idealization to product marketing to make the product available, that cycle is generally very short, generally innovative company has a very systematic or very quick to market programs from idealization to marketing

and then also innovative companies have the tend to be very customer focused, then to be very intimate with the customers they do a lot of consultation with the customers, they understand the customers very well, they spent a lot of time and effort to understand the trends from the customer so then products to be developed would be easier to adopt in the market. We could innovate a lot of things, but how many of those can be successful can hit the market and that why you need to be very close to your own consumers.

## Interviewee “C”

1. Looking back at the last year in your organization, give examples on new ideas, products, or processes introduced? In what aspect were they new?

The examples the come to my mind is the eServices program that we did. That's the most prominent example, the internal and external eServices.

The new aspect, as a real estate company in that industry, our company was probably the first if not one of the first that did the eServices. The idea is a follow on what Dubai Government has done, the eGovernment program started in 2001. The concept is not new to our company, but it's new to the real estate industry. To bring in services closer to the customer where the customer can just go online and interact with the company in the comfort of their own home. We started with ePayment, it was innovative in the sense that it was easy to use, you don't need to register you don't need to go through any long process to use the services, whatever you needed to use the service was already with you as a customer, as your last name, the invoice number or



property number, something that is already available to the customer. So all they had to do is just go online enter a few pieces of information and they were directed to the transaction, to pay online. What's new about is that it did a balance between security and ease of use.

2. In the new establishments mentioned in the question above, are there any factors or forces from outside the organization that may have driven those establishments?

Few factors that pushed us to invest in Eservices for now.

One is the company focus on customer service, it's part of the core values of our company

Second is the chairman's passion about better customer service and the use of technology to bring in better services to the customers.

Third is from the customers themselves. The customers did voice and suggest to use online services with the call center.

Recess and crunch were not a factor at that time, but the situations changes and business conditions or the financial crises is one of the drivers that can push the organizations to be more innovative

It's natural for mimic to follow. Because of the competition and the open market like this, the companies do tend to copy and take what's good from each other and learn from experiences of the competition.

3. Are there any elements, processes, forces within the organization that have led to the mentioned establishments?  
The core values, chairman's vision, the culture of innovation, the leadership form the chairman.

The demand coming from the customer and also the competition, the fact that some of the competition are also thinking that way, some other companies outside of the UAE have introduced eServices that's a driver.

4. Given your above mentioned external and internal factors that may have led to the establishments, what are the conditions, ingredients, or elements that needs to be existent in the organization itself to allow the establishment to manifest and succeed?

One of the main requirements of the innovation is the idea of continuous improvement. That you continuously improve and try to build a better mind strut always try to improve on what's going on, it's basically a dissatisfaction with the status quo.

Always want to improve, on my initial days with our company when I attended the induction program, the speaker put on a word on the board which spelled as "Kaizen", it's a Japanese word for continuous improvement, it's the concept of always improving. Its small steps, very small steps to improve everyday even on the personal level, you take very small steps that moves you forward but because its continuous and every day, then some of it will grow and adds up, this concept we try to apply in IT in our company, whether in our helpdesk service, infrastructure, applications. Try to continuously make small changes small improvements that will eventually add.

Fostering creativity and risk taking are one of the main things required to have innovative organization. You have to take risk, if you're not going to take risk you can't. Most of the new ideas you apply in case of innovation they have not been done before so there is always an aspect of risk. And companies that don't have an appetite for risk they will not succeed.

The suggestion scheme, taking suggestions from employees, getting them to contribute sometimes not in the areas they are responsible for.

But you can't enforce innovation by process and procedure. The company needs to align their internal systems and processes and procedures to enable the organization to do things in a different ways.

Whatever the organization does it needs to be aligned with the organization's core purpose, the vision and mission. So in that sense it has to be communicated and has to be clear.

Champion as a change agent depends on the organization, if you have an organization that is not accustomed to change then you need all what you can get so that the change can happen, in that case in then the change agent can be helpful.

If you are talking about an organization wide changes, then you need to have cross functional teams for example that work together to make these changes happen, so the people that work together to enable change will be essential for a cause like this.

Recently I was reading about the concept in building systems which tries to mimic a surgical team, where you have the surgeon the one who have the understanding and the power to do everything, and the people around him just to facilitate the job and helping him to do his job, that's a model, some organizations may look at it as a good model that can work, but the problem with that model is that it probably doesn't scale very well, if the job is so huge a single person cannot encompass the whole thing, so at the end you have to break it up and have someone on top. So it depends on the scale, some places can have a centralized decision making other where the scale is bigger then you will need to have it decentralized, you will need to have a system of delegation.

Part of the change management is the support from management, listening to the concerns is good, it should be considered, however you cannot please

everyone. In some organizations some change may not be to the best interest for a small group in the organization but that is a cost that needs to be factored in. opportunity

This reminds me a of concept called circle of influence, everybody in the organization they have a circle of influence, and area, if you're talking about you direct job and your direct responsibilities, everything within direct responsibilities is within you circle of influence, it's something that you can directly change or effect, what you do on a day to day basis is completely in your circle of influence. You can expand your circle of influence, there are things that are outside your circle of influence, that you may not be directly responsible for but you can impact on it. Allowing people to stretch their circle of influence this basically relates to empowerment. Empowerment is not directly connected with innovation, to support any operation any part of the business, you need a certain level of empowerment, and otherwise everything is done centrally which can cause bottlenecks.

I prefer to clarify the target and what needs to be done and empower the employees to find their way to achieve the target as long as it's within certain bounds. Prescribing step by step I don't think is very effective.

Training is relevant to sustaining more than bringing new ideas. I don't think you need to be trained to be innovative. It's not necessary but can help. Training is necessary to keep employees up to date, improve certain areas of weakness, or polish areas of strength, so training is required part of business, but not necessary for innovation.

5. In your opinion, what are the pattern of thoughts and actions in an organization that constantly renews itself and is highly productive? Or how would you characterize or identify such organization?

Apart from the ideas that get implemented that are new, that's obviously is a measure. The track record of the company, where they have made contributions, and done things in an innovative way.

If you examine the organization itself you'll find some of the things that I have mentioned earlier, which are high risk appetite, culture that supports creativity, supports going off the norm and trying things differently, a culture that empower the employees.

An organization that has high number of talented people. A talented person is smart with good skills that are able to apply to their job. Able to utilize their areas of strength in doing their job effectively and efficiently.

I was trying to find a definition of innovation, and examples of the companies or products that I find innovative and it's sometimes difficult to see the innovation in what we were trying to do in our company. But some of the examples are like the ipod, iphone, social networking, facebook, linkedIn, I believe they are a very innovative way of using the internet. The Wii, the game, using exercise and monitor was a good game and clever and innovative. Trying to bring this to what we were doing in our company, it's a different kind of innovation, we didn't really develop new products, mainly adapted some the things that we've seen outside into what we are doing within the company. There are plenty of good ideas, we were just taking some of those and implementing them.

## Interviewee "D"

1. Looking back at the last year in your organization, give examples on new ideas, products, or processes introduced? In what aspect were they new?
  - Support and motivate innovation to get the most of the people, and the core business of the academy

- Innovation is necessary
- Innovation is important to stay in business, creativity is related to the retention of employees, it attracts the talented employees, to bring brilliant ideas.
- Innovation is about introducing new projects new methodologies new ways to do things,, do it the other way,
- Bringing new ideas,, for people to follow, to develop people.
- To add to the business and improve the process, generate the revenue, meet the targets, challenging targets,
- Challenges, Not the normal

2. In the new establishments mentioned in the question above, are there any factors or forces from outside the organization that may have driven those establishments?

- To improve the environment, client satisfaction went high, more business more revenue
- Telecom training and business training,
- Introduced technology seminars; so we have instructors and consultants, technology hub.
- Add to the knowledge of the employees,
- Not seen into another place.
- Generate new ideas on daily basis, to improve processes.

