Assessing the Impact of Organizational Culture on Achieving Business Excellence with a Moderating Role for Information and Communication Technology

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Assessing the Impact of Organizational Culture on Achieving Business Excellence With Moderating Role of Information Communication Technology

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Abstract

Researchers have been interested in organizational culture for many years, particularly its relationship with organizational performance. Several studies, however, have concluded that the relationship between organizational culture and business excellence is still unclear, due partly to the limited research on this specific area, and partly because business excellence is a relatively new area, and most studies have focused on it as a whole, rather than examining individual elements. The use of information and communication technology (ICT) tools is increasing and studies have shown that ICT use is affected by organizational culture and also associated with some factors affecting excellence.

This study therefore aims to discover the impact of different dimensions of organizational culture (mission culture, adaptability culture, involvement culture, and consistency culture) on business excellence results criteria (customer results, people results, society results, and business results) in the United Arab Emirates (UAE) and explore the moderating role of ICT use. This research has special importance in the UAE context because UAE is considered a leader in business excellence in the Middle East region, with many excellence awards for government and private sector. In its strategic plan, the UAE government has also emphasized the importance of achieving excellence in the business sector. UAE has very modern ICT infrastructure and in 2016, was ranked first worldwide by the Global Information Technology Report for importance of ICT in achieving the government’s vision for the country.

To achieve these objectives, a quantitative study was conducted, and data were collected by questionnaire from 448 managers in nine companies that have won the Sheikh Khalifa Excellence Award in the last three years. Structural Equation Modeling (SEM) was used to examine the data.

The results confirmed that organizational culture is significantly related to business excellence. However, these effects varied for different business excellence criteria. Three organizational culture types had a significant positive role in achieving excellent customer-related results. All four types of organizational culture had a positive role in achieving excellent people-related results. Only two culture types had significant role in achieving excellent society-related results. Business results were positively related to a balance between the four types of organizational culture. ICT use moderated the relationship between organizational culture and results related to customers, people, and business, but not society. This study had some conceptual limitations. In particular, it considered the organizational culture as four types in the research model, but without structuring the indices under each type. It also had some methodological limitations. It was cross-sectional and used a self-administered questionnaire, which means that no causal relationships can be implied, and there may have been some bias in responding.

Keywords: organizational culture, business excellence, information and communication technology, United Arab Emirates.

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List of Abbreviations

AC	Adaptability culture
ADAEP	Abu Dhabi Award for Excellence in Government Performance
AMOS	Analysis of Moment Structure Software Package
BE	Business excellence
BR	Business results
BSC	Balanced scorecard
CC	Consistency culture
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CR	Customer results
CSR	Corporate social responsibility
DOCS	Denison Organizational Culture Survey
DQA	Dubai Quality Award
EFA	Exploratory Factor Analysis
EFQM	European Foundation for Quality Management
GDP	Gross domestic product
IC	Involvement culture
ICT	Information and communication technology
ICTCCP	ICT Culture Change program
KPI	Key Performance Indicator
MBRGEA	Mohamad Bin Rashid Government Excellence Award

MC	Mission culture
OC	Organizational culture
PR	People results
RMSEA	Root Mean Square Error of Approximation
SEM	Structural Equation Modeling
SKEA	Sheikh Khalifa Excellence Award
SKGEP	Sheikh Khalifa Government Excellence Program
SR	Society results
TLI	Tucker-Lewis index
UAE	United Arab Emirates

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Chapter 1: Introduction to the Study

1.1 Introduction

This chapter provides an overview of this research and the structure of the dissertation. It explains the variables used to assess organizational culture and business excellence, drawing on previous studies, and provides information about the location of the research, the United Arab Emirates (UAE) and its demographic and economic environment, including government plans and strategic priorities. This chapter also explains the research gap and the importance of this study in general and in the UAE in particular. It will develop the research questions, identify the expected results and explain the significance and contribution of the study to the body of knowledge, managerial practices, and business sectors in the UAE.

1.2 Overview of Organizational Culture, Business Excellence, and the UAE Context

1.2.1 Organizational culture. Organizational culture has been a topic of interest to researchers for more than 60 years and is still an active and interesting field of study. The effect of organizational culture on productivity was first highlighted in 1951 (Jaques, 1951), and a meta-analysis found more than 4,600 articles on organizational culture published between 1980 and 2011 (Hartnell, Ou, & Kinicki, 2011).

Researchers have continued to develop new definitions and interpretations of organizational culture and to conceptualize it in different ways, from a key part of the social fabric (Pettigrew, 1979), to the collective programming of the mind (G. Hofstede, 2004), or a pattern of norms, values, beliefs, assumptions and attitudes that influences behavior within an organization (Chin-Loy & Mujtaba, 2007; Schein, 2010).

Organizational culture studies have recently focused on the effect of culture on organizational performance, and using questionnaires as a quantitative tool to assess organizational culture (D. Denison, Nieminen, & Kotrba, 2014). The majority of researchers have found that organizational culture has a direct effect on performance (Sackmann, 2011). However, the relationship between organizational culture and business excellence, and how to achieve outstanding performance, is still ambiguous. Bolboli and Reiche (2013) admitted that it is still unclear how companies should manage organizational culture when applying business excellence models.

1.2.2 Organizational Excellence. The idea of business excellence first appeared thirty years ago, as a new approach to help organizations to deal with the challenge of implementing total quality management (TQM) (Adebanjo, 2001). Business excellence was conceptualized through models developed by several different bodies around the globe, and then adopted by companies to improve performance and achieve business success (Enquist, Johnson, & Rönnbäck, 2015; Ringrose, 2013). The implementation of business excellence models enabled companies to achieve success factors determined by organizational context (Najeh & Kara-Zaitri, 2007; Salaheldin, 2009). Success factors and fundamental concepts of excellence mainly focus on areas related to customers, employees, society and business performance (EFQM, 2013).

In the last few years, there has been a growing understanding and agreement that organizational performance should not be assessed using only quantifiable measures and indicators, but that other attributes are also important to quality. This has supported the use of quality and excellence models to measure organizational performance (Zairi & Alsughayir, 2011), and there are various business excellence assessments which are available and used both externally and internally by organizations (EFQM, 2013; Wiele & Brown, 1999).

1.2.3 The UAE context. The Gulf region's history goes back to 6000 B.C. Historically, the UAE and surrounding area have often been referred to as the Arabian Peninsula. The UAE in its current form was officially established in 1972 as a federation of seven emirates, with Abu Dhabi Emirate as the capital. Discovering oil in 1958, and gas soon after that, triggered substantial economic and social development. The gross domestic product (GDP) increased from USD 1.76 billion in 1971 to USD 418 billion in 2014. To set this in context, GDP in the USA increased from USD 1.16 trillion to USD 17.34 trillion over the same period, an increase of just 1394.83% instead of 23650% in the UAE. Abu Dhabi Emirate alone had a GDP of USD 260 billion in 2014. The UAE population in mid-2013 was estimated to be 9.34 million; Abu Dhabi Emirate's population alone was estimated to be 2.65 million in mid-2014 ("Abu Dhabi Government," 2016, "UAE Government," 2016).

In spite of its current prosperity, the UAE is planning for the post-oil era and the government has therefore initiated investments in different sectors. The Abu Dhabi Investment Authority is considered the fifth largest wealth fund in the world and the largest in the Middle East ("SWFI," 2016). The government's Abu Dhabi Plan 2020 included strategic objectives and programs to achieve excellent experience and services for users. These objectives foster service excellence through strategic programs such as optimizing and facilitating information and communication technology (ICT) enablers ("Abu Dhabi Plan," 2016). UAE was ranked first worldwide on the importance of ICT in achieving the government's vision (Baller, Dutta, & Lanvin, 2016).

1.3 Research problem

Although the culture–performance link has been widely studied (Ashkanasy, Wilderom, & Peterson, 2011; D. Denison et al., 2014), there is very little research on the relationship between organizational culture and business excellence. It is still not clear how corporations should manage organizational culture when applying business excellence models (Bolboli & Reiche, 2013), although lack of consideration of organizational culture is one of the major reasons why improvement projects fail within companies trying to implement business excellence models (Austin & Ciaassen, 2008).

The gap in studying the organizational culture–business excellence link is more significant in the UAE and Middle East, because organizational culture research in Arab countries is rare (Klein, Waxin, & Radnell, 2009). There are also very few studies of companies and organizations that have achieved excellent performance, demonstrated by winning excellence awards (Ahrens, 2013; McAdam, Keogh, Tigani, & Gardiner, 2013). The relationship between organizational culture and business excellence is also a relatively new area for research (Gogheri, Nawaser, Vesal, Jahanshahi, & Kazi, 2013).

The focus in the UAE is to deliver excellent services and improve efficiency. This intention has been translated into dedicated strategic objectives on excellence in service delivery in the Abu Dhabi Plan 2020 ("Abu Dhabi Plan," 2016), and has resulted in the establishment of quality and business excellence awards such as the Sheikh Khalifa Excellence Award, the Mohamad Bin Rashid Government Excellence Award and the Abu Dhabi Award for Excellence in Government Performance, designed to improve performance and competiveness in companies or government organizations.

The UAE government prides itself on being a regional leader in using ICT and investing in building modern and advanced technological infrastructure. Government encouragement of ICT use is shown in various projects such as the e-government project, smart services initiatives, and strategic projects in the Abu Dhabi Plan 2020 to optimize and facilitate ICT enablers ("Abu

Dhabi Plan," 2016). One recent study ranked UAE first worldwide on the importance of ICT for achieving the government's vision (Baller et al., 2016), and the country is ranked 32 of 167 countries in the 2014 ICT Development Index (International Telecommunication Union, 2015).

1.4 Purpose of the Study

The purpose of this study is to contribute to filling this gap in the literature and support efforts in the UAE to improve business excellence, as well as exploring the role of ICT utilization in the organizational culture and business excellence context. This will be done by examining the influence of organizational culture on business excellence in general, then looking at the effect of each organizational culture type (mission, adaptability, involvement, consistency) on each business excellence area (customers, people, society, and business), and examining the moderating role of ICT use on these relationships.

This study will therefore extend the previous research in several ways. Firstly, it will frame the relationship between organizational culture and business excellence and examine it in the Middle Eastern context. Secondly, it is the first known study that attempts to comprehend and describe the association between organizational culture type and business excellence results criteria, considering the moderating effect of ICT use. Thirdly, this study contributes to business excellence from an organizational culture perspective by examining the relationship between four types of organizational culture and four business excellence criteria. Finally, it tests the moderation effect of ICT use on this relationship.

1.5 Research Questions

This research aims to investigate the influence of organizational culture on business excellence in the UAE and the moderation role of ICT. Organizational culture and business excellence were both considered to be multidimensional constructs.

The following research questions were therefore developed:

RQ1. What are the relationships between the dimensions of organizational culture and the components of business excellence?

RQ2. What is the moderating role of information and communication technology on the relationships between the dimensions of organizational culture and of business excellence?

In total, 25 hypotheses were developed to examine these questions.

1.6 Importance of the Study

This importance of this study lies in its theoretical and managerial implications. It will contribute to the body of knowledge by providing a better understanding of the relationship between organizational culture and business excellence, and will be the first study of its kind in the UAE. It will show how results related to customers, people, society, and the business are affected by organizational culture and how this relationship is changed by ICT use. Companies in the UAE will be able to use the results to better implement business excellence criteria and align their efforts with organizational culture. Managers and decision-makers will be able to maximize the success rate of improvement plans by aligning them to the most appropriate type of organizational culture.

1.7 Structure of the Study

The study consists of eight chapters:

1.7.1 Chapter one: Introduction to the study. This chapter gives an overview of the research, including the research problem and gap in the literature.

1.7.2 Chapter two: Literature review. This chapter conceptualizes the research variables and discusses the findings of previous studies on organizational culture, business excellence, and ICT. It highlights concepts and definitions, and ways of measuring the variables, and shows how they relate in the UAE context. This chapter also highlights well-established theories and models of organizational culture and business excellence.

1.7.3 Chapter three: Development of research hypotheses. This chapter develops the research hypotheses by reviewing the most relevant literature and the relationships between the study variables. The chapter covers the general associations between organizational culture and business excellence, and highlights the most significant findings. The focus then shifts to the relationship between each culture type and each business excellence criterion, and also examines the potential impact of ICT use.

1.7.4 Chapter four: Research methodology. This chapter covers the research methods used, and defines the independent, dependent, and moderating variables. It provides a brief description of the scientific procedure followed for data coding and analysis, discussing sample size and sampling frame and the justification for choosing particular sampling techniques. It also covers the pilot study, data collection procedure, and ethical considerations.

1.7.5 Chapter five: Data analysis and results. This chapter includes the results of hypothesis testing and data analysis using structural equation modeling (SEM) and path analysis, as well as the interaction approach for moderation testing. Details of the scales' validity, reliability and model fitness testing are included, using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). Descriptive statistics are used for demographic information.

1.7.6 Chapter six: Discussion. This chapter discusses the results of data analysis and relates them to previous findings, setting them in the UAE context. It has five sections, covering the relationship between organizational culture types and each of the four results types, customer, people, society, and business results, and finally the moderating role of ICT use.

1.7.7 Chapter seven: Implications, limitations, and future research. This chapter discusses the implications of the results, both theoretical, and how the findings contribute to the body of knowledge, and practical, how managers should use the findings to improve business excellence results through organizational culture and ICT tools. This chapter also includes the research limitations and recommendations for future research.

1.7.8 Chapter eight: Conclusion. This chapter brings together the lessons from the study, and is followed by references and appendices. The conclusion summarizes the answers to the research questions and links them back to the findings of previous studies.

1.8 Summary

This chapter sheds light on the importance of studying the impact of organizational culture on organizational excellence, and the current research gap on the relationship between organizational culture and business excellence. More studies are required to explore this. The focus in the UAE on achieving business excellence and increasing ICT use makes it an ideal location for this type of research. This chapter also sets out the study structure and content of each chapter.

Chapter 2: Literature Review

2.1 Introduction

This chapter gives a comprehensive review of the literature on organizational culture, business excellence, and ICT. It examines the history and definition of organizational culture, and the diverse approaches used to conceptualize it. It also sets out some of the different organizational culture models, emphasizing the Denison model (1995) with its four types of culture (mission, adaptability, involvement, and consistency). This chapter also covers the concept of national culture and uses the dimensions of Hofstede's model (2004) to shed light on the national culture of UAE. It sets out different approaches to measuring organizational culture.

It goes on to consider the rise of business excellence and the meaning of the term, together with the use of business excellence models and awards. It focuses in particular on the fundamental concepts of excellence and the four criteria in the European Foundation for Quality Management (EFQM) model (customer results, people results, society results, and business results). There are a number of different approaches used to measure business excellence in general and in UAE in particular, including the UAE-based business excellence scheme and Sheikh Khalifa Excellence Award.

Finally, the chapter covers ICT and the different methods used to handle it, discussing ICT infrastructure and use in the UAE compared to other countries, providing the foundation for the research questions.

2.2 Organizational Culture

2.2.1 History and definition. The significance of organizational culture was recognized for the first time at the beginning of the second half of the twentieth century. In industrial firms, organizational culture was used to explain the low productivity environment and why rules and procedures failed to improve unhealthy relationships between supervisors and subordinates (Jaques, 1951). Thirty years later, another new concept of organizational culture was introduced: the idea of culture as the social fabric of the organization, contributing to the collective process of establishing a unique organizational character (Pettigrew, 1979). Since then, a number of other definitions have been suggested, for example, considering organizational culture as a factor that differentiates between organizations on the basis of employee mindset, or “'The collective programming of the mind which distinguishes the members of one organization from another” (G. Hofstede, 2004). Other researchers focused on the long-term beliefs characterizing groups and companies (Cameron & Quinn, 2005). Perhaps the most common definition is of organizational culture as a pattern of norms, values, beliefs, assumptions and attitudes that influences behavior within an organization (Chin-Loy & Mujtaba, 2007; Schein, 2010).

2.2.2 Conceptualizing organizational culture. The literature also conceptualized organizational culture in different ways. Some researchers suggested that culture can be seen as a series of levels. Schein (2010), for example, identified three levels of organizational culture. The first level is symbols and artifacts, and covers communications, songs, words, and pictures that have a precise meaning for employees plus language, mythologies, costumes, and the space where the organization operates. This layer is considered to be closest to the surface and can be identified by observation. The second layer is the espoused values, or the organizational values that have been set out by managers as the most essential for the organization (Schein, 2010). The espoused values will not necessarily be accepted in the same way by all employees, and in some cases, they will be most powerful when they are not written, but held in employees’ unconscious mind and used as a guide when making decisions (Bourne & Jenkins, 2013). The third layer identified by Schein (2010) was the underlying assumptions, or why employees do what they do, and what they believe is most important to the company. The underlying assumptions run very deep and are difficult to capture. They can usually only be identified by intensive interviews with employees (Schein, 2010).

Culture can be conceptualized by the unit of analysis. When a group of individuals with a shared objective work together, they will create a unique culture. Based on the level of analysis, different terms are used to articulate the phenomena emerging from these relationships. For example, if it occurs at the country or state level, we call it “national culture”; at an ethnic level, it is “ethnic culture”; and if the focus of study is the company, it is “organizational culture”. Here, culture is a tool created and used by a group of people to help them to survive and achieve their agreed objectives (Ostroff, Kinicki, & Tamkins, 2003).

Culture can also be categorized on the professional level, where each profession creates certain behaviors that are demonstrated by those who practice it (Burke, Teague, Ward, & Worrall, 2016). Occupational culture can be identified as a level above organizational but below national culture; some occupations, however, may create cultures that include elements from organizational and national levels, such as the culture of management (G. Hofstede, Hofstede, & Minkov, 2010).

Organizational culture can be categorized into integration, differentiation, and fragmentation perspectives. The integration perspective suggests that individual employees will agree about some elements of the organization’s culture and will usually describe it similarly, at least to some extent (Martin, 2002). Culture can be considered as a pillar that is seen similarly by most individuals, albeit from different angles.

The differentiation perspective, however, views culture as a combination of the subcultures within an organization. In this case, consensus only exists in the subcultures. These operate together, oppose each other, or act independently and are mainly seen in big companies or those with well-structured business units. The fragmentation perception assumes that culture is vague and lacks consensus. (Martin, 2002, p. 94) stated "Interpretations of cultural manifestations are ambiguously related to each other, placing ambiguity, rather than clarity, at the core of culture".

It is also possible to operationalize organizational culture in a number of ways, for example, holistically, metaphorically, and quantitatively (Cameron & Quinn, 2005). Researchers use a holistic approach to gain a rich understanding of culture by contributing and noticing, almost attempting to become 'native' to the company, as this gives them the opportunity for deeper understanding and the ability to describe the culture more accurately. Researchers using the metaphorical or language approaches apply techniques to identify cultural patterns in documents, conversations, and other forms of language (Cameron & Quinn, 2005). This is relatively straightforward, but the quantitative approach remains easier to implement and provides faster results.

2.2.3 Organizational culture models. There are many different models used to assess organizational culture. Perhaps the two most popular are the Denison Model (1995) and the Competing Values Framework (2005).

***2.2.3.1 Competing values framework*. T**he competing values framework (CVF) is a well-established tool used to assess organizational culture. It emerged form research using instruments to measure organizational effectiveness and performance (Cameron, Quinn, Degraff, & Thakor, 2014). The model has four dimensions that illustrate the values employees think are most important for corporate performance. The four dimensions of the CVF model are grouped into two contexts. The first differentiates between values of organizational flexibility and stable practices and more control. The second differentiates between internal focus and external efforts to become more competitive (Cameron & Quinn, 2005). The four cultures in the model are clan, hierarchy, market, and adhocracy cultures. Organizations may have one dominant culture type or a balanced culture, where no leading culture can be identified (Cameron & Quinn, 2005). The clan culture is usually associated with a friendly work environment where employees feel empowered and happy, and the managers ensure flexible work roles and policies and focus on maintaining high employee satisfaction. Companies with a dominant adhocracy culture concentrate on their external competitors and their strategic positioning, maintaining a high level of flexibility and agility. Employees of these companies are generally able to deal with continuous change in the external environment, and to create unique solutions and offerings. Companies with a market culture focus on being stable and well-positioned in the market, and they tend to be tough competitors. The hierarchical culture reflects a strong governance system. Companies with a dominant hierarchical culture usually have more internal stability and steady management practices (Cameron & Quinn, 2005; Cameron et al., 2014).

2.2.3.2 Denison organizational culture model. The Denison model is different from other organizational culture models. Most models are based on the culture effectiveness theory, but the primary theoretical framework of Denison Model is based on the field theory (D. R. Denison, 1984). The field theory (Lewin, 1997) has been used to describe different behaviors at the organizational level, but is also applicable to groups and individuals (Burnes & Cooke, 2013).

The Denison model is built on four characteristics that help companies improve their performance (see Figure 1). These are adaptability, mission, involvement, and consistency (Daniel R. Denison & Mishra, 1995). The work to construct this model used both quantitative and qualitative methods, and the results showed that overall, the top achieving organizations found ways to empower and involve their employees, enable harmonized activities, and endorse consistent behaviors that showed commitment to the main organizational values. These organizations also had the ability to respond to changes in the business environment, providing a clear vision and future direction for employees (D. Denison, 1984; Daniel R. Denison & Mishra, 1995; Fey & Denison, 2003).

The characteristics of the Denison model are ordered into a structure that is aligned with modern theories of the dynamic tensions that exist as part of organizational effectiveness. These are grouped primarily by internal or external focus, and also by flexibility or stability. By considering the four model traits, we can categorize involvement and adaptability cultures as focused on flexibility, and mission and consistency cultures as tending towards stability (Daniel R. Denison & Mishra, 1995). The roots of the Denison model are similar to those of the competing values framework. There are, however, clear differences, such as the use of a profiling approach in making a cultural assessment for the Denison model. The Denison model also suggests that the best performing organizations are those that show complete or balanced profile, or high levels of all four cultural traits (Gillespie, Denison, Haaland, Smerek, & Neale, 2008).

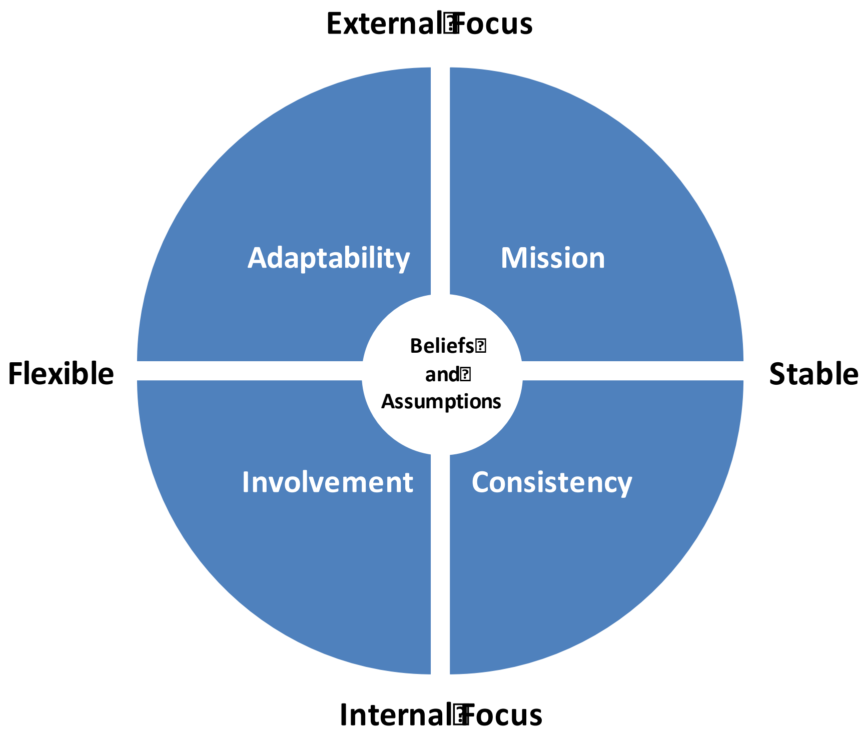

Figure 1 – Denison Organizational Culture Model, adapted from Denison, Haaland, & Goelzer (2004).

The next sections explain the four traits in the Denison model.

2.2.3.2.1 Involvement Culture. The companies with high scores for an involvement culture usually encourage employees to be more involved in their work and with their colleagues. They give them more responsibility and encourage a sense of ownership. Employees in these organizations act informally and do more work on a voluntary basis, and there is very little bureaucracy. Employee commitment to the organization is high, coming from the strong feeling of ownership. Companies with an involvement culture believe that decision-making is a collective process and should be carried out in participation with employees, to increase the wisdom and accuracy of decisions and ease implementation (D. Denison et al., 2014; Fey &

Denison, 2003). Fey and Denison (2003) concluded that an involvement culture shows three indices (see Figure 2):

Empowerment – when employees have the power to handle their own duties, they do so by being initiators and showing a high level of ability. This generates feelings of possession and obligation towards the company.

Team Orientation – employees feel jointly accountable with their colleagues for work that needs group cooperation. Team working is the preferred way of operating in companies with an involvement culture.

Capability Building – companies invest in developing the skills of employees, with a focus on skills gaps. The aim is to improve the work output and enable employees to achieve their objectives.

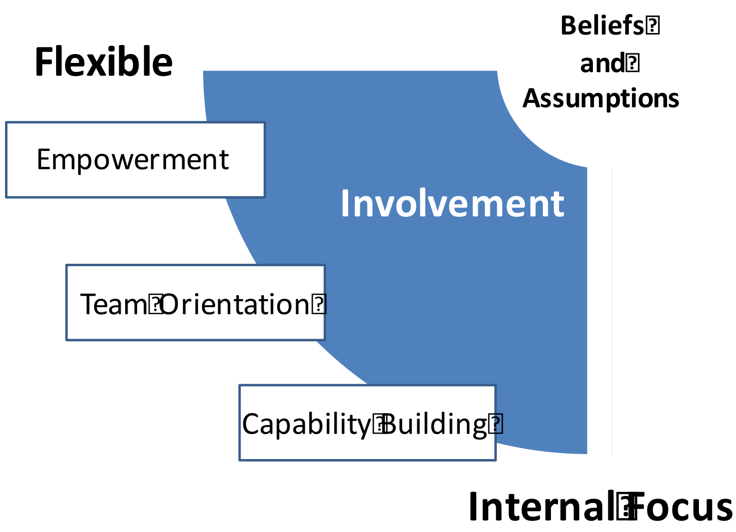

Figure 2 – Involvement Culture Attributes

2.2.3.2.2 Consistency Culture. This attribute is frequently observed in companies with solid cultures. These companies show constancy, in that employees usually agree with one another. The consistency attribute includes values, agreement, coordination, and integration, and employees who work within a consistency culture are usually very committed and have clear instructions on how to work, with strong roles and guidance and a clear code of conduct. When organizations build a consistency culture, they tend to have high levels of internal promotions (D. Denison et al., 2014).

The control within these organizations is implicit and based on employee commitment because of common values. When employees meet unfamiliar conditions, they respond in predictable ways. Organizations that score highly for the consistency attribute usually have an internal focus, and provide stability for their workforce (Fey & Denison, 2003). Fey and Denison (2003) concluded that an involvement culture consists of the following three indices (Figure 3):

Coordination and Integration – the different business units inside the organization are able to work together effectively to achieve the agreed organizational objectives. Cross-sectional projects are familiar and easy to implement.

Agreement – the company is capable of developing consensus on crucial subjects, including when there is a conflict or disagreement. Employees can deal with these conflicts in a professional manner.

Core values – employees agree on certain values, which establishes an organizational identity, and shapes a distinctive management style articulated by leaders who do what they say.

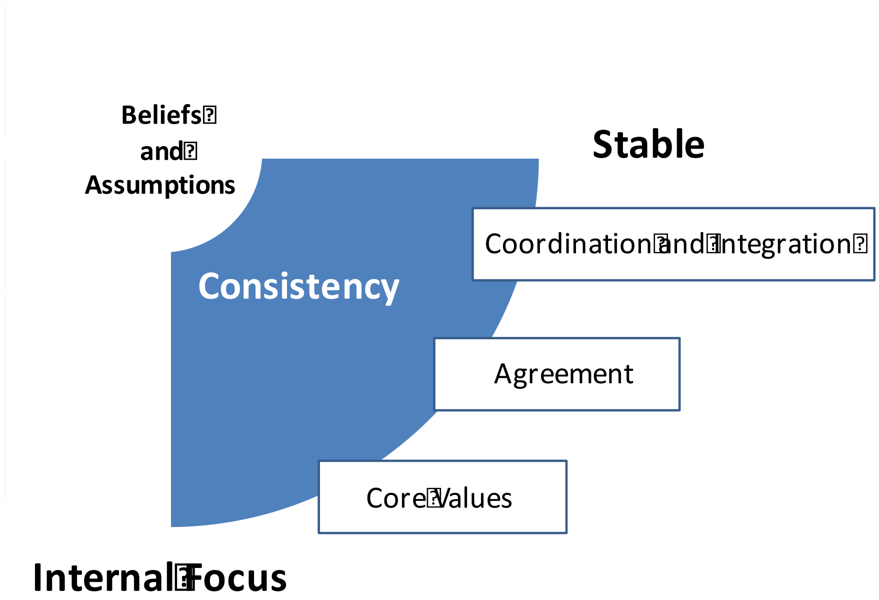

Figure 3 – Consistency Culture Attributes

2.2.3.2.3 Adaptability Culture. An adaptability culture requires creating change, focusing on customers, and organizational learning. Companies scoring highly for adaptability will be able to perceive and react to the environment and their clients, and restructure their behaviors and processes to allow adaptation (Fey & Denison, 2003). The company will be able to perceive and use signs from the external environment, mainly from customers and competitors, to modify internal behaviors and permit more improvement and growth. The company will also react to the needs of its employees, because they are considered ‘internal customers’ across all levels and sections, roles and responsibilities (D. Denison et al., 2014). Fey and Denison (2003) concluded that the adaptability culture covers the following three indices (Figure 4):

Creating change – the company is able to analyze the industry environment carefully and effectively, and take fast actions to deal with its findings. It demonstrates a clear ability to forecast future scenarios.