3. Are there any elements, processes, forces within the organization that have led to the mentioned establishments?

- Improvement on the processes as a responsibilities,, targets, add value to the position

- Suggestions from the bottom as well, evaluation, suggestion scheme
4. Given your above mentioned external and internal factors that may have led to the establishments, what are the conditions, ingredients, or elements that needs to be existent in the organization itself to allow the establishment to manifest and succeed?
- The staff has to believe in it, communication with the management,
  - Vision communication of new goals, we put a copy on board to constantly remind ourselves, circulate to all. To go in one direction all,
  - Discussed with the people, they have to believe in it, coz they will be using it at the end of the day, before the final frame they get the buy in from them, and it's the way to get things, if rejection then will force it on them. To convince people change is good.
  - Champion allocation, allocate someone to take control, the objectives are communicated, measure the effectiveness and the result,
  - Open door policy well, in face we don't have doors, take views from everyone channels are open.
  - Management support.
  - Empowerment: certain procedures as holistic procedures to be followed, leadership as direction, so not at the end we say no that is not what we wanted
  - When teams are between projects we send them to trainings to develop and learn, we see that trainings and investments during time of crises is very essential

5. In your opinion, what are the pattern of thoughts and actions in an organization that constantly renews itself and is highly productive? Or how would you characterize or identify such organization?

- Processes, time factor things happening on time, successful
- Number of products, product varieties,
- Talented people, the way they approach, business approaches they try to convince you with, the way they tackle a problem

## Interviewee “E”

1. Looking back at the last year in your organization, give examples on new ideas, products, or processes introduced? In what aspect were they new?

There is something that we developed. It was a complete financial and HR software, which was very much geared toward UAE in particular and in general to the gulf region, tailor made to suit this region, because a lot of other software have a lot of other components like taxes and whatsoever, this was something that was very much developed to this region. It also looked into account the situations in the GCC countries and to the UAE in particular. It was aimed to be flexible to work with number of different businesses, not geared up towards a certain industry. So it is used by many organizations and they are quite happy with it. What we offer also local support, because it's a product that was developed by us, we can provide very close interaction with the client, and what the customer needs, but we can also provide very customized customization to a certain degree. And the development team is available here. And there is a good integration between the development team, the sales team, and the customer.

Done from scratch.



The financial component had all finance aspects so did the HR had its own HR aspects as a full package. Also as a key component for it is that it also to some extent focused on retail business and construction business, basically because they are the main two areas in new world UAE.

2. In the new establishments mentioned in the question above, are there any factors or forces from outside the organization that may have driven those establishments?

Most of the packages we have, have not been developed were have not been exclusively for this region, they have been brought in with some soft customization; they were not products that were really developed from within. So our incentive was to develop something from the region for the region. And we saw an opportunity in that because of the boom in business, particularly in SMEs, this is a software not for the large corporations, it's for medium size operations, and we felt that the big sizes of organization had their own mainframes and big softwares but SMEs did not have something that they could really rely on, so that was our incentive, that's what made us sort of target that group.

And when we did the market survey and feasibility study there was quite a lot of positive response, in fact there was a good collaboration between us and our selected group that we call the VIC, Very Important Clients, we worked while developing this with around 25 key customers were involved in this, and at every stage we used to go back to them, whether they used the product or not we got good feedback from them, some have adopted it some of the major ones, we are quite happy that now also some of the big organizations are also adopting it.

For us we had other products that we developed but this was our main product, it also was a learning thing for us, because what made us go for it in a way is out organizational built in capabilities over the years, we are an

organization that has been in operation since 1991, so you're talking about something like 18 years. We also have a development team in-house, a sister company their job was to develop software and over years they gained a lot of experience, we also have a sub company which is in India, in Bangalore, so we also used expertise as and when needed, Bangalore is famous in this. So we have a company there which is part of our group, but the main work was done here in Dubai through the sister company. So over the years we had built in capabilities that made us confident that we could deliver this product, but still when we were doing this we had challenges during the design, we had challenges during the testing, we had challenges during the implementation, but we made it, in the beginning we had few issues but we also brought in people, people who developed the software were quite expert in these fields, so we had people who knew the financials systems and HR systems, so we knew what we were talking about. We brought in also people from the actual field so that they can tell us what they want. Now the product can even be taken as a whole and can be taken separate.

3. [Are there any elements, processes, forces within the organization that have led to the mentioned establishments?](#)

We have a mechanism where we capture all the responses that comes out from the external world from our customers through our sales team, presales team, through our product managers through our account managers, the feedback that we used to get is that there is a missing link. We are an IT solutions company, so we provide products, services and solutions, part of that our interaction concluded that there was something needed there that our development team can do, also in our composition of the development team we had good people with financial background that understood that business, so when the market research and market feedback and these people talked it all made sense. Also as I said the internal capabilities that we sort of developed over the years on how to develop software products and we had good success in there. Perhaps In the first five years, it took us 5 years to built

internal capabilities, processes and whatever, we were developing softwares we didn't have a structured not only a structured approach, but also an integrated approach through all the processes together, but an innovative way, i.e., eventually trying new things that would be of value to the customers. We tried, we had failures, but we kept on going and we accepted it, just to give an example we had in the R&D we had almost 5 years of losses but we still continued and we still funded that business, because we believed but every year we are getting better, at sometimes we asked if we should shut it down, but then we said no way, eventually we wanted it.

Also because this kind of business, IT solutions was our strategic direction, but software development was also something we enjoyed because eventually in terms of gross margins, it had a lot of gross margins because it had a lot of ongoing services, licenses. So that was part of our strategy, it fitted in our strategy, it took us sometime to learn from our mistakes, and to do it in a way that felt like now we can do it. After that when we had other products developed and we had problems and whatsoever, after that we felt that we are ready we embarked on this project, this project took some time to develop, it took around 3 years to develop, but it basically incorporated all our experiences. We provide very good customer support and we are there for the customer to partner with him and meet his needs the best. Our motto is empowering businesses, and we felt that we were doing to our company mission, so this way we were empowering businesses. We were providing a product with services with good value for the customer at a good value.

We are an ISO certified company. With over 2500 customers, but at any given time we are dealing with 700 customers.

4. Given your above mentioned external and internal factors that may have led to the establishments, what are the conditions, ingredients, or elements that needs to be existent in the organization itself to allow the establishment to manifest and succeed?

You need to have a leadership that is committed towards innovation

You need to have an organization that has capabilities, structure, process, and systems that support innovation not at the central point but also across the organization.

Also there is some kind of a collaborative unit that fosters and energizes all other departments and supports all other departments' innovation, they are not responsible for the innovation or the ultimate responsibility, but what they do is facilitate and support and remove obstacles from other people to give you innovation, so that's one thing that the leadership must make sure that they have that.

We also need integration, we need to have good communication, good internal systems and processes that make all other units, like pre-sales, the marketing, the sales, post services, they should talk to each other, and they should see that they add value to the other businesses. Just to give an example, we have regular meetings the sales, purchasing, development and whatever to share ideas, what is going on, how we are pursuing, so all of that is there.

You need an organization that has a high degree of conviction in its abilities to deliver.

A leadership that is not only inspiring but is courageous enough to take difficult decisions, to take decision that sometimes may seem as wasting money, but they are not wasting money, they have that believe that eventually we'll get there.

Also you need to have the organization that is true in every aspect to its strategy. If our motto is empower businesses and we are not creating products and services that are empowering businesses then we are not true to our mission.

The strategy must support. You also created structure the strategy, the structure has to support the strategy so that made us going as well.

We had a high degree of tolerance for people to make mistakes to try new things out, one of the reasons that we learnt this much is that people were given perhaps sometimes too much leeway to experiment. We nowadays we have this situation where we encourage new thinking but at the same time we try to understand it more. Previously it was sort of anything new go for it more or less, too loose, without defining. Now there is something, now there are teams that would provide help in trying to understand the new thing that is coming up and to what extent it can be fostered it can be taken to the next level. So there is more of a structured approach towards fostering new ideas. Otherwise it becomes random. This is one of the things that we learn. Nevertheless the leadership still strongly believes in supporting new ideas, so the principle hasn't changed.

An example, in this time where everybody is laying off people, we haven't laid off one person, in fact we have plans to recruit few more. When the time that a lot of clients are saying we don't have the budget to pay you our budgets are late, especially that many of our clients are government, ministries and local departments, most of those their budgets are on hold. We still haven't laid off any people, and we will not do it, and we went into declaring it. Because we don't believe in that, we took time to develop our own internal skills and we feel the layoff is not the right approach, we still invest not to that extent though, we are prudent, and we are not spending just like that, we are still spending on training, part of it is requirement, because our agents are required to maintain their professional accreditation, so we do that. It's something that we felt that we could.

The strategy was right, the mission was right, that what made it happen in a way. There is a high of space given to employees to deliver, to think differently and creative, all that happened. They provided a platform for them. But also

there was a good integration between departments, that's what made it happen.

Follow-ups..

The central innovation entity that is not responsible for innovation. Innovation can occur at every level, but you need someone that supports this innovation, helps people to bring their ideas, they have bright ideas but they don't know how to structure, how to develop it further, this team develops it, provides the resources to work on their ideas and so forth, you need something like that. Now in our organization not being that big, the top management took that role, the MD himself took that role, because that was something he passionately believe in. so he used to regularly meet them and sits with them, he comes from an IT background, he facilitates that. In addition to that, all the VPs part of their responsibilities is to support and motivate coming with new ideas, but in general other organizations need to have a small group of people whose responsibility is solely to provide platform and facilitate and provide support for innovation and for creative ideas to come to the surface, it should not be lost. Their job is to support that and perhaps integrated with that people like IT to support in creating platform that would create a systems and processes that would provide integration among all business. Example, company X when they had the dashboard, at any given time all the businesses could see where there on the dashboard, how they are doing, similarly you need a structure that fosters innovation that way, whereby successes are shared, ideas are floated around everywhere and people are commenting on it, imagine a powerful team like that where people in IT and other business heads support that so that anything coming out whether it is through brainstorming whether it is through customer interface or other places, market research, customers, all these ideas are filtered through the system whereby people can view so that people can think that yes we can add to this, and then a group is responsible for collecting it and fostering it well. Then once the idea comes out, and its

crystallized, then it goes to the next stage, could go to R&D for testing, for management for reviewing. So you come with a new idea that you want to take to the next stage whether it is a new product, whether we need funding, it would be debated then, if you have such things out of 200 ideas maybe 1 or 2 would be successful but these 1 or 2 can have quite significant impact on the business.

There is a good article in Harvard business review, August 2008, talks about innovation and integration, like P&G adopted, Lenovo adopted it, their emphasis is on the role of IT. I personally don't thinking that having a person responsible for innovation would do the trick, I wouldn't support that, I think innovation should be at every level of the organization, everybody should be given the opportunity to look back at what they are doing, and come up with new ways of doing things that would add value. Who make the difference are the people not the systems and whatever, people make difference. And if the right environment is created for new thinking in a way and challenging the way we do things, and people are given resources including financials, then ordinary people once energized can come up with a lot of brilliant ideas. I truly believe that. But there are also people that are talented, that have a lot of ideas there, you may say that we need to find new ideas, but there are lot of ideas there that no one is tabbing them and collecting them, putting them in a structured way so that it can be taken to the next level, and that is the problem with many organizations. If you look at company X, they had a lot of ideas, but they said that no one is listening to us, nobody is taking it, nobody is reviewing it and see if it's something that can be developed further or not, they didn't have that kind of platform and organizational capability that would collect all that. You may have in Harvard business review, in the article it talks about the small group for business innovation, a small group for business integration, but it goes more than that, it doesn't talk about the leadership side of the thing, how much leader can influence positively and negatively this whole thing,

whereby they can play a very big role. So that's whereby people can do a lot of good there.

The right structure? There is no such thing as one right structure per say. If you really look at organizations such as Google, how do they work, young talented guys in very casual dresses, they go to work they play ping pong, free food, the Google environment, the carefree type of thing, they go to work, their own hours, because what they are really looking for is not sort of 9 to 5 structure, what they are looking for is creativity, the talent to use those new things, they created environment for young talents, because young guys like to feel free, like to do whatever they want but they have targets like that, people think they are free, they are not, they work longer hours, but they do it their own way. You'll find them on roller skates. I was once in New York, Cornell university in 2000 with a meeting with top HR guys, almost 10 of us, shell, Microsoft myself and everything, and the Microsoft comes in jeans, short sleeves shirt, not shaved, we were all in dresses! And before the presentation he says guys,, I've dressed up for you today! He said I go to work with shorts! Cause they don't care about all that. Microsoft feeds on creativity and is a very fast moving business, so they need to innovate very frequently, new products and stuff because otherwise they would fall behind, so they need to need to tab that talent anywhere in the world. Somebody was telling me when I was there that Microsoft paid college professors so that they spot the talent within their students, and then Bill Gates calls a guy in Canada who has a brilliant talent and says this is Bill Gates, we'd like you to come and work for us, and he says no I don't want to leave Canada my hometown, so Bill says fine, we'll put an office for you there, just work for us. Why, because they want that talent, that's how they operate! Because they need that flow of talents. It's not a matter of a given structure, it's the matter that there is a given approach a structured approach that would foster innovation in whatever way they want to do it, as long as it is supported by the top, declared, transparent, understood, and it's part of integral, the key word is integral, integral with everybody's work,



everybody's business. Yes you are given the freedom, you are given the latitude to challenge the way you do your work, and to come up with ideas, and nobody will think bad of that, if it's a good idea then it will be supported, that commitment should be there, the structure there have to have commitment, they need to have the channels that would take that. Now how would those channels look like depends from an organization to another, how they report that and feed that channel everybody does it differently. They can do it through regular meetings they can do it online, through a software they develop, whatever. This is not something that should be left out with R&D team, this is something that eventually will go to R&D for further testing, R&D they can do their bid, this cannot cancel that, it complements. R&D will support it.

5. In your opinion, what are the pattern of thoughts and actions in an organization that constantly renews itself and is highly productive? Or how would you characterize or identify such organization?
  1. There are organizational capabilities, as said earlier, how they go about doing their business, the day to day business, to what extent employees are empowered and delegated, are given the freedom, this is all built in the organizational capability
  2. The top management behavior, that's quite critical without it there is a high chance of failure. Also embodied in that is that you need to have more or less inspiring leaders. Not many, but some people at top decision making who will perhaps be the champion of these things, who will provide top management support, the vision, the inspiration in a way, who also can be a true believer in what the future can bring, we need that kind of what I call inspirational leadership, if you don't have that.
  3. The new science of Cryptonomics, it's a Greek word means the unwritten rules. Which is quite powerful, a lot of organizations have quoted a lot of

consultants, written the right strategy, had the mission, they did everything, but they still fail. They say how come our new initiative, our new strategy failed, and then they come to find that it may be cause of the Cryptonomics. Cryptonomics is sort of the Greek word of the unwritten rules. An example, this is sort of the collider talk, the unwritten rules that govern the organization. for example if you go to this organization, they'd say listen, in this organization you have to protect yourself, you have to not contradict, where if you challenge the boss you are out, even if you are brilliant, even if you tell him that this may be wrong or this is not workable, you have to be very careful because the boss is very sensitive to any kind of criticism or even not challenging ideas, even a small different ideas which are not different of his, he'd be very upset and you'd be digging your own grave, you'd hear a lot of this. You'd know that in this organization you have to please your boss. All of that are the unwritten rules that could be disastrous on the organization. usually when am assigned as an HR consultant for an organization, what I do is, I spend two days just wandering around, so that I'd get a feel of the unwritten rules, how things are here. Forget about the processes they wouldn't matter. They'd talk about that program, some objective and what truly is happening about it in the organization, that's the situation. The organizations have to create the right Cryptonomics. This is the degree of misalignment has occurred between the operational strategy, and company's objectives per say, this is to do precisely with behaviors, how people behave in an organization. The rules are written in a way, but the unwritten rules are that they have to behave in another way. The misalignment between the official behavior and the unofficial the unwritten sort of behaviors. The more alignment of that is, the better the organization would have the chance of success. Part of that is being innovative.