Customer focus – the company takes care of its customers and listens to them. Customer observations and feedback are taken seriously and used to make changes within the company, and employees show a clear understanding of customer expectations and requirements.

Organizational learning – the company inspires innovation and supports initiatives to acquire organizational knowledge. It recognizes employees who take risks and try to be creative, and considers failures and faults as an opportunity for improvement.

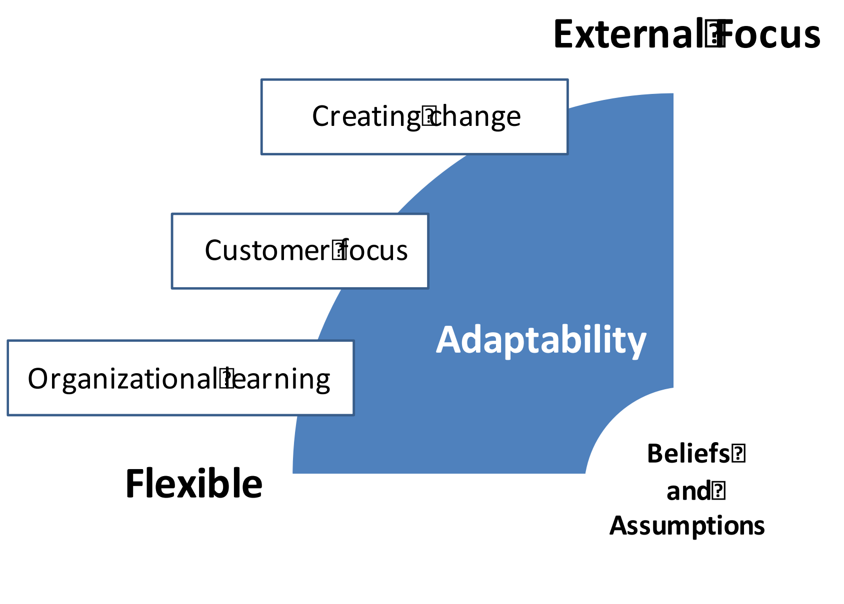

Figure 4 – Adaptability Culture Attributes

2.2.3.2.4 Mission Culture. A company with a mission culture has a robust sense of organizational direction and sets clear vision and goals. A mission culture covers establishing strategic direction and intent, and setting strategic objectives, goals, and a vision for the organization. Companies that score highly for a mission culture will be able to handle their external environment by achieving stability (D. Denison et al., 2014; Fey & Denison, 2003). The social contribution of the company and its external focus are obvious and clearly-stated, and good performance is determined by the ability to encourage employees and company to focus on goals (D. Denison et al., 2014). Fey and Denison (2003) concluded that the mission culture consists of the following three indices (Figure 5):

Strategic direction – the company has a robust mission that helps to set individuals' work in context. The mission is accompanied by a long-term vision and explained clearly to all employees. The company develops a strategy to execute and cascade its future objectives.

Goals and objectives – the leaders of the organization agree on a set of goals directly linked to its mission and purpose. These organizational goals are challenging yet achievable and there is a mechanism to measure progress towards those goals on an ongoing basis.

Vision – the leaders of the company and other employees are agreed on their view of the future and use short-term activities to achieve the desired results without compromising any of them. The company's vision is able to enthuse and inspire employees.

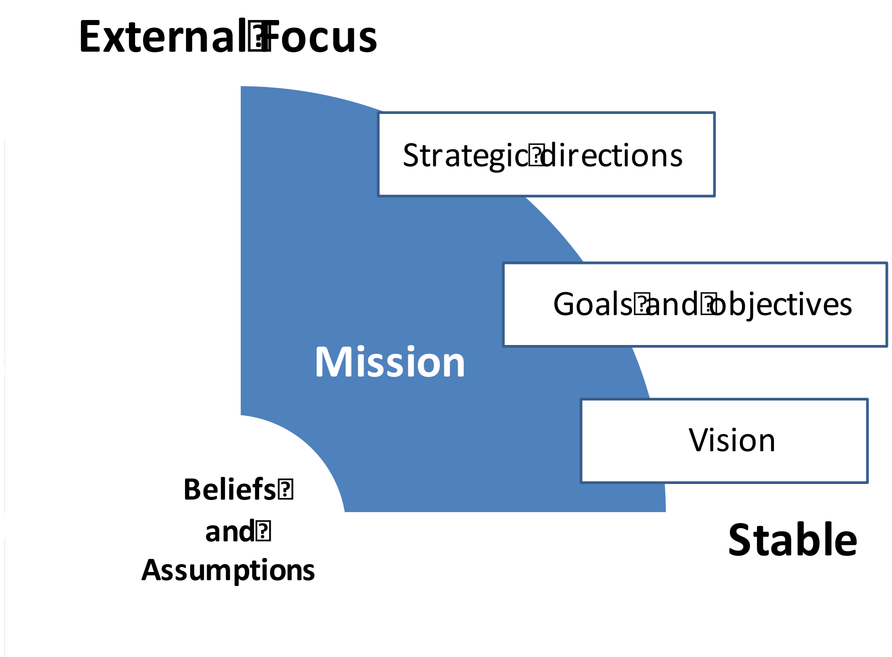

Figure 5 – Mission Culture Attributes

2.2.4 National culture. Many scholars have studied culture at a national level and compared it between counties. Geert Hofstede has perhaps made the greatest contribution in this area (Minkov & Hofstede, 2011). Hofstede (2004) described culture as a collective programming of minds that made it possible to distinguish one group of people from another. 'Groups' in this context can mean countries, nations, religions, companies or even genders.

2.2.4.1 Hofstede's national culture model. Hofstede developed a model to measure dimensions of national culture. His original work highlighted four dimensions, and two further dimensions were later added to the model by other researchers. The resulting six dimensions of national culture (G. Hofstede et al., 2010) are:

2.2.4.1.1 Power Distance. The power distance dimension describes the degree to which citizens agree that power in organizations is, and should be, spread unequally. In countries where the power distance score is high, employees do not object to decisions being made by managers and supervisors, and instead accept this. Society in general also accepts a hierarchal system and power of decision-makers without needing any explanation. Countries that score low on the power distance index work hard to balance the distribution of power, and look for clear explanations and justifications for differences in power distribution (G. H. Hofstede, 2001).

2.2.4.1.2 Individualism–Collectivism. This dimension is the degree to which objectives are individual or promote the interests of the wider group (G. H. Hofstede, 2001). This dimension enables societies to be categorized into two groups. In individualistic societies, people focus on their own interests and pay particular care and attention to themselves, their work colleagues, and family members (Schein, 2010). People in collectivistic societies, however, give priority to the group and consider group interests more important than individual interests (Minkov & Hofstede, 2011).

2.2.4.1.3 Masculinity–Femininity. Societies that score high for masculinity show a tendency to achievement, persistence, high competitiveness and reward focus. Societies that score high for femininity show more preference for cooperation and collaboration, supporting people in need and charities, and focus on enhancing quality of life. There is more consensus in this type of society (G. Hofstede et al., 2010). In a masculine society, men and women behave differently: men are tough and women are modest and tender. In feminine societies, men and women behave similarly, and tend to be caring and modest (Minkov & Hofstede, 2011).

2.2.4.1.4 Uncertainty Avoidance. This indicates the degree to which citizens feel uncomfortable with uncertainty. It describes how people accommodate the fact that the future is not certain and cannot be predicted, and whether societies try to control the future or let things happen. Societies that achieve low scores in uncertainty avoidance maintain a more relaxed approach, and consider behavior is more important than procedures and roles (G. Hofstede et al., 2010).

2.2.4.1.5 Long Term–Short Term Orientation. This dimension was added in 1991 by Michael Bond. Societies that score high for long term orientation tend to look to the future and show a high ability to adapt to change. Short term societies focus on the past and present, which are often articulated in national pride. They tend to value tradition and commitment to social obligations (Minkov & Hofstede, 2011).

2.2.4.1.6 Indulgence–Restraint. Indulgent societies are those that permit activities that make people happy, and enable them to have fun. Restrained societies restrict activities that satisfy needs, and control them by means of clear social rules (Minkov & Hofstede, 2011).

2.2.5 National culture in the UAE. The national culture in the UAE and in six other Arab countries was studied by Hofstede (1980), using only the four original dimensions of his model. The Arab culture scored 80 for power distance and 68 for uncertainty avoidance, both of which are considered high. The score for masculinity was 52, which is considered average. A high score in this dimension would indicate a high level of gender differentiation. The score for individualism was 36, which is considered very low compared with the average of 64. This indicates a collectivist culture and strong obligation to family (G. Hofstede, 1980).

The national culture of the UAE is considered a classic case for studying the influence of societal values on organizational culture traits (Klein et al., 2009). However, a more defensive style was found to be strong, which could limit the effectiveness of managers in influencing the behaviors of employees. It might lead to the creation of an organizational culture that would enable competition in an international business setting (Klein et al., 2009). The Arab culture has also been found to have a tendency towards consistency (Askary, Pounder, & Yazdifar, 2008).

2.2.6 Measuring Organizational Culture. Early attempts to measure organizational culture adopted a qualitative approach, drawing on the sociological and anthropological base of culture. It was usually examined from an insider's perspective (Daniel R. Denison, 1996). Surveys were later established and used to measure organizational culture by researchers doing comparative studies, as an effective tool to spot cultural differences between organizations or internal departments (Xenikou & Furnham, 1996). The idea of using questionnaires to assess organizational culture was supported by clear advantages such as the ability to provide normative evidence on organizational culture, time savings because these methods were quicker than qualitative ones, financial savings because surveys are much cheaper to administer, and the ability to compare organizational culture between companies using the same parameters (Cooke & Rousseau, 1988; Robert W. Tucker, Walt J. McCoy, & Linda C. Evans, 1990). In summary, using questionnaires to measure organizational culture is appropriate especially if the purpose is to compare and highlight cultural differences across organizations drawing on the same issues in each (Ashkanasy et al., 2011).

2.3 Organizational Excellence

2.3.1 Definition and approaches. The concept of business excellence first emerged in the 1980s, based on total quality management (TQM) principles (Adebanjo, 2001), and developed as a concept for three main reasons. The first was that managers adopting TQM wanted to see improvements and tangible results in a shorter time. The second was that small companies found it difficult to allocate the required budget and resources for TQM projects, and the third was the difficulties in implementing TQM in small and medium organizations (Adebanjo, 2001). Some researchers have argued that management theory served as the theoretical foundation for business excellence (Lu, Betts, & Croom, 2011). However, the most common definition of business excellence describes excellent organizations as those that attain and keep exceptional levels of performance that meet or go beyond the expectations of different groups of stakeholders (EFQM, 2013).

Alongside the rise of business excellence, models have been developed to operationalize this concept and provide a structured implementation process that can be used by different organizations (Ringrose, 2013). These business excellence models were established by different bodies that have also helped companies with implementation and developed excellence awards programs to celebrate their accomplishments (Ringrose, 2013). Companies that have adopted business excellence models have usually done so by using initiatives, tools, and techniques to achieve the desired results (Adebanjo, 2001).

A new concept associated with adopting excellence models is “self-assessment” as a tool to help organizations to identify their strengths and areas for improvement (EFQM, 2013).

Effective self-assessment requires appropriate training for employees, and the commitment of the leadership, including top and middle managers (Hillman, 1994; Wiele & Brown, 1999).

2.3.2 The EFQM model. The most common business excellence models are the EFQM model in Europe and the Malcolm Baldrige model in the United Sates (Peter Samuelsson & Lars-Erik Nilsson, 2002). More than 59% of business excellence models around the world, and 80% in Europe, are based on the EFQM Excellence Model (Boulter, Bendell, Abas, Dahlgaard, & Singhal, 2005). Several studies have found that the EFQM model is more universally applicable, and can be implemented in companies regardless of size or industry. The EFQM model focuses on results and may therefore be more appealing in for-profit organizations (Enquist et al., 2015). Companies that have successfully implemented the EFQM model have been shown to perform better over both short and long time periods (Boulter et al., 2005). This research, carried out in Europe over eleven years, compared award-winning organizations with companies of similar sizes from the same business segment. The results showed that award winners leveraged higher rises in share price, and had improved cost savings, sales growth, and revenues.

The EFQM was founded in 1988 to help European organizations to become more competitive in the international marketplace (Gómez, Costa, & Martínez Lorente, 2011). The first quality and business excellence award was made in 1992, using the organizational excellence model as a framework to evaluate organizational performance (Jafari, 2013). The model has been reviewed and updated regularly, with the most recent version, EFQM 2013, published in 2013 (EFQM, 2013) (see Figure 6).

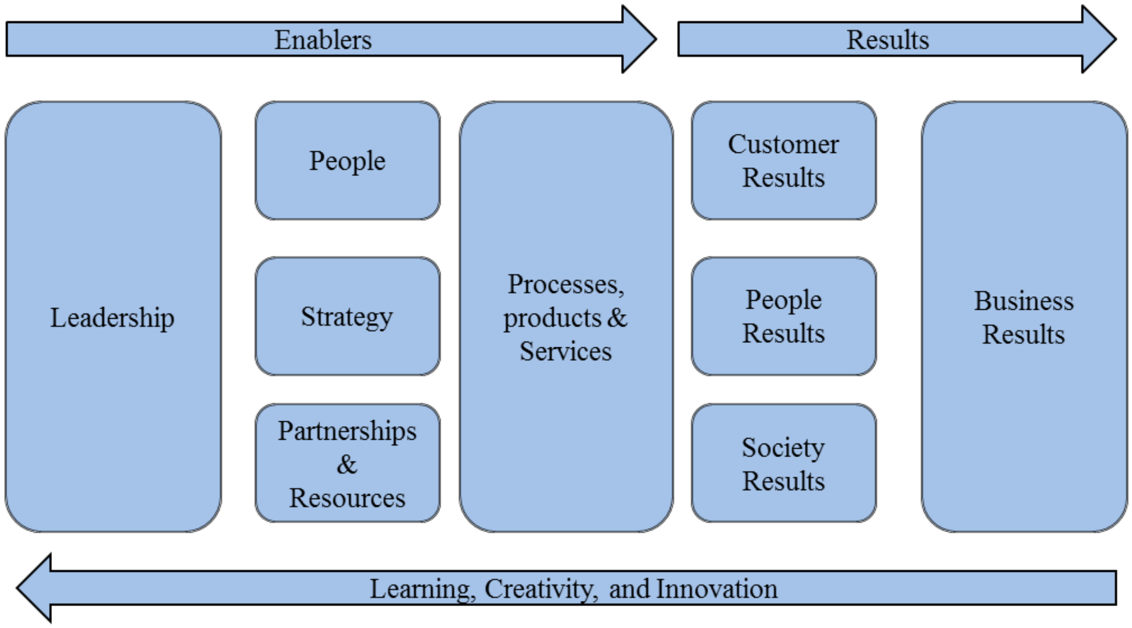

Figure 6 – The EFQM Model 2013 (Source: EFQM, 2013)

The EFQM model is built on eight fundamental concepts of excellence that can be used to describe the traits of a culture of excellence (EFQM, 2013):

- Excellent organizations always take the necessary actions to understand their customer needs and be able to anticipate and fulfil their expectations. In doing so, they add value for their customers.
- Excellent organizations have a positive impact on the surrounding social, economic, and natural environment by adopting the concepts of sustainability and cooperating to build a sustainable future.
- Managing change is a vital practice in achieving organizational excellence, and companies should manage change effectively to improve their own capabilities.
- Excellent companies encourage creativity among their stakeholders, and use it to build organizational improvements. Regular innovation increases the performance level.

- Visionary leaders are usually found in excellent organizations. They behave as role models for other employees, projecting the future of the company and making it real.
- Excellent organizations are sensitive to changes in the surrounding environment, and have the ability to recognize and react to emerging opportunities and threats.
- The culture of empowerment is well-established in excellent organizations. Employees are empowered and able to achieve both company and personal objectives.
- Excellent organizations achieve excellent business results, both short- and long-term, to satisfy all their stakeholders' needs.

The EFQM Model uses nine criteria covering enablers and results. The enabler criteria include what an organization does and how it does it, and the results criteria include what it achieves (EFQM, 2013). The five enablers are:

- Leadership, which focuses on how leaders develop and deliver the future of the company. It includes being a role model of morals and principles, and stimulating trust, setting out that leaders should be flexible enough to enable the continued success of their organizations.
- Strategy articulates how the company implements its vision and mission statements, and how it involves stakeholders when developing strategy. The company should demonstrate the use of proper policies, processes, and goals to achieve its strategy.
- People explains that companies should be able to build a suitable organizational culture that facilitates the achievement of company and personal objectives. Companies should grow the competences of employees and endorse justice and fairness. To build commitment, they should take care of, recognize, and motivate people.
- Partnerships and resources describes how companies should handle their ecological and social impact effectively, and ensure process effectiveness.

- Processes, products and services explains that outstanding companies plan, manage and develop their processes to add value for clients and other stakeholders (EFQM, 2013).

The four results criteria of the EFQM model are customer results, people results, society results, and business results.

2.3.2.1 Customer results. Excellent organizations achieve and maintain exceptional results that meet or go beyond customers' needs and expectations (EFQM, 2013). If companies want to achieve excellent customer results, they need to have positive results in two main areas. The first is related to customer perceptions, and is often referred to as customer satisfaction. Companies can use different tools to measure customer perceptions about their products and services and to better understand the real drivers for satisfaction. This may be across the branding and image of the company, the value customers received from services and products, the delivery process, the quality of customer support services and customer relationship management, customer loyalty and to what extent customers are engaged with the company (EFQM, 2013; Jafari, 2013). Companies may also use other tools to measure customer perceptions and level of satisfaction, such as reviewing customer complaints or compliments, or holding customer focus groups (EFQM, 2013).

The customer results criterion also includes setting internal performance indicators and measures. Companies should monitor those to be able to predict their influence on customer satisfaction and to assess the implementation process for customer-related strategies (Gómez et al., 2011; Saunders, Mann, & Grigg, 2008). The goals, measures, and performance indicators for customer results should satisfy five conditions. Firstly, they should be precise and clear about the goals. The most important customer results should have clear targets based on the needs of customers, and must take into account their expectations. Secondly, companies should measure performance indicators and quantify them clearly, so that it is clear exactly when they have been achieved. Thirdly, the performance measures should be related directly to the goals, meaning that the goals should be measurable. Fourthly, the measures should be relevant to the customers, related to customer wants and expectations and introduced at the right time. Fifthly, goals and measures should have clear target achievement dates. Companies should know when the goals and target measures should be reached (EFQM, 2013; Jung, 2007).

Customer results should be segmented in a way that improves understanding of the needs and requirement of different groups of customers. Segmenting customer satisfaction results will enable the company to identify unsatisfied groups of customers, to facilitate improvement (Gómez et al., 2011; Saunders et al., 2008).

Excellent organizations have positive results for both customer perception and performance indicators over at least three years. Positive results means either achieving better results year-on-year, to create a positive trend, or sustaining good results over three years. In both cases, results should be on target. Companies should also understand the causes of their results and what they did to achieve them. Companies should be able to show that they understand the impact of their customer results on other results (EFQM, 2013).

Examining customer results should not be considered an internal exercise. Companies should compare their customer results to other similar companies, and use the comparisons to set future targets. This should give companies confidence that good performance will be sustained in the future (EFQM, 2013; Rawabdeh, 2008).

2.3.2.2 People results. Excellent organizations achieve and maintain exceptional results that meet or go beyond their employees' needs and expectations (EFQM, 2013). If companies want to achieve excellent employee results, they need to have positive results in two main areas.

The first is related to employee perceptions and is usually referred to as employee satisfaction. This can be defined as a factor used to measure the degree to which staff are happy with their specific jobs and working environment (Hashemi, Jusoh, Kiumarsi, & Hashemi, 2015). Job satisfaction is also conceptualized as employee feelings that affect their job (Yiing & Ahmad, 2009). Employee satisfaction with their job is crucial in an organization because it affects individual performance, productivity and commitment to the organization. Satisfied employees also have better relationships with their managers and colleagues (Adeniji, 2011).

Companies can use various tools to measure employee satisfaction and to better understand its drivers, and probably the most commonly used is an employee satisfaction survey. These usually measure various aspects of employee satisfaction, including opinions on management and leadership practices, the appraisal and performance management systems, training activities and professional development, internal communication systems and their effectiveness, levels of empowerment, employee involvement, and other general work conditions (EFQM, 2013; Jafari, 2013). Interviews, structured appraisals, and employee focus groups can also be used to assess employee perceptions (EFQM, 2013) .

Like customer results, employee results require internal performance indicators and measures, which must be monitored to assess their influence on employee satisfaction and examine the implementation of employee-related strategies (Gómez et al., 2011; Saunders et al., 2008). Employee results should also be segmented to improve understanding of the needs and requirement of different groups, and to enable the company to identify unsatisfied groups and facilitate improvements (Gómez et al., 2011; Saunders et al., 2008).

Organizations can only be considered excellent if they are able to sustain good results over at least three years, either improving year-on-year, or maintaining the same standard.

Companies need to understand the causes of their results, and the impact of employee results on other results (EFQM, 2013). Employee results, like customer results, should be compared against those in other similar companies, to help identify future targets and ensure that good performance will be sustainable (EFQM, 2013; Rawabdeh, 2008).

2.3.2.3 Society results. This area focuses on contribution to society in general and corporate social responsibility (CSR) in particular. These have become important issues in many countries. CSR is usually used to determine the effects of the company's business activities on society, and to highlight its environmental and social contributions. CSR tends to concentrate on the company's efforts to achieve environmental, economic, and social sustainability (Jenkins, 2009). As a definition, CSR is the company's commitment to contribute to sustainable economic growth through establishing ways of working with public communities, ultimately to improve the quality of life (Jamali, 2006).

Excellent organizations achieve and maintain exceptional results that meet or go beyond the expectations of stakeholders within society. Society results tend to be measured by the perception of external stakeholders, often referred to as society perception. Like customer and employee results, there are a number of different tools that can be used to measure society perception. The most common are society perception surveys, information gathered from press articles about the company's activities, public meetings, social responsibility reports, and references from public representatives and administrative authorities (EFQM, 2013; Jafari, 2013). Society results can also be monitored with internal performance indicators and measures, which can be used to examine the process of implementing CSR strategies (Gómez et al., 2011; Saunders et al., 2008).

Like other results, society results should be segmented to improve understanding of the needs and requirements of different groups of external stakeholders, enabling the company to identify unsatisfied groups and facilitate improvements (Gómez et al., 2011; Saunders et al., 2008). Again, excellent performance requires maintenance of good results over at least three years, and understanding the causes of these results (EFQM, 2013). Companies should also be prepared to benchmark their society results and performance against similar companies, to ensure that performance remains sustainable over time (EFQM, 2013; Rawabdeh, 2008).

2.3.2.4 Business results. The traditional approach to measuring organizational performance is based on a mixture of criteria such as the profitability of the company, quality of products and services, and efficiency and effectiveness (Rolstadås, 1998; Sink & Tuttle, 1989). A mix of performance attributes may provide a more holistic view of the organization, and may be measured at company, core process, or departmental level (Tangen, 2003).

Business results are divided into financial and non-financial results. Organizations should consider both in different situations, depending on the nature of their business and their structure, for example, semi-government or private. Companies should manage business results on two levels, strategic and operational. At strategic level, measures should cover core process outcomes, such as service or product volume, achievement against company budget, and perceptions of the main stakeholders. At operational level, indicators should include financial elements such as costs of initiatives and projects, and performance of vendors and partners (EFQM, 2013; Jafari, 2013).

Again, key results should be segmented to improve understanding of the needs and requirements of different groups of stakeholders, and to enable identification of unsatisfied groups and facilitate improvement (Gómez et al., 2011; Saunders et al., 2008). As before, excellence requires sustained results over at least three years, and a good understanding of the causes of the results and their impact on other areas (EFQM, 2013). Business results can, and should, be benchmarked to ensure that they are sustainable (EFQM, 2013; Rawabdeh, 2008).

2.3.3 Measuring business excellence. Traditionally, companies evaluated their performance using quantifiable measures such as return on investment, net profit, and turnover. In the last few decades, however, there has been a growing understanding that companies should also consider quality-related characteristics to set business goals and measure performance. Total quality management (TQM) and later, business excellence, therefore emerged as strategies for improving performance (Zairi & Alsughayir, 2011). Because business excellence is based on TQM principles, companies often use business excellence schemes to improve performance. More than 80 countries around the world have established business excellence or quality awards (Grigg & Mann, 2008). Business excellence models include an assessment mechanism that may be used internally as a self-assessment exercise, or externally, mainly by participating in quality and business excellence awards (Ahrens, 2013; Sharifi, Shahriari, & Golzari, 2015).

The EFQM model provides five different tools for self-assessment:

- The simple self-assessment tools examine the company’s maturity level in each of the eight fundamental concepts of excellence;
- The EFQM quick check is a list of 20 items, covering the most crucial approaches required to build robust business excellence within an organization. These approaches are linked to the fundamental concepts and cover critical areas such as managing core processes and strategic planning;

- The EFQM business excellence matrix contains a list of 50 approaches that capture more detailed information about the company, including across the enablers and results excellence criteria;
- The EFQM Excellence Matrix is similar the business excellence matrix but is more comprehensive, covering 90 approaches and reaching the level of criteria in the results section;
- The site visit simulation is a self-assessment approach that replicates the award assessment process. A team of assessors is needed to implement this assessment properly;
- The questionnaire asks employees to score their companies against a number of statements from the EFQM model. There are various versions available, and this tool gives the opportunity to collect opinions from a large number of employees (EFQM, 2013; Hides, Davies, & Jackson, 2004; Peter Samuelsson & Lars Erik Nilsson, 2002; Tarí, 2006; Tarí & Juana-Espinosa, 2007; Wiele & Brown, 1999).

Organizations are assessed when they participate in excellence awards. They prepare their applications by stating what they have done against each of the excellence criteria, and the results they have achieved. A team of assessors reviews the application and prepares an initial assessment either individually or together, then the assessors conduct a site visit to validate the submission information and clarify anything that is unclear. Finally, the assessors prepare a feedback report covering the strengths of the organization, the areas that need to be improved and the total score achieved, across the different criteria. The score also allows comparisons between applicants and identification of winners (EFQM, 2013; Mavroidis, Toliopoulou, & Agoritsas, 2007; McAdam et al., 2013).

2.3.4 Business excellence in the UAE. In the UAE, the EFQM model is the dominant model for business excellence, and almost all excellence awards are based fully or partially on this model (Nambiar, 2012), The Sheikh Khalifa Excellence Award (SKEA) was the first award established in Abu Dhabi Emirate, in 1999, and was heavily influenced by the EFQM model (Nambiar, 2012). The award aims to integrate worldwide business standards and best practices in the Abu Dhabi business sector ("Sheikh Khalifa Excellence Award (SKEA)," 2008).

The SKEA's objective was to create a favorable climate for competitive and sustainable businesses by recognizing organizations that demonstrate improved performance and sustained competitiveness based on the business excellence model. By adopting the EFQM model of excellence, the SKEA is able to recognize companies in different businesses and sectors, including manufacturing, services, trade, construction, finance, tourism, professional services, and health. A robust assessment approach is used to identify strengths and areas for improvement among applicants, and to award scores that reflect progress in implementing excellence performance criteria. The score is used to determine the winning companies in three main categories: diamond, gold, and silver.

2.4 Information and Communication Technology (ICT)

2.4.1 Definition and approaches. Information and communication technology (ICT) is a significant source of economic value and important tool in the competitive international economic structure. Understanding ICT and acquiring the fundamental skills required to use it effectively have been crucial causes in growth and evolution (*Generic ICT Skills Profiles*, 2001). ICT can be defined as the collection of primarily digital technologies designed to gather, organize, store, process and link information within and external to an organization (Ritchie & Brindley, 2005). Other researchers consider ICT as a technological tool that can be used by almost all countries regardless of size, population, or level of economic development (Apulu & Latham, 2011). ICT can support governments, organizations, and individuals to transform information into knowledge that can be used to support further development in the social and economic environment (Conole & Dyke, 2004).

The use of ICT is becoming more popular, particularly in specialized companies (Emmanouilidis & Economides, 2010). ICT can be divided to two main categories by age. The early generations helped companies to achieve more but the technology was limited because it was linked to the available manpower in companies. The latest generations of ICT cost much less and have a bigger impact on company performance (Hollenstein & Woerter, 2007; Kretschmer, 2013).

ICT has a number of features that make it attractive to companies. Firstly, it tends to improve and accumulate better qualities over time, while also becoming cheaper and more affordable for users. Secondly, ICT can be used in most sectors and businesses and in companies of all sizes from small to large. Thirdly, it facilitate the process of introducing new products and services in new markets, and encourages development by making research activities more efficient (Vincenzo Spiezia, 2011).

To identify suitable ICT tools, it is important to look at ICT as a concept that covers all technical activities used to progress information and to communicate it properly. This concept can be articulated by considering ICT as the sum of the technologies used in telecommunications and in information management. ICT tools therefore include mobile phones, computers, internet, e-commerce packages, and email (Nyandoro, 2016). ICT tools are grouped into categories based on communication time. Synchronous tools provide immediate communication in real time between different parties in different places. These include video conferencing and some social media applications. Asynchronous tools, such as email, enable communication between parties in multiple locations but at different times. Some ICT tools help management to facilitate work and manage projects. These include data management tools, presentation tools, and spreadsheets (Drigas, Koukianakis, & Papagerasimou, 2011).