4. The organization have to have a degree of tolerance, you have to also make differentiation to what extent you can provide that tolerance.

Especially in a fiercely competitive market, depends on the market factors, depends on the type of customer, the type of people you have in the organization. If you are in a nuclear plant where you have a sort of control board in front of you, that each button sort of fires a missile, you don't want to experiment there! But a lot of organization is not that.

5. You need to have a management style that supports creative ideas, new ideas, but not only supports but create the mechanism to also do something about it. And then when something is done about it, it's important that the organization recognized those people who are responsible for this success, so we celebrate their successes, we also share their successes whereby there is a learning organization. This is what made it happen, and for others to follow suit. So you need to create that.
6. The degree of fear needs to come down, it shouldn't be there. You need to create an environment where people are happy. Happy people are creative, not afraid. Part of the unwritten rules may be that you don't take risk, if you take risk you may fail, and failure you could be punished. That unwritten rule should not be there. But happy people who enjoy their job, and enjoy their job, also that sort of organization needs to understand what makes people tick. Nowadays, the war for talents, people need to feel they have choices, so you need to create an environment that people have choices. These young guys have choices, many choices they can choose. So you need to create an environment where people can identify that organization with their career aspirations, their career aspirations can be met but also is dynamic enough to provide them a career growth at a much faster pace than normal. Because they are restless, they need this, and they have choices. The new generation need to feel that they are being looked after, but also in general you need people who would come to work who feel they are happy at their work, want to be there and want to contribute. It's the notion of the psychological contract; you need the right

psychological contract. Psychological contract is what is expected from each, but beyond that is that you need a work that they go to and identify themselves with that work, that they are happy with that work, that they are happy with their needs, and they don't have to worry about other things. It should give a room for them to be creative. So it is important that they enjoy their work. It sounds very simple, but it's very powerful. Once people are happy doing their work, then they would think on how to make it better, how to be creative. Because they take ownership of that.

7. The process of decision making and resources allocation should be at the lower competent level.
8. the response and speed to achieve the new ideas affect the motivation to come with more, the speed must be fast, the way its managed should be efficient, not to lose the momentum.

## Appendix D – Descriptive Analysis on Survey Profiling

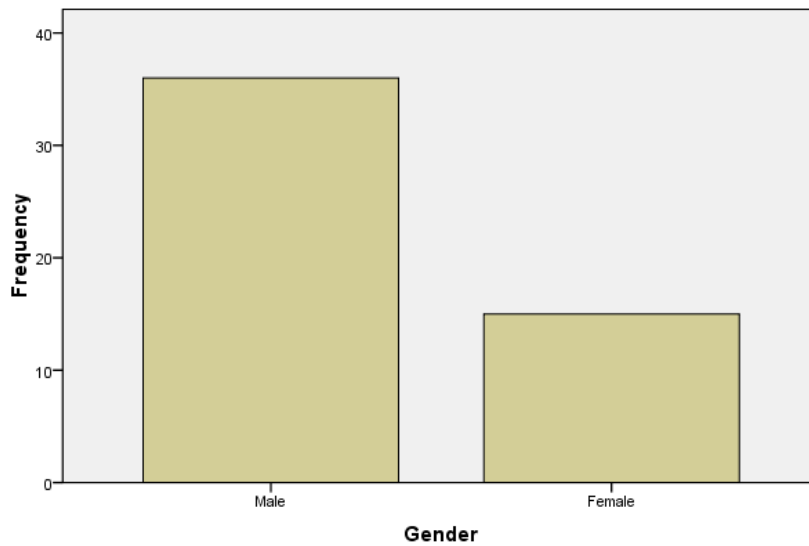
### Statistics

		Gender	Marital Status	Nationality	Education Level	Age Group	Tenure	Total years of experience	Job Level	Industry
N	Valid	51	51	51	51	51	51	51	51	51
	Missing	0	0	0	0	0	0	0	0	0

### Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	36	70.6	70.6	70.6
	Female	15	29.4	29.4	100.0
	Total	51	100.0	100.0	

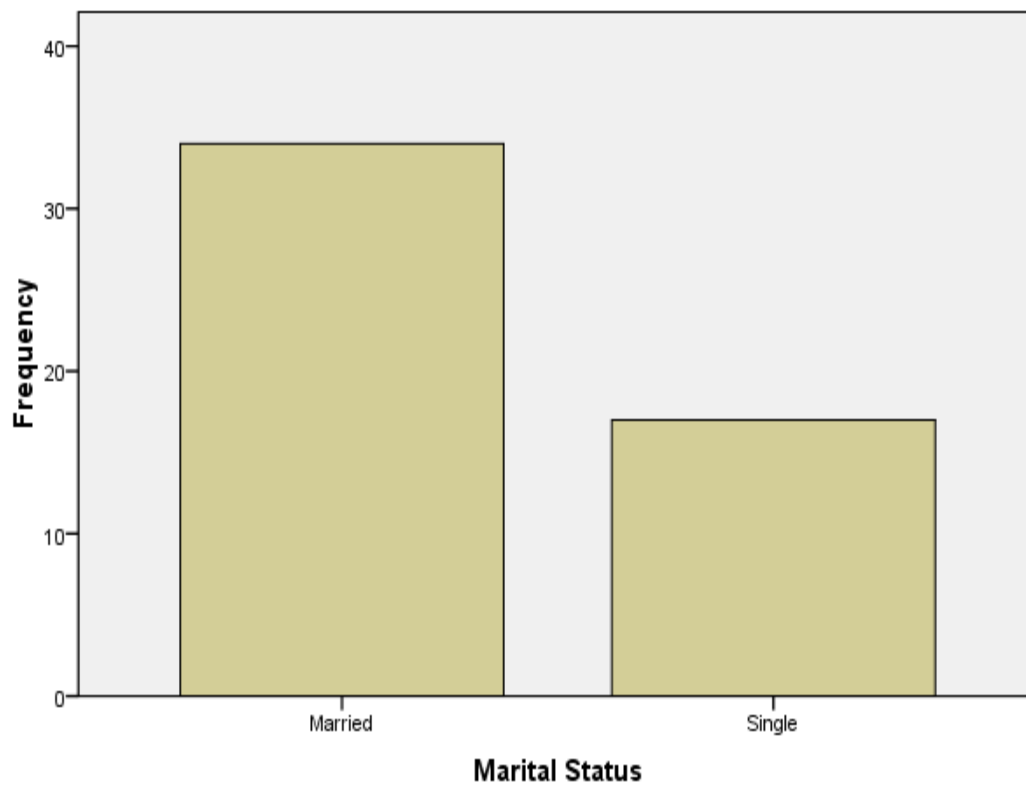
### Gender



### Marital Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	34	66.7	66.7	66.7
	Single	17	33.3	33.3	100.0
	Total	51	100.0	100.0	

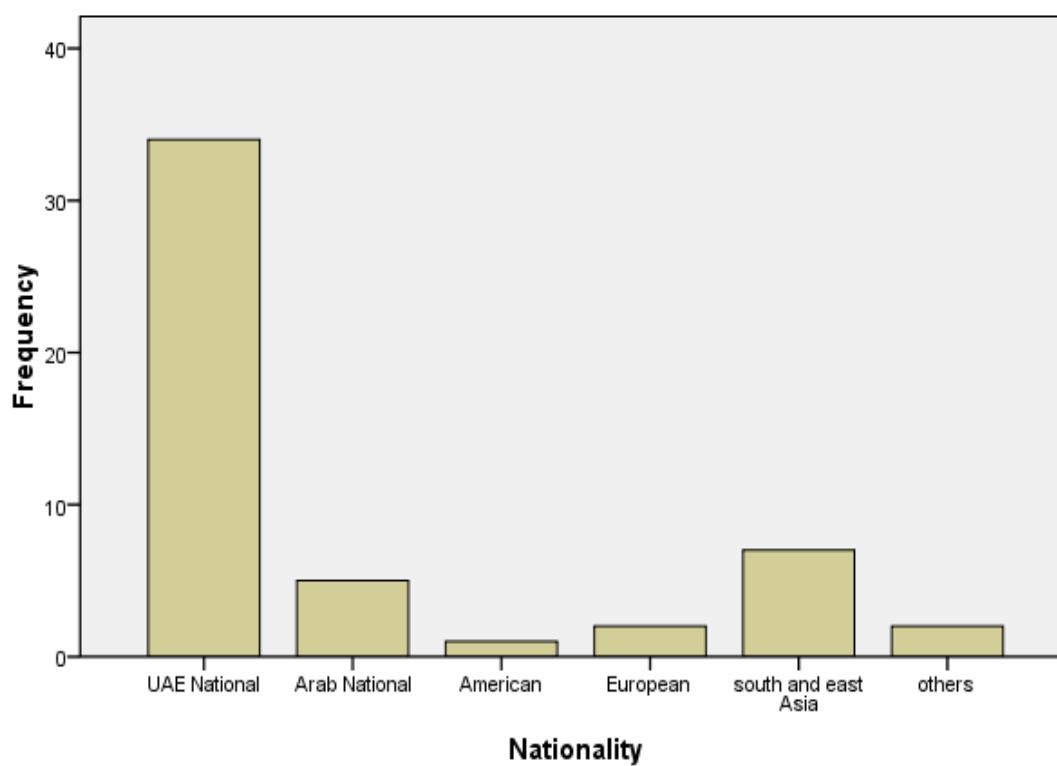
**Marital Status**



**Nationality**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	UAE National	34	66.7	66.7	66.7
	Arab National	5	9.8	9.8	76.5
	American	1	2.0	2.0	78.4
	European	2	3.9	3.9	82.4
	south and east Asia	7	13.7	13.7	96.1
	others	2	3.9	3.9	100.0
	Total	51	100.0	100.0	

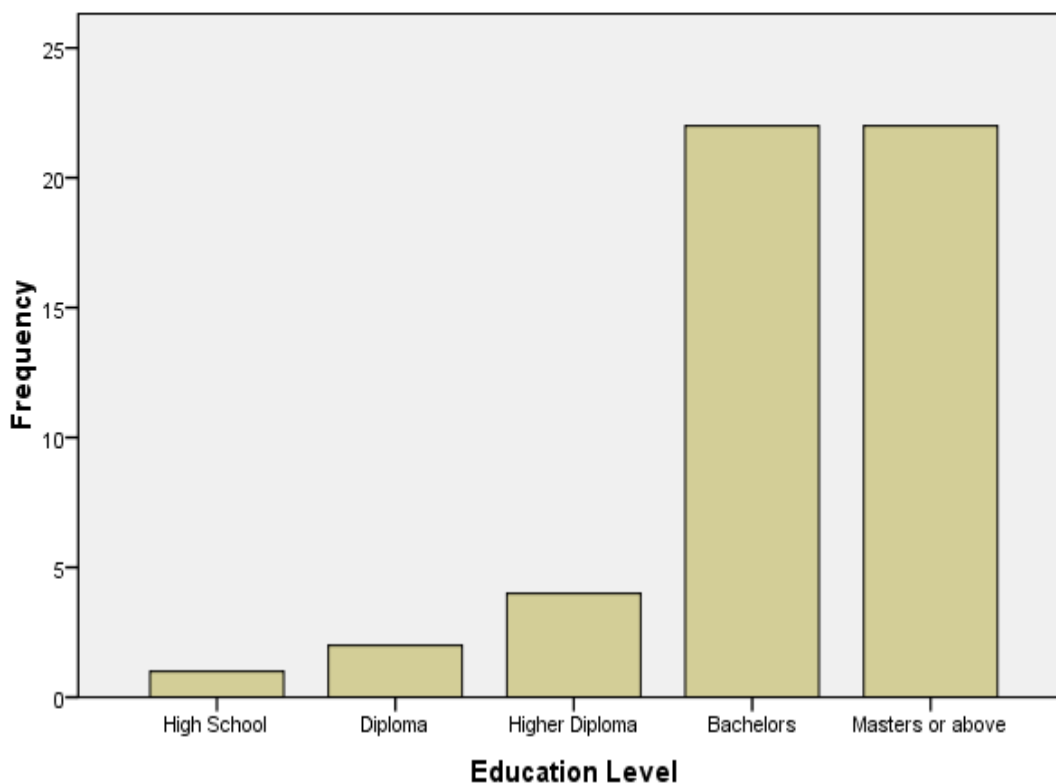
**Nationality**



**Education Level**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High School	1	2.0	2.0	2.0
	Diploma	2	3.9	3.9	5.9
	Higher Diploma	4	7.8	7.8	13.7
	Bachelors	22	43.1	43.1	56.9
	Masters or above	22	43.1	43.1	100.0
	Total	51	100.0	100.0	

**Education Level**

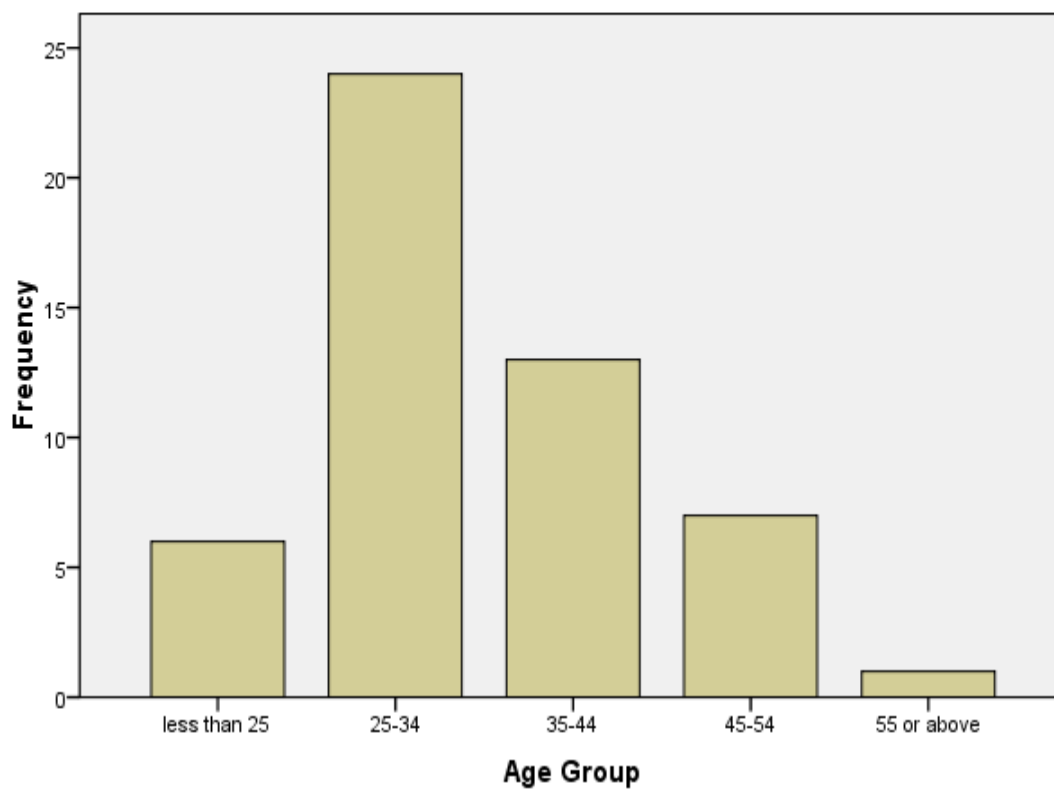




**Age Group**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 25	6	11.8	11.8	11.8
	25-34	24	47.1	47.1	58.8
	35-44	13	25.5	25.5	84.3
	45-54	7	13.7	13.7	98.0
	55 or above	1	2.0	2.0	100.0
	Total	51	100.0	100.0	