2.4.2 ICT in the UAE. Using ICT tools is becoming more popular in Arab countries in general, and the gap between developing countries and developed countries in using ICT has become less significant in the last two decades (Hodrab & Maitah, 2016). The UAE has very modern technological infrastructure that can compete with most developed countries in the world. This has led to high levels of use of ICT tools in the last few years. The International Communication Union highlighted the use of ICT tools in the UAE in its report “Measuring the Information Society”, which showed that 90.4% of individuals used the internet in 2014, compared to only 68.0% in 2010. This percentage is very high, even compared with developed countries such as the United States (87.4%) and United Kingdom (91.6%) (International Telecommunication Union, 2015). The UAE also has a very high number of active mobile broadband subscriptions per 100 population, 114 in 2014 compared with 13.4 in 2010, 96.9 in the United States and 98.7 in the United Kingdom. The number of mobile phone subscriptions per 100 inhabitants reached 178.1 in 2014, compared to 129.4 in 2010. Similar pictures are seen with the availability of computers. The percentage of households with computers in UAE was 76% in 2010 and had increased to 87.9% by 2014, against 81.5% in the United States (International Telecommunication Union, 2015).

One way to assess the overall ICT maturity of a country is to look at the ICT Development Index. This compares countries based on three sub-indices. ICT access measures telephone and mobile subscriptions, bandwidth usage and percentage of households with computers. ICT usage measures percentage of people using the internet and subscriptions for mobile and fixed broadband. ICT skills includes, for example, enrolment in tertiary and secondary education and literacy rate. The UAE was ranked 32 of 167 countries in 2104 (International Telecommunication Union, 2015).

The ICT maturity in the UAE has encouraged the government to launch smart initiatives to provide more effective and efficient services. These include Smart Government initiatives at federal and local level. People living in the UAE benefit from these projects, and can get a wide range of services by using ICT tools like smartphones and computers. Smart government projects are estimated to have saved the government of Dubai an average of $10 million every month (ArabianBusiness, 2016).

2.5 Research Questions

The previous chapter explained that the objective of this research is to investigate the influence of organizational culture on business excellence in the UAE. Organizational culture is considered a four-dimensional concept, across involvement, consistency, adaptability, and mission. Business excellence is also considered to have four dimensions (customer results, people results, society results, and business results).

This study also seeks to examine the moderating role of the use of ICT on the relationship between the various components of organizational culture and business excellence. The following questions were therefore constructed:

RQ1. What are the relationships between the various dimensions and components of organizational culture and business excellence?

RQ2. What is the moderating role of ICT on the relationships between the dimensions of organizational culture and of organizational excellence?

2.6 Summary

This chapter has highlighted the importance of organizational culture and how it can be viewed from different perspectives. It set out and explained the Denison model for measuring organizational culture. This model was built on a coherent theoretical basis after robust research, and its assessment tool can be used by all employees in the form of a questionnaire (Daniel R. Denison & Mishra, 1995). Organizational excellence in general, and the EFQM model in particular, were discussed. This model is very popular, and underpins most of the business excellence awards in the UAE (Nambiar, 2012). Finally, the increasing use of ICT in the UAE was discussed, and the investment in the ICT sector emphasized.

The next chapter will explore the relationships between the research components and use these as a foundation to develop the research hypotheses.

Chapter 3: Development of Research Hypotheses

3.1 Introduction

The aim of this chapter is to build the research hypotheses by reviewing the most relevant literature on the relationships between the study variables. The literature covers the general associations between organizational culture and business excellence and highlights the most significant findings in identifying the relationships, then the focus shifts to the relationship between individual culture types and business excellence criteria. This is done by examining the relationship between each type of culture (mission, adaptability, involvement and consistency) and its attributes and each of the results criteria (customer, people, society and business results) in turn. This chapter also discusses the interactions between ICT and both organizational culture and the business excellence results criteria, setting out the research hypotheses required to answer the research questions.

3.2 Organizational Culture and Business Excellence

The relationship between organizational culture and business excellence can be discussed from different dimensions. Bolboli and Reiche (2013) concluded that there are obstacles to implementing business excellence in organizations. Some of these obstacles are related to the resistance of employees to culture change, which implies that changing the organizational culture may be required for companies to achieve and sustain excellence. How companies should manage organizational culture when applying business excellence models remains unclear.

Some studies have focused on the relationship between organizational culture and business excellence but have reached different conclusions about whether companies should maintain the existing culture, when implementing business excellence, or change it, and if so, how (Kekale & Kekale, 1995). The role of organizational culture in achieving business excellence requires more research, and empirical studies should take into consideration that business excellence should be reviewed from a systems perspective (Gogheri et al., 2013).

Some research has suggested that particular attributes of organizational culture can support successful implementation of business excellence models (Kujala & Lillrank, 2004; Metri, 2005). Companies with a robust culture, for example, are more likely to be successful, especially when the dominant culture type is aligned with the company's values and beliefs (Kujala & Lillrank, 2004).

Austin and Ciaassen (2008) asserted that companies should identify the culture changes needed to achieve business excellence. Most companies identify improvement activities using business excellence criteria and develop implementation plans without considering the organizational culture aspects. That may cause problems if the activities do not fit with the existing organizational culture (Austin & Ciaassen, 2008). Employees may refuse to accept business excellence measures if these measures do not suit the existing corporate culture, particular the decision-making and action-planning roles (Bolboli & Reiche, 2014).

Although there have been many studies on organizational culture, there are few pieces of empirical research that guide decision-makers in organizations on how to deal with organizational culture when they start to implement business excellence models. Most of the available information suggests that companies should try to develop a culture of excellence and spread this among their employees (Morris, 1994).

Achieving sustainable business excellence in organizations may require a balance between the existing structure and culture. This balance will help to achieve maturity. Most business excellence models, however, do not emphasize the importance of building this balance, and instead concentrate their guidance on improving the structure of the organization, without paying enough attention to the organizational culture, a crucial aspect in achieving sustainable excellence (Bolboli & Reiche, 2014).

The EFQM model, although one of the most popular excellence models, also shows this lack of balance between cultural and structural aspects. A seven-year study ending in 2011, which covered more than 550 business excellence projects implemented by 186 organizations in Germany, concluded that mature companies deployed management systems that contained both structural traits, including products, services and processes, and cultural aspects, such as internal communication between employees and development of capabilities. The results showed that the structural and cultural practices were not balanced in most of the organizations studied, perhaps because this imbalance is core to the EFQM model criteria, which places more focus on the structural aspects (see Figure 7). This may contribute to the failure of business excellence projects (Bolboli & Reiche, 2014; Sommerhoff, 2011).

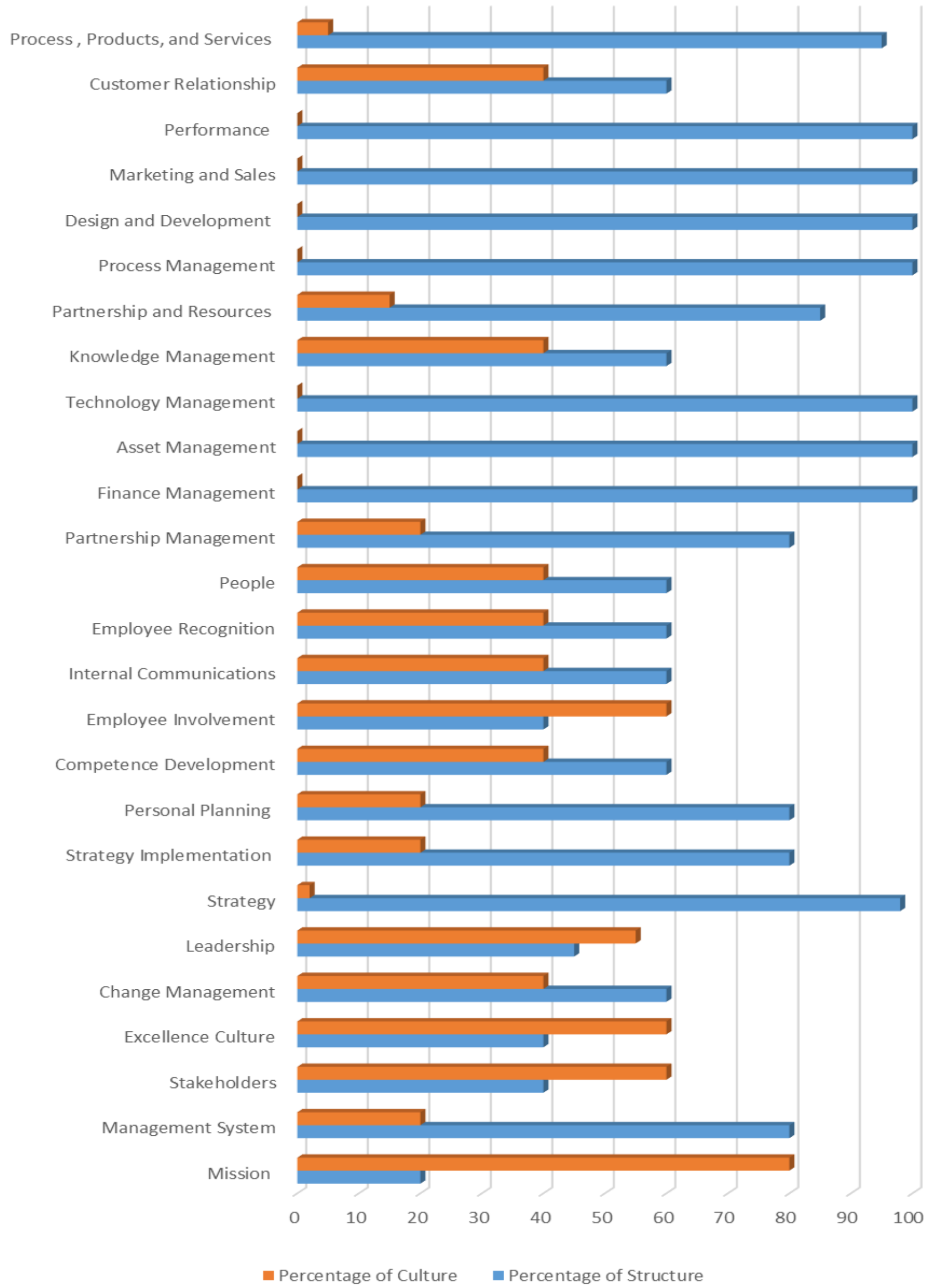

Figure 7 – Structure and Culture Aspects in the EFQM Model (Source: Bolboli & Reiche, 2014)

The following hypothesis is therefore proposed:

H1: There is a significant relationship between organizational culture and business excellence.

3.3 Organizational Culture and Customer Results

A number of studies have shown a relationship between achieving good customer results and certain cultural attributes. Entrekin and Pearson (1996), for example, found that the successful implementation of business excellence in areas like customer relationships required companies to implement cultural changes . This relationship was further demonstrated by Aydin and Ceylan (2011), who showed that organizational culture has a positive and significant correlation with customer orientation. The existence of different culture types as a balanced mix, described as a robust culture, was found to have a positive impact on customer satisfaction in the marketing industry (Conrad, Brown, & Harmon, 1997).

Many empirical studies have focused on one particular aspect of culture, the service climate, and how it relates to customer satisfaction (Schneider, White, & Paul, 1998). The literature indicates a relationship between all four types of organizational culture and customer satisfaction as a crucial element of excellent customer results.

3.3.1 Mission culture and customer satisfaction. In one study investigating the relationship between the existing organizational culture type and the engagement of managers in customer-related initiatives, results showed that there was more engagement in companies with clan or adhocracy cultures (Conrad et al., 1997). This suggests that customer satisfaction requires a clear strategic direction aligned with goals and objectives. The following hypothesis was therefore developed:

H2: A mission culture has a significant and positive relationship with customer results.

3.3.2 Adaptability culture and customer satisfaction. An adaptability culture, by its nature, has an external focus. It is closely related to customer satisfaction because it encompasses customer focus activities and the company’s ability to respond to changes in the market and variation in demands. The adaptability trait also encourages organizations to develop strategies to meet customer expectations (D. Denison et al., 2014). Gillespie et al. (2008) found empirically that an adaptability culture is positively related to customer satisfaction. The following hypothesis was therefore developed:

H3: An adaptability culture has a significant positive relationship with customer results.

3.3.3 Involvement culture and customer satisfaction. The first look at the involvement culture attribute gives the impression that it is not linked to customer satisfaction, mostly because of its internal focus. However, an involvement culture empowers employees who have direct contact with customers, and provides them with the skills required to provide better services. This not only encourages teamwork and cooperation, but also leads to better customer satisfaction. This assumption is supported by the literature, and the involvement culture has been found to have a significant relationship with customer satisfaction in both the home-building and auto dealership markets (Gillespie et al., 2008). The following hypothesis was therefore developed:

H4: An involvement culture has a significant and positive relationship with customer results.

3.3.4 Consistency culture and customer satisfaction. Establishing common values between employees and work systems that foster employee coordination will help to provide better customer services and satisfaction on the long term (Gillespie et al., 2008). The following hypothesis was therefore developed:

H5: A consistency culture has a significant positive relationship with customer results.

Some organizational culture types are expected to have a stronger relationship with customer satisfaction. For example, the external focus of the mission and adaptability types means that they are expected to be more closely related to customer satisfaction than the involvement and consistency cultures, which reflect an internal focus. The adaptability culture is expected to have a stronger relationship with customer satisfaction than the mission culture, because of its emphasis on customer focus and creating changes to satisfy customer needs. The involvement culture's focus on building employee capabilities and skills to enable them to provide better services is expected to have a greater effect on customer satisfaction than the consistency culture.

The following hypothesis was therefore developed:

H6: The relationships between culture types and customer results will vary. The adaptability culture will have the strongest impact, followed by mission, involvement, and then consistency.

3.4 Organizational Culture and People Results

A robust organizational culture leads to agreement and consistency in the organization. A weak culture will create an unhealthy environment, leading to employee dissatisfaction and tension. Frustration and negative feeling is likely to spread among employees (Shamsudin, Kassim, Hassan, & Johari, 2010). Assessing the effect of culture on employee satisfaction is impeded by its definition, since it is described as a system of common values and beliefs and shared expectations between employees. This, by definition, will affect behavior, attitudes and productivity (Moynihan & Pandey, 2007). Many studies have found a positive relationship between organizational culture and employee satisfaction (Chan, Shaffer, & Snape, 2004; Moynihan & Pandey, 2007; Rawashdeh, Al-Saraireh, & Obeidat, 2015). Organizational culture will also influence interactions between employees and with those outside the organization (Aydin & Ceylan, 2011; Jones & George, 2010).

3.4.1 Mission culture and employee satisfaction. Having a clear strategic direction will positively affect employee satisfaction. Strategic planning in different areas, including human resources, has been found to be significantly related to employee satisfaction (Kashfi, Jahangirfard, & Monfared, 2015). The level of stakeholder satisfactions with vision, mission and strategic direction also has a positive relationship with employee satisfaction (Testa, 1999). The structured implementation of strategic planning and organizational performance management can enhance staff satisfaction. A study from 2014 showed that adoption of the balanced scorecard approach in organizations positively affected the level of employee satisfaction (Ángel Calderón Molina, Manuel Hurtado González, Palacios Florencio, & Luis Galán González, 2014). The following hypothesis was therefore developed:

H7: A mission culture has a significant and positive relationship with people results.

3.4.2 Adaptability culture and employee satisfaction. Learning organizations provide a satisfying environment for employees. Operations within learning companies were found to have a positive impact on employee satisfaction (Su-Chao & Ming-Shing, 2007). The innovation aspect of an adaptability culture encourages employees to be more productive and more satisfied with their job (Belias & Koustelios, 2014). However, companies that encourage risk-taking and emphasize the external environment, adopting a strict customer-focused approach, have been found to have lower employee satisfaction in certain industries, including aviation (Rawashdeh et al., 2015). The following hypothesis was therefore developed:

H8: An adaptability culture has a significant positive relationship with people results.

3.4.3 Involvement culture and employee satisfaction. A study across six industries in 2013 found that employee empowerment and a culture of involvement was significantly related to staff satisfaction (Reddy, Sudheer, & Karthik, 2013). Empowering employees and giving them the opportunity to actively participate in organizational activities was found to be positively related to staff satisfaction. Providing training and development was also found to be significantly associated with employee satisfaction (Noor & Jamil, 2014). The following hypothesis was therefore developed:

H9: An involvement culture has a significant positive relationship with people results.

3.4.4 Consistency culture and employee satisfaction. The absence of consistency and agreement between employees negatively affects their satisfaction, because conflicts will have harmful consequences, including lowering employee morale (Mukhtar, 2013). Achieving high employee satisfaction is related to having agreed core values in the organization, and perceived company values appear to be strong predictors of many factors related to job satisfaction (Kumar, 2012). A study in 2013 to identify the corporate values with the biggest effect on employee satisfaction in healthcare concluded that unity and enhancing inner harmony had the most significant effect on staff satisfaction (Ravari, Bazargan-Hejazi, Ebadi, Mirzaei, & Oshvandi, 2013). The following hypothesis was therefore developed:

H10: A consistency culture has a significant positive relationship with people results.

Again, some culture types are expected to have a stronger relationship with employee satisfaction. For example, the internal focus of the involvement and consistency types means that they are expected to be more closely related to employee satisfaction than the mission and adaptability cultures. The involvement culture is expected to have a stronger relationship with employee satisfaction than the consistency culture, because of its emphasis on empowering employees and equipping them with the skills they need to do their jobs. The mission culture encourages companies to have a unified vision and objectives, and that will be reflected by employees since they will be helping to achieve the company's strategic goals. This will create a sense of participation, which is expected to lead to higher levels of satisfaction than the adaptability culture, which focuses more on customer satisfaction. This idea is supported by previous studies. For example, Lund (2003) found that clan and adhocracy cultures were positively related to job satisfaction, and market and hierarchy cultures were negatively related. The following hypothesis was therefore developed:

H11: The relationships between culture types and people results will vary. The involvement culture will have the strongest impact, followed by consistency, mission, and then adaptability.

3.5 Organizational Culture and Society Results

The main dimension within society results as a business excellence criterion is the company's environmental impact, especially for manufacturing and large companies (Westlund, 2001). The EFQM model can help to integrate quality and environmental management systems in organizations (Tarí & Molina-Azorín, 2010). The increasing demands of different groups of stakeholders push companies to show more commitment to different aspects that affect society and the environment. These aspects can broadly be characterized as economic, social, and environmental (Gechevski, Mitrevska, & Chaloska, 2016). Corporate social responsibility (CSR) is one of the most significant elements in EFQM society results. The current conceptualization of CSR is relatively new, becoming popular in the 1990s, but its roots and fundamental ideas date from the industrial revolution (Snider, Hill, & Martin, 2003).

There are different ways to define CSR, based on the purpose and area of concern. The most common principles underpinning it are business sustainability, accountability and ethics, environmental responsibility, and company citizenship, and the most common focus is the social and business environment (Bhattacharya & Sen, 2004). Blowfield and Murray (2008) defined CSR as "the proposition that companies are responsible not only for maximizing profits, but also for recognizing the needs of such stakeholders as employees, customers, demographic groups and even the regions they serve". Organizations that implement effective CSR strategies and have a positive environmental influence are in a better position to generate more profit, improve their image and guarantee their future reputation (Tarí & Molina-Azorín, 2010).

3.5.1 Mission culture and society results. Formal strategic planning activities support company efforts to better understand the needs of stakeholders and spread awareness about their expectations. These activities also facilitate the company's responses to stakeholders' requirements (Galbreath, 2010). Research on Australian companies concluded that strategic planning was positively associated with CSR (Galbreath, 2010). Since CSR is a main component of society results, and strategic planning, particularly setting a vision, mission, and goals and objectives, is the main attribute of a mission culture, the following hypothesis was developed:

H12: A mission culture has a significant positive relationship with society results.

3.5.2 Adaptability culture and society results. Research has shown that there is a significant positive relationship between CSR and customer satisfaction, customer commitment, and customer trust (Fatourehchi, Parham, & Yusifov, 2015). Organizational learning is also positively associated with implementing concepts underpinning CSR, with one study showing that learning happens in socially responsible companies on both the individual and group level (Cramer, 2005). The adaptability culture has a positive role in achieving customer satisfaction and emphasizes customers and organizational learning, so the following hypothesis was proposed:

H13: An adaptability culture has a significant positive relationship with society results.

3.5.3 Involvement culture and society results. Company commitment towards employees is an important element of CSR. The positive relationship between companies and employees is more coherent when CSR is implemented. By contrast, companies that do not consider the staff aspect of CSR will not be able to count on employee loyalty, because they are more likely to leave the company (Nguyen & Nguyen, 2015). Melo (2012) concluded that implementing CSR can improve the attitudes of employees towards the company. Employees are then more likely to spend more time at work and be more productive. The involvement culture is based on staff empowerment and building good relationships with employees, so the following hypothesis was proposed:

H14: An involvement culture has a significant positive relationship with society results.

3.5.4 Consistency culture and society results. Companies that score highly for implementing CSR and society-related criteria tend to have robust and clear values (Gherghina & Vintila, 2016), with the CSR index having a positive impact on the company's values, and other CSR sub-indices showing a similar pattern (Gherghina & Vintila, 2016). The consistency culture focuses on clear values within the organization, and creating agreement between employees, and an environment supporting coordination. The following hypothesis was therefore proposed:

H15: A consistency culture has a significant positive relationship with society results.

Again, some culture types are expected to have a stronger relationship with society results and CSR activities. Because of the focus of the involvement culture on employees and its linkage with company CSR components, and the learning aspect of the adaptability culture and its focus on satisfying external stakeholder needs, these two culture types are expected to be more closely related to society results than the mission and consistency cultures. Setting the strategic direction of the company and assigning vision, mission, and goals will probably encourage most companies to include society-related initiatives in their plans, especially in the UAE, in the light of governmental recommendations. The following hypothesis was therefore developed:

H16: The relationships of culture types with society results will vary. The mission culture is expected to have the strongest impact, followed by involvement, adaptability, and then consistency.

3.6 Organizational Culture and Business Results

The EFQM business results criterion focuses on achieving outstanding strategic and operational performance results (EFQM, 2013). A popular hypothesis in the organizational culture literature is that a robust culture leads to better performance; cultural strength can be measured by the extent to which a culture exhibits the attributes of a single cultural type (Deal & Kennedy, 1983). The culture–performance link is supported by a review of a large number of related studies, which found that the majority support the idea that culture has a direct effect on organizational performance (Ashkanasy et al., 2011). Some of the more recent studies concluded that effects can be moderated and that more studies are needed to understand the dynamic nature of this relationship in different contexts (Ashkanasy et al., 2011). Some researchers have argued that although there are many studies on the culture–performance link, few have made a real contribution because of a variety of reasons, including the challenge of analyzing culture (Lee & Yu, 2004).

Gordon and DiTomaso (1992) proposed that a robust culture, in conjunction with the ability to adapt, would lead to better performance. They discovered that a solid culture was an indicator of short-term organizational performance in a study of eleven insurance companies in the United States. By looking at growth rates and assets over a five-year period, they found that an adaptability culture was linked to positive performance, and was also an indicator of short-term performance. They then assumed that a combination of strong and appropriate cultures would yield a positive outcome. This discovery was significant, as it introduced the notion of ‘fit’ into culture–performance research.

The level of cultural strength needed to ensure a company’s success is still under discussion. Some authors support the idea that a robust culture leads to higher performance (Barnes, Jr, Hutt, & Kumar, 2006), and others support a contingency theory where the required level of cultural strength is linked to the environment in which the company operates (Cameron & Quinn, 2005). Kotter and Heskett (1992) stated that companies that have a robust culture, emphasize their stakeholders, and adjust to their environments will attain better levels of performance. Culture is a critical success factor in successful implementation of total quality management (Shibani, Soetanto, Ganjian, Sagoo, & Gherbal, 2012), and is crucial to organizational behavior and excellent performance (Peters & Waterman, 2004).

Research by Denison (1984) demonstrated that certain practices inside the organization are more closely related to financial performance. Denison’s study covered 34 companies and 25 business areas, and he constructed performance using wide-ranging indicators such as return on sales, assets and investments. He found that “organization of work” and “decision making” were strongly linked to financial outcomes. Denison concluded that the cultural strength was a projection of short-term company performance.

3.6.1 Mission culture and business results. The attributes of a mission culture have a positive influence on organizational performance. Sandada, Pooe, and Dhurup (2014) found that SMEs with a clear vision and mission and formal strategic plans, including goals and objectives, performed better . Another study, in the banking sector, concluded that the existence of a strategic orientation is positively linked to high organizational performance (Gelard & Saeedi, 2015). The following hypothesis was therefore proposed:

H17: A mission culture has a significant positive relationship with business results.

3.6.2 Adaptability culture and business results. Organizational learning has a positive association with organizational performance. Organizations with the ability to identify changes in the external environment and adapt effectively to these changes tend to have better performance (Ratna, Khanna, Jogishwar, Khattar, & Agarwal, 2014). Babaei and Ghafari (2016) found that organizational learning had a positive influence on organizational performance.

Mousavi, Hosseini, and Hassanpour (2015), however, found that of the types of organizational culture, only adaptability and involvement cultures had a negative effect on company performance in the banking sector. Mission and consistency cultures had an indirect effect on performance. The results of this study contradict the majority of research on the relationship between culture and organizational performance. The following hypothesis was therefore proposed:

H18: An adaptability culture has a significant positive relationship with business results.

3.6.3 Involvement culture and business results. Goromonzi (2016) studied the relationship between organizational culture and bank performance, and found that highly performing banks tended to score highly for all four traits of organizational culture, but had the highest score for the involvement culture. A study in the Malaysian manufacturing sector concluded that staff empowerment has a positive relationship with organizational performance across three different dimensions: economic, environmental, and social (Yusoff, Imran, Qureshi, & Kazi, 2016). The following hypothesis was therefore proposed:

H19: An involvement culture has a significant positive relationship with business results.

3.6.4 Consistency culture and business results. Areas of common agreement between employees positively affect the performance of a company. These areas of common agreement and a positive attitude towards the organization can be at individual group, team or organizational level (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). A study in the banking sector found that companies with established organic core values among managers and employees had better performance and social contribution (Jin & Drozdenko, 2010). The following hypothesis was therefore proposed:

H20: A consistency culture has a significant positive relationship with business results.

There is a clear theme in the literature, suggesting that a balanced organizational culture is positively related to organizational performance. A balanced culture is shown by a robust culture with a high score for each culture type (Conrad et al., 1997; Zhang, Li, & Wei, 2008), so the following hypothesis was proposed:

H21: A balanced organizational culture has a significant positive relationship with business results.

3.7 ICT and Organizational Culture

The linkage between ICT and the components of organizational culture is well-discussed in the literature. A study in the construction sector found that organizational culture was one of the main success factors in using and adopting ICT in construction projects. This study considered only the fragmentation and differentiation dimensions of organizational culture because of the complexity of construction projects (Gajendran & Brewer, 2007).

Organizational culture type was found to have a positive impact on use of ICT. One study in Spain, across 300 companies, found that all four organizational culture types (market, adhocracy, clan, and hierarchy) encouraged ICT use in knowledge management practices, but that the significance of the relationship varied by culture types (Lopez-nicolas & Meroño-cerdán, 2009).

Welch and Feeney (2014) conducted a study based on data gathered from 2,500 managers in local government in the United States from 2010 to 2012. Their main conclusion was that organizational culture had a positive influence on ICT use by organizations to achieve specific managerial results (Welch & Feeney, 2014).

Using ICT can also support organizational learning and encourage activities to create change. A study in the healthcare sector in the United Kingdom found that implementing the ICT cultural change program, or ICTCCP, support change management and enabled the creation of a visionary culture, helping to enhance clinical services (Frame, Watson, & Thomson, 2008).

National culture also influences ICT use. The attributes of national culture were found to be significantly correlated with adoption of ICT in a study covering 49 countries. The study found that all dimensions of national culture were important and related to ICT use, but uncertainty avoidance and power distance were the most influential attributes (Erumban & de Jong, 2006).

3.8 ICT and Business Excellence

The literature shows that the use of ICT is positively associated with excellent results across each of the EFQM business excellence results criteria. ICT use is particularly helpful in improving customer satisfaction. One study examined the elements that affected customer satisfaction in South Korea, and found that the availability of options for e-commerce had a significant impact on customer satisfaction (Kim, Jang, & Morrison, 2011). A study on local government performance in Nigeria concluded that by using ICT tools, governments can achieve several benefits that will lead to better customer satisfaction (Teryima & Sunday, 2015). The following hypothesis was therefore proposed:

H22: ICT moderates the relationships between organizational culture types and customer results.

The relationship between ICT and job satisfaction is also addressed in the literature. A study in the United States on the influence of ICT on job satisfaction in the telework sector found a positive correlation between using ICT tools and employee satisfaction (Webster-Trotman, 2010). Using ICT in libraries also had a positive association with staff satisfaction (Bellary, Sadlapur, & Naik, 2015). The influence of ICT on job performance can be indirect in some sectors; adopting ICT was found to improve job satisfaction indirectly among sales teams through salesforce managerial performance (Limbu, Jayachandran, & Babin, 2014). The following hypothesis was therefore proposed:

H23: ICT moderates the relationships between organizational culture types and people results.

Contribution to society and creating a sustainable future is an aspect of achieving business excellence (EFQM, 2013). Adopting ICT can helped organizations to manage and coordinate sustainability challenges (Prattipati, 2010). Using ICT can also help organizations to reduce damage to the environment and save energy by reducing energy consumption (Yoshida, 2010). The following hypothesis was therefore proposed:

H24: ICT moderates the relationships between organizational culture types and society results.

The link between ICT and business performance is well-established. A study from 2011 found that the use of ICT is appropriate for tourism businesses, and has a positive effect on business outcomes (Peña, Jamilena, & Molina, 2011). Other studies shed light on the relationship between communication and organizational performance. Timmerman and Scott (2006), for example, found that communication forecasts were correlated to the outcomes of virtual teams, including communication levels, trust and satisfaction. This study also found that not all structural variables of communication were directly linked to team outcomes. One communication variable with a significant correlation with virtual team performance was communication channel choice to preserve connections. Timmerman and Scott (2006) stated that perceptions about the effectiveness of team work can be enhanced by communication competence during team interactions.