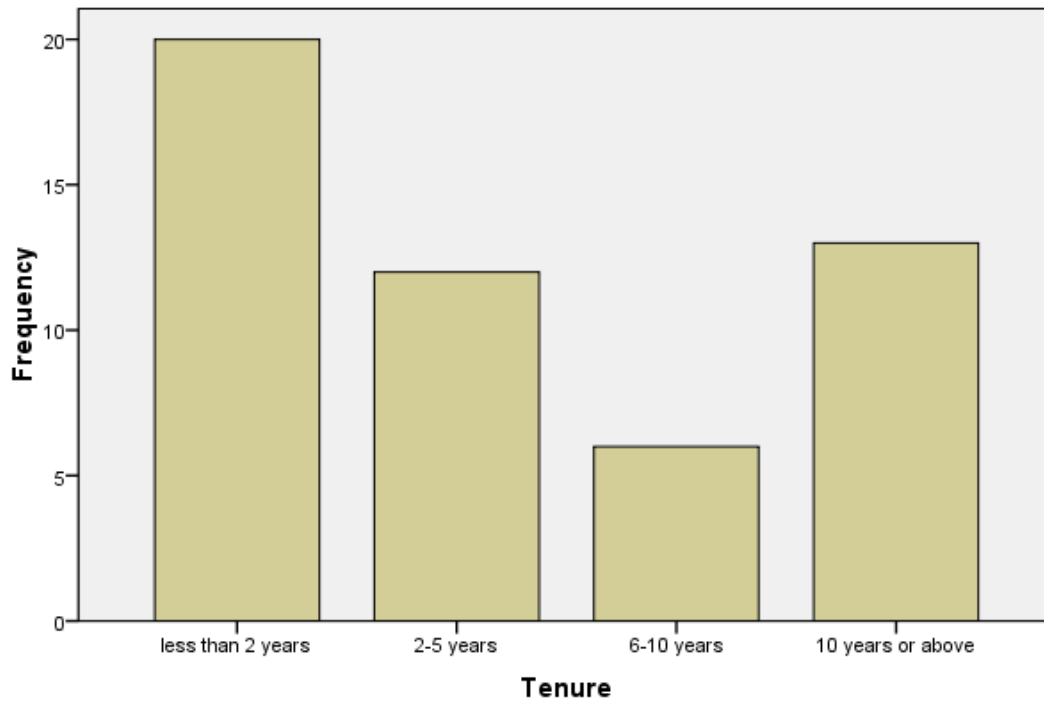
**Age Group**



Tenure

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 2 years	20	39.2	39.2	39.2
	2-5 years	12	23.5	23.5	62.7
	6-10 years	6	11.8	11.8	74.5
	10 years or above	13	25.5	25.5	100.0
	Total	51	100.0	100.0	

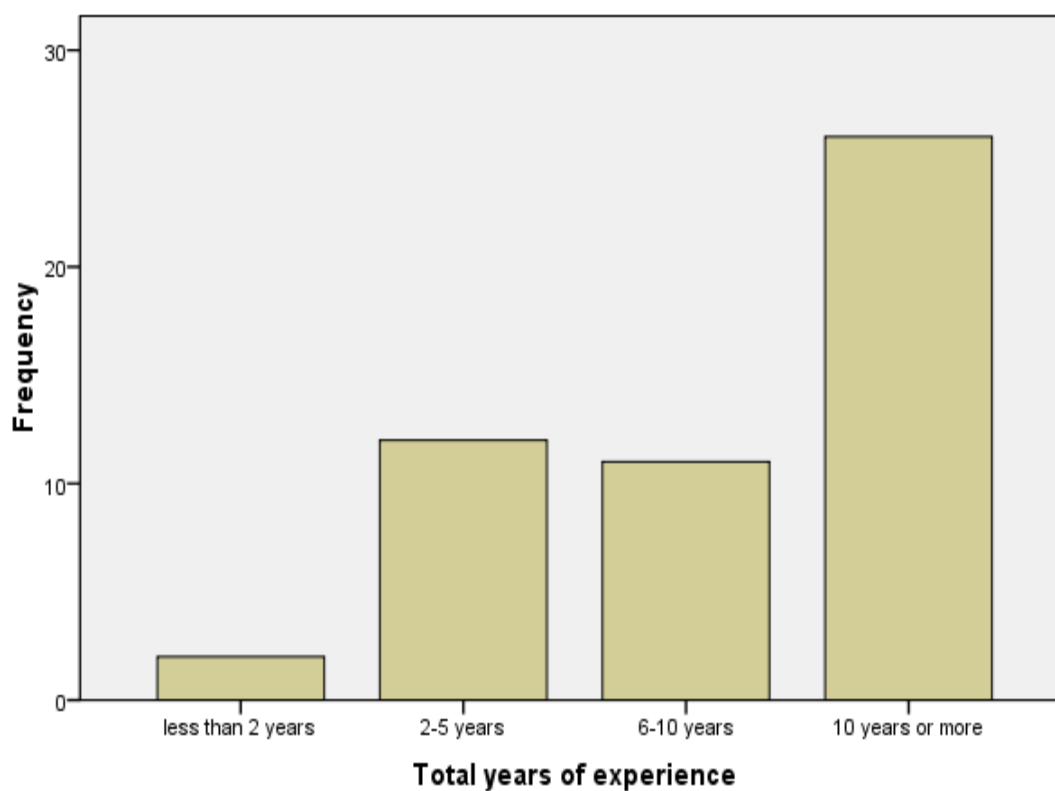
Tenure



**Total years of experience**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid less than 2 years	2	3.9	3.9	3.9
2-5 years	12	23.5	23.5	27.5
6-10 years	11	21.6	21.6	49.0
10 years or more	26	51.0	51.0	100.0
Total	51	100.0	100.0	