The association between ICT use and performance is not limited to any particular sector. A study of agricultural sector firms in 2013 found that adopting ICT could largely solve the challenges associated with information and communication with stakeholders and government (Prajanti, Djuniadi, & Soesilowati, 2013). Another study in two coastal villages in India concluded that using ICT tools like mobiles and computers enabled fishermen to increase productivity and improve safety, as well as being cost efficient (Sabu & Shaijumon, 2014). The following hypothesis was therefore proposed:

H25: ICT moderates the relationships between organizational culture and business results.

The research model for the study is shown in Figure 8.

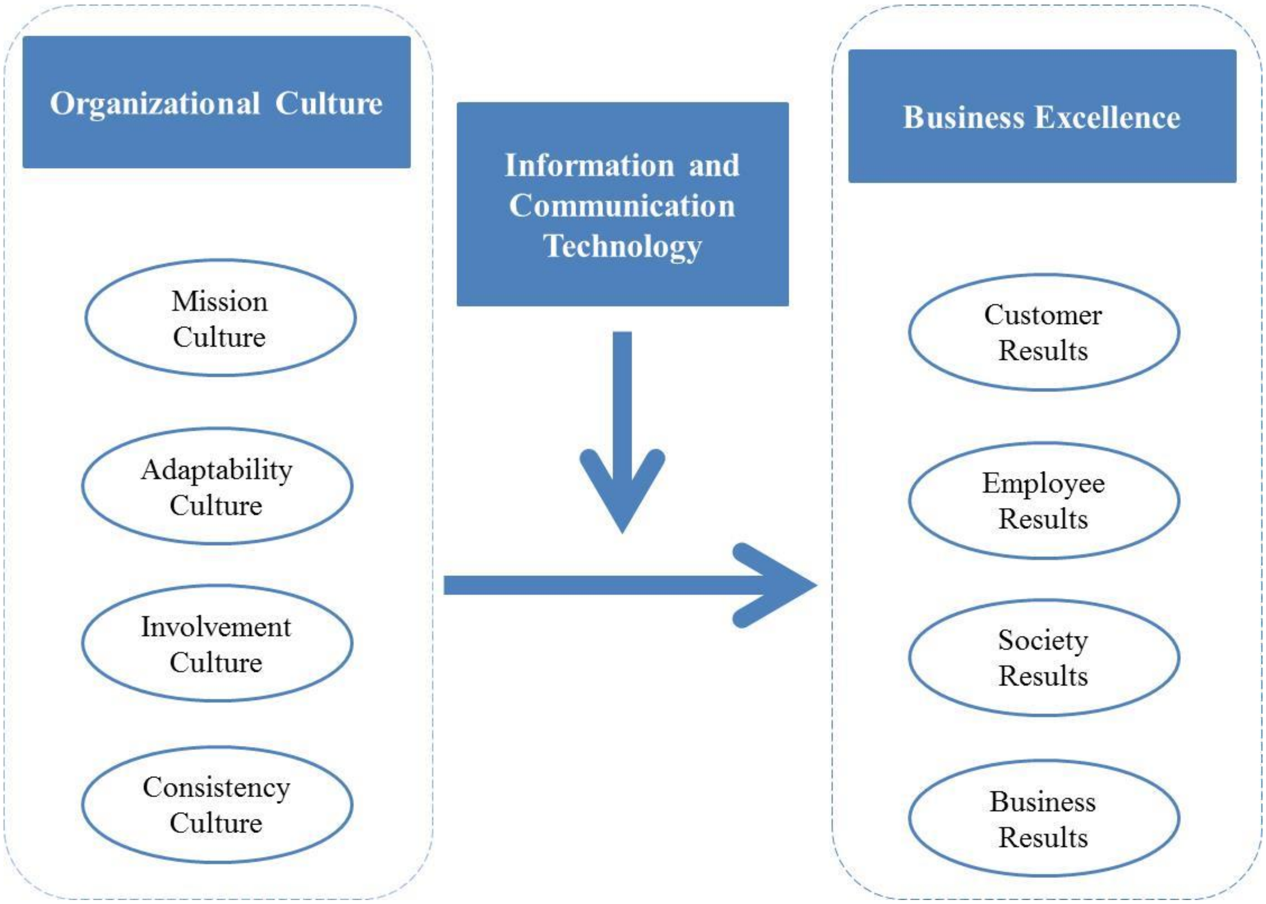

Figure 8 – Research Model

To answer the research questions, 25 hypotheses have been developed to explore the nature of the relationship between each organizational culture type and each business excellence results criterion, and the moderating role of ICT use on each relationship. Figure 9 shows 20 of the research hypotheses, since the remaining four compare the strengths of relationships between the four culture types and each excellence criterion.

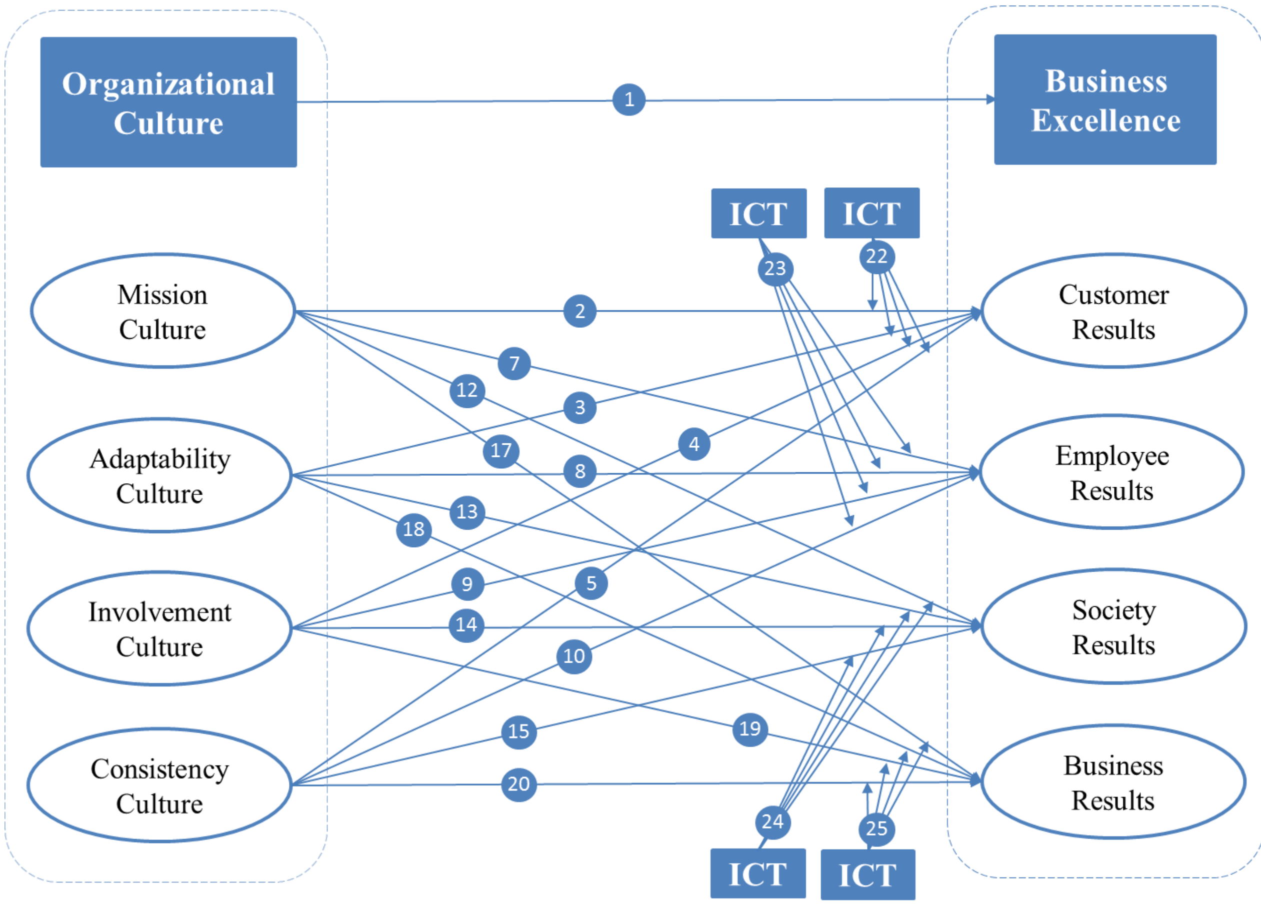

Figure 9 – Research Hypotheses

3.9 Summary

This chapter covers the findings of previous studies on the relationships between the research components, in this case, organizational culture types, business excellence results criteria, and ICT. The most recent findings and any strong themes in the literature have been highlighted, together with any areas with conflicting results.

This research uses a vertical analysis approach, by examining the relationship between each individual organizational culture type and business excellence criterion. The large number of hypotheses is a reflection of this depth of analysis, as shown in Figure 9. The next chapter covers the research methodology and design.

Chapter 4: Research Methodology

4.1 Introduction

The previous chapter developed the research model and hypotheses. This chapter now explains the methodology. It gives more information on the research variables, including the independent, dependent, and moderator variables, and discusses the research sample size and sampling frame, together with the justification for choice of sampling technique. It describes the pilot study and reports on the reliability of the scales chosen. It explains the data collection procedure for the main study, including activities related to the administration of the research questionnaire and communication with the target companies, and provides details of the number of responses received from each company and the response rate. It also covers ethical considerations, including the actions taken to maintain the respondents' anonymity and protect data from unauthorized use.

4.2 Research Design

This research aims to answer two questions about the relationship of organizational culture type with components of organizational excellence, and to discover how ICT use moderates these relationships, via 25 hypotheses. The logical nature of this study required the use of a quantitative applied research approach, because it focuses on analyzing and evaluating several variables, as well as exploring their relationships. The quantitative approach allows comparisons between the cultures of several organizations (Cameron & Quinn, 2005), using a numerical analysis to provide an in-depth understanding of the information, theories, and concepts related to the research questions and hypotheses. Responses were coded to facilitate the use of statistical methods of analysis to compare different variables related to organizational culture and business excellence. Quantitative methods also have demonstrated validity and reliability, unlike qualitative methods, which focus on developing themes and interpreting data (Bhattacherjee, 2012).

4.2.1 Independent Variables. The four organizational culture types were the independent variables in this research. This approach enabled more focus on each culture type, to generate detailed and insightful conclusions. Figure 10 shows the independent variables in this study.

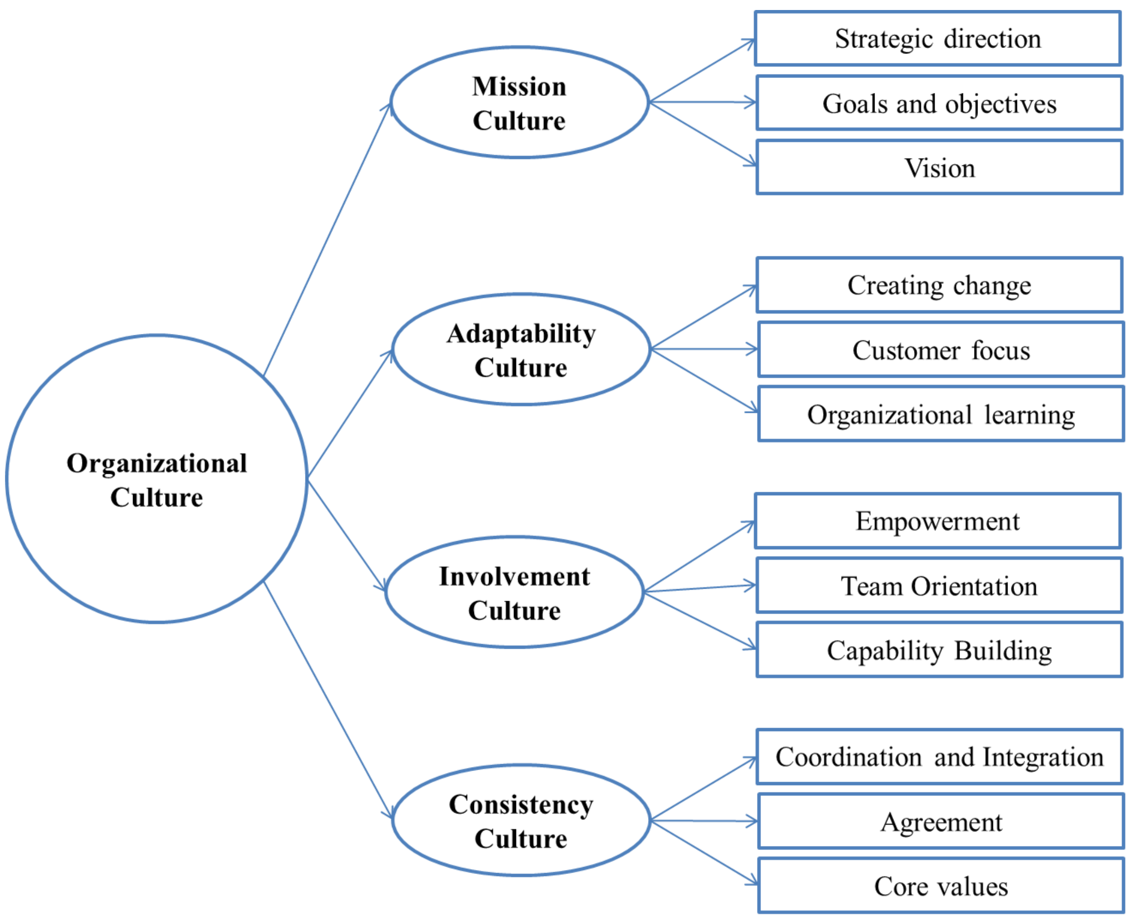

Figure 10 – Independent Variables in this Study

4.2.2 Dependent Variables. The EFQM organizational excellence results criteria were used as dependent variables (see Figure 11).

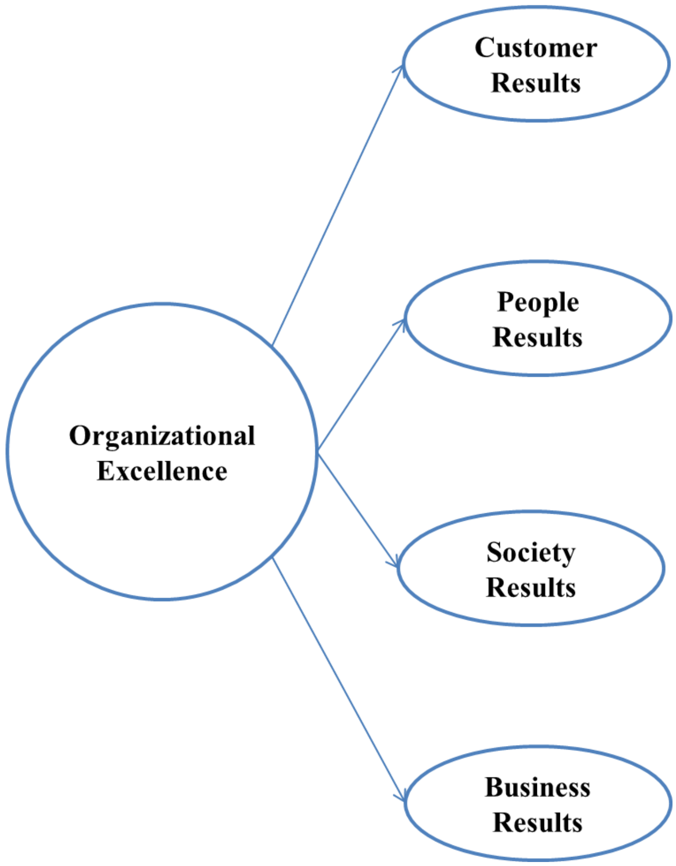

Figure 11 – Dependent Variables Used in the Study

4.3 Population and Sample

The sample population is companies in the UAE who have demonstrated a high level of organizational excellence. The parameter used to identify these companies was excellence awards, and particularly, previous winners. There are several quality and business excellence awards in the UAE. Some accept applications only from the government or private sector, and a few are open to both. This study targeted awards that accept applications from both private and government sectors, because this was expected to provide more realistic and generalizable results. There are only two awards that satisfy these criteria, the Dubai Quality Award (DQA) and the Sheikh Khalifa Excellence Award (SKEA) ("DQA," 2015, "SKEA," 2015).