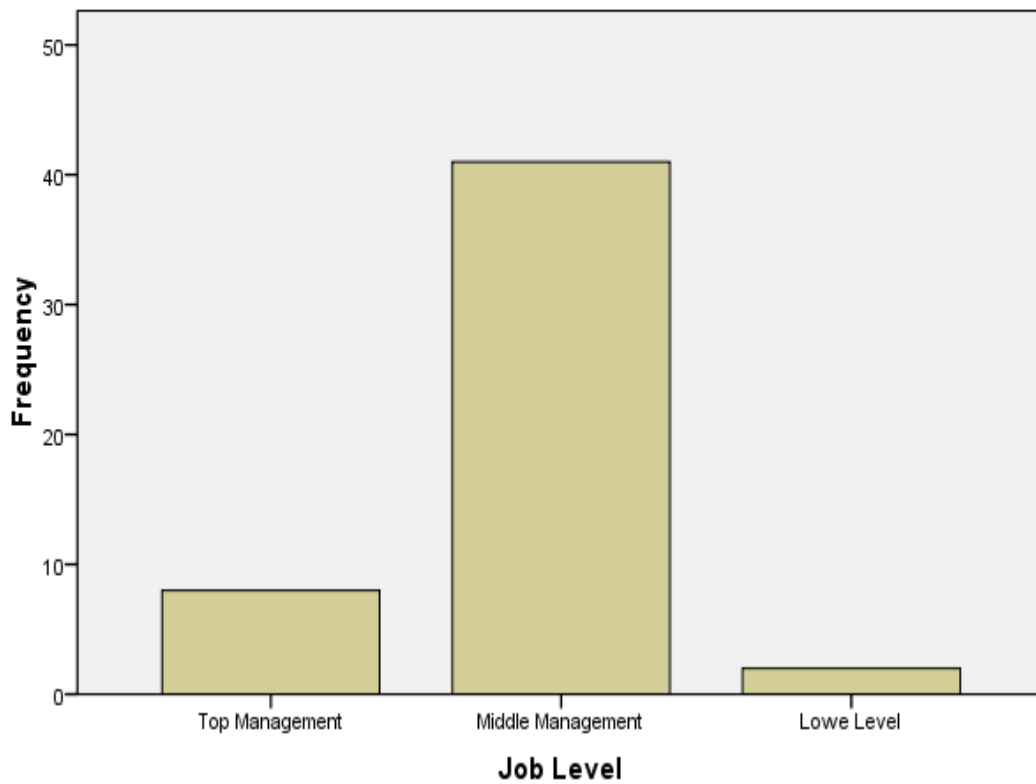
**Total years of experience**



**Job Level**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Top Management	8	15.7	15.7	15.7
Middle Management	41	80.4	80.4	96.1
Low Level	2	3.9	3.9	100.0
Total	51	100.0	100.0	

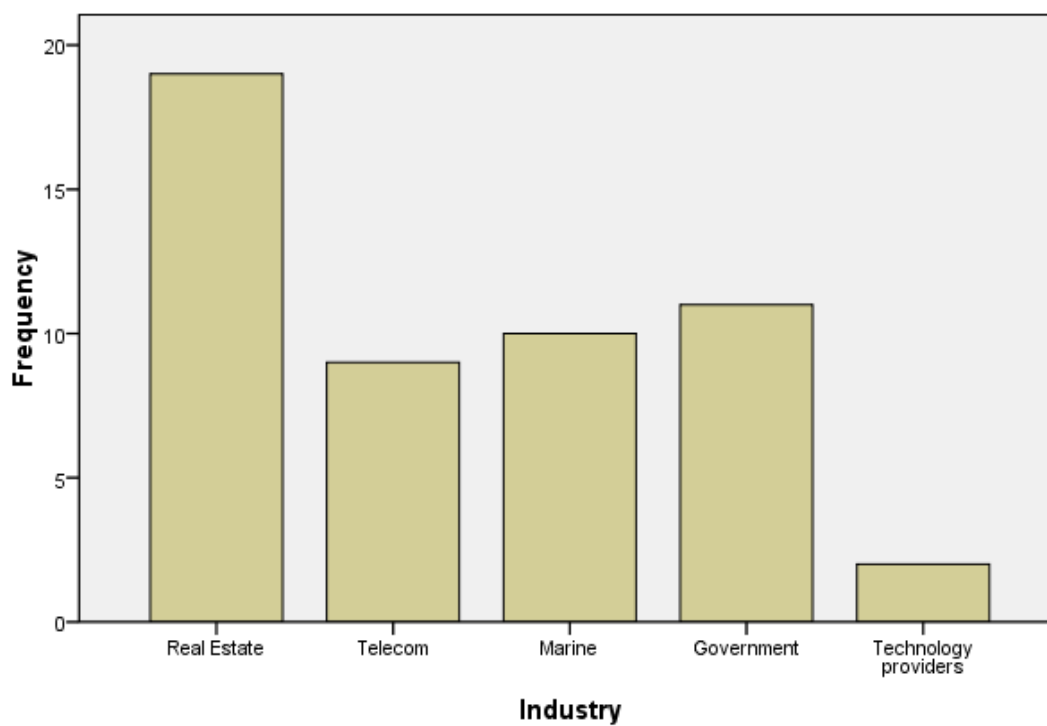
**Job Level**



Industry

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Real Estate	19	37.3	37.3	37.3
	Telecom	9	17.6	17.6	54.9
	Marine	10	19.6	19.6	74.5
	Government	11	21.6	21.6	96.1
	Technology providers	2	3.9	3.9	100.0
	Total	51	100.0	100.0	

Industry



## Appendix E – Regression Test Results

For All Sectors

### Regression for Organization Conditions as a whole

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.829 <sup>a</sup>	.687	.680	2.85845

a. Predictors: (Constant), OrganizationCondition

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	876.968	1	876.968	107.331	.000 <sup>a</sup>
	Residual	400.365	49	8.171		
	Total	1277.333	50			

a. Predictors: (Constant), OrganizationCondition

b. Dependent Variable: Innovativeness

**coefficients**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
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## Triggers and Conditions for Innovations in Dubai

	B	Std. Error	Beta		
1 (Constant)	-.345	1.596		-.216	.830
OrganizationCondition	.292	.028	.829	10.360	.000

a. Dependent Variable: Innovativeness

### Regression for Organization Condition Factors

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.870 <sup>a</sup>	.757	.717	2.68723

a. Predictors: (Constant), Champion, OrganizationStructure, Training, OrganizationCulture, ManagementStyle, Empowerment, OrganizationClimate

#### ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	966.822	7	138.117	19.127	.000 <sup>a</sup>
	Residual	310.512	43	7.221		
	Total	1277.333	50			

a. Predictors: (Constant), Champion, OrganizationStructure, Training, OrganizationCulture, ManagementStyle, Empowerment, OrganizationClimate

b. Dependent Variable: Innovativeness

#### Coefficients<sup>a</sup>

## Triggers and Conditions for Innovations in Dubai

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.712	1.931		.887	.380
	OrganizationCulture	-.311	.224	-.154	-1.388	.172
	OrganizationClimate	.534	.119	.511	4.472	.000
	OrganizationStructure	.206	.294	.066	.702	.486
	Empowerment	.660	.219	.339	3.013	.004
	Training	.216	.334	.072	.648	.520
	ManagementStyle	.204	.121	.179	1.696	.097
	Champion	.213	.560	.039	.380	.706

a. Dependent Variable: Innovativeness

### Regression for Internal Triggers

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.767 <sup>a</sup>	.588	.562	3.34543

a. Predictors: (Constant), Internal Trigger\_Management Cosmopolitan, Internal Triggers\_Management Decision, Internal Triggers\_Management Education

#### ANOVA<sup>b</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.



## Triggers and Conditions for Innovations in Dubai

1	Regression	751.313	3	250.438	22.377	.000 <sup>a</sup>
	Residual	526.021	47	11.192		
	Total	1277.333	50			

a. Predictors: (Constant), Internal Trigger\_Management Cosmopolitan, Internal Triggers\_Management Decision, Internal Triggers\_Management Education

b. Dependent Variable: Innovativeness

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.715	1.679		1.617	.112
	Internal Triggers_Management Education	.566	.520	.124	1.088	.282
	Internal Triggers_Management Decision	1.767	.607	.305	2.910	.006
	Internal Trigger_Management Cosmopolitan	2.777	.557	.535	4.989	.000

a. Dependent Variable: Innovativeness

## For Government Sector

### Regression for Organization Conditions as a Whole

## Triggers and Conditions for Innovations in Dubai

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.869 <sup>a</sup>	.755	.728	2.38858

a. Predictors: (Constant), OrganizationCondition

### ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	158.652	1	158.652	27.808	.001 <sup>a</sup>
	Residual	51.348	9	5.705		
	Total	210.000	10			

a. Predictors: (Constant), OrganizationCondition

b. Dependent Variable: Innovativeness

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.220	2.528		.878	.403
	OrganizationCondition	.238	.045	.869	5.273	.001

a. Dependent Variable: Innovativeness

## Regression for Organization Condition Factors

## Triggers and Conditions for Innovations in Dubai

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.990 <sup>a</sup>	.981	.936	1.16098

a. Predictors: (Constant), Champion, OrganizationStructure, Training, ManagementStyle, OrganizationCulture, Empowerment, OrganizationClimate

### ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	205.956	7	29.422	21.829	.014 <sup>a</sup>
	Residual	4.044	3	1.348		
	Total	210.000	10			

a. Predictors: (Constant), Champion, OrganizationStructure, Training, ManagementStyle, OrganizationCulture, Empowerment, OrganizationClimate

b. Dependent Variable: Innovativeness

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.639	2.233		.286	.793
	OrganizationCulture	.427	.333	.230	1.280	.290
	OrganizationClimate	.211	.168	.269	1.253	.299
	OrganizationStructure	.247	.259	.091	.955	.410

## Triggers and Conditions for Innovations in Dubai

Empowerment	-.297	.449	-.137	-.662	.555
Training	-.011	.326	-.004	-.033	.976
ManagementStyle	-.017	.077	-.028	-.225	.836
Champion	3.368	1.164	.679	2.893	.063

a. Dependent Variable: Innovativeness

## Regression for Internal Triggers

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.825 <sup>a</sup>	.681	.544	3.09317

a. Predictors: (Constant), Internal Triggers\_Management Decision, Internal Trigger\_Management Cosmopolitan, Internal Triggers\_Management Education

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	143.026	3	47.675	4.983	.037 <sup>a</sup>
	Residual	66.974	7	9.568		
	Total	210.000	10			

a. Predictors: (Constant), Internal Triggers\_Management Decision, Internal Trigger\_Management Cosmopolitan, Internal Triggers\_Management Education

b. Dependent Variable: Innovativeness

## Triggers and Conditions for Innovations in Dubai

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.633	3.255		1.116	.301
	Internal Trigger_Management Cosmopolitan	3.409	1.272	.751	2.681	.031
	Internal Triggers_Management Education	-1.738	.957	-.546	-1.816	.112
	Internal Triggers_Management Decision	2.489	.889	.659	2.799	.027

a. Dependent Variable: Innovativeness

### For Semi Government Sector

## Regression for Organization Conditions as a Whole

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.965 <sup>a</sup>	.932	.924	1.79946

a. Predictors: (Constant), OrganizationCondition

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
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## Triggers and Conditions for Innovations in Dubai

1	Regression	356.095	1	356.095	109.972	.000 <sup>a</sup>
	Residual	25.905	8	3.238		
	Total	382.000	9			

a. Predictors: (Constant), OrganizationCondition

b. Dependent Variable: Innovativeness

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.066	1.814		-1.139	.288
	OrganizationCondition	.348	.033	.965	10.487	.000

a. Dependent Variable: Innovativeness

## Regression for Organization Condition Factors

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1.000 <sup>a</sup>	1.000	1.000	.00000

a. Predictors: (Constant), Champion, OrganizationClimate, Empowerment, OrganizationCulture, Training, ManagementStyle, OrganizationStructure

## Triggers and Conditions for Innovations in Dubai

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	382.000	7	54.571	5.317E13	.000 <sup>a</sup>
	Residual	.000	2	.000		
	Total	382.000	9			

a. Predictors: (Constant), Champion, OrganizationClimate, Empowerment, OrganizationCulture, Training, ManagementStyle, OrganizationStructure

b. Dependent Variable: Innovativeness

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-13.066	.000		-1.750E6	.000
	OrganizationCulture	-7.904	.000	-3.888	-1.241E6	.000
	OrganizationClimate	1.787	.000	1.648	2.016E6	.000
	OrganizationStructure	14.743	.000	4.240	1.240E6	.000
	Empowerment	6.801	.000	2.641	1.671E6	.000
	Training	-6.051	.000	-1.871	-1.654E6	.000
	ManagementStyle	-1.941	.000	-1.159	-9.290E5	.000
	Champion	-.221	.000	-.029	-3.403E5	.000

a. Dependent Variable: Innovativeness

### Regression for Internal Triggers

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.975 <sup>a</sup>	.951	.926	1.76662

a. Predictors: (Constant), Internal Triggers\_Management Decision, Internal Triggers\_Management Education, Internal Trigger\_Management Cosmopolitan

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	363.274	3	121.091	38.799	.000 <sup>a</sup>
	Residual	18.726	6	3.121		
	Total	382.000	9			

a. Predictors: (Constant), Internal Triggers\_Management Decision, Internal Triggers\_Management Education, Internal Trigger\_Management Cosmopolitan

b. Dependent Variable: Innovativeness

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.539	2.341		-.230	.825



## Triggers and Conditions for Innovations in Dubai

Internal Trigger_Management Cosmopolitan	4.257	.740	.767	5.755	.001
Internal Triggers_Management Education	1.412	.900	.183	1.570	.167
Internal Triggers_Management Decision	1.060	.836	.138	1.268	.252

a. Dependent Variable: Innovativeness

### For Private Sector

## Regression for Organization Conditions as a Whole

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.759 <sup>a</sup>	.576	.561	3.20729

a. Predictors: (Constant), OrganizationCondition

### ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	390.772	1	390.772	37.988	.000 <sup>a</sup>
	Residual	288.028	28	10.287		
	Total	678.800	29			

## Triggers and Conditions for Innovations in Dubai

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.759 <sup>a</sup>	.576	.561	3.20729

a. Predictors: (Constant), OrganizationCondition

b. Dependent Variable: Innovativeness

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.980	2.785		-.352	.728
	OrganizationCondition	.299	.048	.759	6.163	.000

a. Dependent Variable: Innovativeness

## Regression for Organization Conditions Factors

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.840 <sup>a</sup>	.706	.612	3.01302

a. Predictors: (Constant), Champion, OrganizationCulture, OrganizationStructure, Training, Empowerment, OrganizationClimate, ManagementStyle

## Triggers and Conditions for Innovations in Dubai

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	479.078	7	68.440	7.539	.000 <sup>a</sup>
	Residual	199.722	22	9.078		
	Total	678.800	29			

a. Predictors: (Constant), Champion, OrganizationCulture, OrganizationStructure, Training, Empowerment, OrganizationClimate, ManagementStyle

b. Dependent Variable: Innovativeness

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.208	3.763		1.650	.113
	OrganizationCulture	-.510	.317	-.231	-1.609	.122
	OrganizationClimate	.419	.250	.345	1.675	.108
	OrganizationStructure	-.193	.516	-.057	-.374	.712
	Empowerment	.483	.399	.272	1.209	.240
	Training	.072	.554	.023	.130	.898
	ManagementStyle	.752	.437	.464	1.721	.099
	Champion	-.270	.771	-.052	-.349	.730

a. Dependent Variable: Innovativeness

### Regression for Internal Triggers

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.766 <sup>a</sup>	.587	.539	3.28435

a. Predictors: (Constant), Internal Triggers\_Management Decision, Internal Trigger\_Management Cosmopolitan, Internal Triggers\_Management Education

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	398.338	3	132.779	12.309	.000 <sup>a</sup>
	Residual	280.462	26	10.787		
	Total	678.800	29			

a. Predictors: (Constant), Internal Triggers\_Management Decision, Internal Trigger\_Management Cosmopolitan, Internal Triggers\_Management Education

b. Dependent Variable: Innovativeness

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.166	2.401		1.319	.199

## Triggers and Conditions for Innovations in Dubai

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Internal Trigger_Management Cosmopolitan	2.169	.742	.407	2.923	.007
Internal Triggers_Management Education	1.693	.696	.372	2.433	.022
Internal Triggers_Management Decision	1.296	.934	.201	1.388	.177

a. Dependent Variable: Innovativeness