The criteria for each award were examined to assess their links to the EFQM model, because this model is well-established worldwide and includes tested and verified assessment tools (EFQM, 2013). The SKEA uses the EFQM model criteria without any modification, and is also a representative of the EFQM in UAE ("SKEA," 2015). The DQA had modified some of the EFQM model criteria. This study therefore targeted SKEA winners.

Within the SKEA, there are different categories of success, from letters of appreciation through silver and gold awards, to the top level, diamond awards. Since this research targets excellent companies, the study focused on diamond and gold winners. It also targeted only winners from the last three cycles to avoid uncertainty about the current state of the company, and whether it has maintained its level of excellence. In total, this gave 31 organizations, and a convenience sampling technique was used to select nine as a sampling frame that included a mix of governmental and private organizations, service and manufacturing companies, and small and larger organizations.

All the respondents were managers in the selected organizations, working across any levels except top management. Managers were chosen because they can give informed feedback about the business excellence criteria, being more exposed to the results within the organization. Managers can also provide accurate information on the organizational culture, because they have both managers and subordinates. They also probably have a clearer view of cross-departmental communication within the company than more junior or senior staff.

4.4 Research Instruments

A survey was used to collect data, following approval from the Institutional Review Board. The research questionnaire has four parts, covering demographic information, organizational culture, business excellence, and ICT use (see Appendix A).

The organizational culture questions were adapted from the Denison Organizational Culture Survey (DOCS) survey, which contains questions covering the four types of organizational culture, mission, adaptability, involvement, and consistency culture, with three attributes under each culture type (D. Denison et al., 2014; Daniel R. Denison & Mishra, 1995). The survey uses a five-point Likert-type scale ranging from strongly disagree to strongly agree.

The DOCS is one of the most widely-used instruments to measure the effectiveness of organizations and its link to the existing organizational culture. The validity and reliability of this scale has been tested several times and shows good results compared to nine other culture assessment instruments (D. Denison et al., 2014). A study by Denison and Mishra demonstrated the scale validity with a comparative fit index (CFI) score of 0.98 and root mean square of approximation of 0.048 (Daniel R. Denison & Mishra, 1995). These CFI findings supported the survey's theoretical foundation. Another study of 160 companies with more than 35,000 employees measured the reliability of the model, and found acceptable results for Cronbach's alpha coefficient within the range from 0.70 to 0.85. The factor loading for the items was 0.60 to 0.75, which means that the items measured the same principal concepts (D. R. Denison, Janovics, Young, & Cho, 2006). The DOCS can be applied in different cultures and languages with similar levels of validity and reliability (D. Denison et al., 2014).

The business excellence questions were adapted from the EFQM Self-Assessment questionnaire, based on the EFQM model, and developed to measure the level of business excellence within organizations (EFQM, 2013). The tool's validity and reliability has been tested by many researchers in different countries. For example, Karimi, Atashpour, Papi, Nouri, and Hasanzade (2014) reported a value of 0.93 for Cronbach's alpha coefficient, indicating a high level of reliability. Calvo-Mora, Leal, and Roldan (2006) tested the EFQM self-assessment questions and found that the constructs had internal consistency of 0.82, exceeding the benchmark of 0.7. The self-assessment questions use a five-point Likert-type scale across the four results criteria, customer, people, society, and business results.

For questions on ICT use, responses were categorized into two groups (Yes/No) to assess the use of a list of ICT tools in each company (emails, smart phones, video conferences, e-services, and mobile apps).

4.5 Pilot Study

Researchers often use pilot studies to help them prepare for their main research (Polit & Beck, 2013). Another reason to conduct pilot studies is to test research instruments such as questionnaires, surveys, or interviews (Baker, 1999). A pilot study was therefore used to test the research instruments and look for possible improvements. Before the pilot study, the questionnaire was assessed by two experienced academics from Abu Dhabi University. Based on their comments, some questions were rephrased and simplified to better match the local environment and to avoid being very direct in some sensitive statements. These improvements were designed to encourage employees to respond to the questionnaire and ensure that responses were less likely to be biased.

Pilot testing was used to ensure that the research questions were clear and understandable for respondents and to spot any issues with the flow of the questions. A drop-off approach was used to distribute the questionnaires randomly to a sample that was smaller than planned for the study, but comparable: a single company in the UAE that had won the gold Sheikh Khalifa Excellence Award. Questionnaires were manually distributed to middle managers, including division and section heads, in the targeted organization. A total sample size of 45 managers was identified and 29 responses were received, a response rate of 64.44%. An internal consistency test was used to check the instrument's reliability, and the results showed a high level of reliability, with all values above the threshold value of 0.7 usually given for Cronbach's alpha (Nunnally & Bernstein, 1994) (see Table 1).

Table 1 – Pilot Study Instrument Reliability Testing

	Variables	**No. of Items**	**Cronbach's Alpha**
Independent Variables	Mission Culture	3	0.79
	Adaptability Culture	3	0.83
	Involvement Culture	3	0.74
	Consistency Culture	3	0.83
Dependent Variables	Customer Results	4	0.82
	People Results	4	0.77
	Society Results	4	0.84
	Business Results	4	0.78
Moderator	ICT	4	0.82

Collecting the data from the pilot study took more time than expected, mostly because of the drop-off method used to distribute the questionnaire. Some of the managers moved between sites or preferred an electronic version of the questionnaire, so an online questionnaire was used for the main study.

4.6 Data Collection

An online survey platform (SurveyMonkey) was used to share the questionnaire and collect the data. Questions were translated from English to Arabic and then translated back again to ensure accuracy. A separate collector was created for each target organization, to ensure that it was possible to check the number of respondents from each company and to organize the follow-up process effectively.

To accelerate the data collection process and encourage companies to participate in this study, the SKEA office was approached. Once the purpose of the research had been explained, the office agreed to support the study and sent an invitation letter to all target organizations (see Appendix D). Once the letter had been sent, direct approaches were made to each company and a period of one month was allocated to complete the data collection. The follow up process was in waves, using telephone calls and emails as reminders. The total number of respondents was 448 managers from nine companies, a response rate of 61.16% overall, although this varied between companies (see Table 2).

Table 2 – Response Rate from the Companies Studied

S/NO	Company	No. of Managers who were sent the Questionnaire	No. of Respondents	Response Rate
1	Company 1	255	138	54.12 %
2	Company 2	224	130	58.04 %
3	Company 3	118	48	40.68 %
4	Company 4	65	33	50.77 %
5	Company 5	34	27	79.41 %
6	Company 6	41	25	60.98 %
7	Company 7	27	22	81.48 %
8	Company 8	32	16	50.00 %
9	Company 9	12	9	75.00 %
		Total number of respondents	448	
		Average response rate		61.16%

The response rate is considered very good, because the rate for online surveys is often much lower than paper surveys (Nulty, 2008). In a meta-analysis, Cook, Heath, and Thompson (2000) found that the response rate in internet-based surveys was less than paper-based surveys, which had an average response rate of 55.6%.

There were missing data in 60 out of 448 cases. In 19 cases, the respondents did not complete the questionnaire, but just clicked the link and browsed the invitation page. In many cases, there were more data missing from the end of the questionnaire, which was expected because respondents had to answer the questions in order. Any cases with missing data in the questions related to the dependent variables were therefore excluded, to avoid any artificial increase in the relationship with the independent variables. In total, 29 cases of missing data were excluded using this rule, leaving 12 cases with missing data in fewer than 10% of the survey questions, which was considered acceptable (Hair, Black, Babin, & Anderson, 2013). The remaining data were examined to identify any respondents who had given the same answer for all questions. These respondents were identified by checking the time spent on the questions. Anyone who completed the questionnaire in less than one minute was considered to be unengaged. The SD for each case was also calculated, and cases with SD = 0 were considered unengaged. A further eight cases were therefore excluded using this principle, bringing the final number of cases for analysis to n = 392.

4.7 Ethical Considerations

To keep the respondents' personal information confidential, the questionnaire was conducted anonymously and no personal details were collected. The tracking system used collector names and respondents' codes, and the demographic part of the questionnaire did not ask for any self-identifying data such as name, location, or department. Abu Dhabi University Institutional Review Board reviewed and approved the questionnaire and other documents, including the consent letter, to ensure that data privacy was maintained. A confidentiality statement was signed with the SKEA office (Appendix B) to ensure that data would be used only for academic purposes, and that the names of companies would be kept confidential. A confidentiality statement was included in the survey introduction page and in the invitation letters sent to participants (Appendix C).

4.8 Summary

This chapter has provided a detailed view of the research model and its constructs, plus the four independent variables (mission, adaptability, involvement, and consistency cultures), the four dependent variables (customer, people, society results and business results), and the moderating variable, ICT use. It has set out that the study targeted nine companies that had won

SKEA diamond and golden awards in the last three cycles, and explained about the pilot study, conducted using a questionnaire with adapted scales of proven face validity. The results showed an acceptable level of reliability for the research variables, so the questionnaire was used for the main data collection. This achieved a response rate of 61.16%, with responses from 448 managers in the targeted companies. Any responses with a high level of missing data or from unengaged respondents were excluded, leaving a total of 392 responses for analysis.

The privacy of participants was maintained, with a confidentiality agreement signed with the SKEA office and the survey conducted anonymously with no personal details required, and the survey questions reviewed and approved by the Institutional Review Board.

Chapter 5: Data Analysis and Results

5.1 Introduction

This research aims to study the relationships between organizational culture and business excellence by investigating the relationships between each type of organizational culture (mission, adaptability, involvement, consistency) and the four results criteria of business excellence (customer results, people results, society results, business results). It also aims to examine any moderating role of ICT use on these relationships.

The research model was created using exploratory factor analysis (EFA), and fit was measured using confirmatory factor analysis (CFA). The validity and reliability of the scales were tested. Descriptive statistics were used to show demographic information. The hypotheses were tested by applying structural equation modeling (SEM) and path analysis. The hypothesized moderation effects were tested by applying the continuous interaction approach. Analyses used Microsoft Excel 2016, IBM SPSS Statistics 21, and IBM SPSS Amos 21.

5.2 Descriptive Analysis

In total, 808 questionnaires were distributed to managers of nine companies selected from the population of 27 companies that had won SKEA diamond and golden awards in the last three cycles; 448 questionnaires were returned, of which 392 were considered complete and valid. In total, 32% of respondents were female, and 68% were male, with male respondents more common particularly in manufacturing companies, probably because of the nature of the business and the existence of more physically-demanding jobs. The national culture of the UAE and the wider Gulf region may also have had an influence, because men tend to be more likely to obtain managerial positions and leadership roles.

The average age of respondents was 37.8 years (SD = 0.84). Table 3 shows that 38% of the respondents were aged 40–48 years old, and 36% 30–39 years old. The high number of respondents from these two groups is because of the seniority of the targeted employees. Employees usually need several years of experiences before they are promoted to management or supervisory positions.

Table 3 – Demographic Profile of the Respondents – Age Groups

Age Group	Response Percentage	Response Count
18–24	0%	0
25–29	4.6%	18
30–39	35.6%	139
40–49	37.7%	148
50 or older	22.1%	87
Total	100%	392

Table 4 shows that 54% of the respondents held bachelor degrees and 29% masters' degree. This is because of the high level of education needed to become a manager in most of the companies in the UAE. Around 4% held doctorates; this low percentage was expected since top managers were excluded from this study. Top management positions often require higher academic qualifications like doctorate degrees.

Table 4 – Demographic Profile of the Respondents – Education Level

Education Level	Response Percentage	Response Count
High School	2.0%	8

Diploma	10.7%	42
Bachelor	54.1%	212
Master	29.1%	114
Doctorate	3.6%	14
Other	0.5%	2
Total	100%	392

Table 5 shows that around 37% of the respondents had spent between five and nine years with their current employers and 23% had spent less than four years there. These results indicate high turnover among managers in excellent companies in the UAE. In turn, this points to the dynamic nature of the UAE economy and active movement of workers between companies.

Table 5 – Demographic Profile of the Respondents – Years of Experience With the Current Organization (Tenure)

Tenure (Years)	**Response Percentage**	**Response Count**
0–4	23.0%	90
5–9	36.7%	144
10–14	19.1%	75
15–19	11.0%	43
20 or more	10.2%	40
Total	100%	392

Table 6 shows the respondents’ job level. Around 47% of respondents work at the supervisory level, 40% in middle management and 13% in senior management. This distribution reflects the standard ‘pyramid’ shape for organizations, with a wide base for the lower management positions, and fewer senior management roles.

Table 6 – Demographic Profile of the Respondents – Job Level

Job Level	Response Percentage	Response Count
Senior Management	13.0%	51
Middle Management	40.1%	157
Supervisory Management	46.9%	184
Total	100%	392

5.3 Measures of Central Tendency

Table 7 shows the measures of central tendency related to each research construct. All were measured on a five-point Likert-type scale, ranging from strongly disagree (1) to strongly agree (5). The mean is the sum of all scores for the variable divided by the number of respondents, and ranged from 2.91 to 3.82 (between disagree and agree). The median is the middle value, and was between three and four (neutral and agree with the statement). The standard deviation shows distance from the mean. The standard deviation of the data ranged from 0.62 for an adaptability culture to one for people results. This indicates that the adaptability culture scores do not vary greatly, which may be because excellent companies all tend to adapt similarly to the external environment.

Table 7 – Measures of Central Tendency

	MC	AC	IC	CC	CR	PR	SR	BR
Mean	2.99	3.80	3.40	3.75	3.82	3.35	2.91	3.75
Median	3.00	4.00	3.75	4.00	4.00	3.50	3.00	4.00
Mode	3.00	4.00	4.00	4.00	4.00	4.00	3.00	4.00
Std. Deviation	0.98	0.62	1.00	0.93	0.75	1.00	0.99	0.96
Variance	0.96	0.38	1.00	0.86	0.56	1.00	0.98	0.92

Note: MC: Mission Culture; AC: Adaptability Culture; IC: Involvement Culture; CC: Consistency Culture; CR: Customer Results; PR: People Results; SR: Society Results; and BR: Business Results.

5.4 Validity and Reliability Testing

To assess the validity of the scales, exploratory factor analysis was used with Eigenvalue value more than 1 to extract the number of factors. The Varimax Method was used to rotate variables. This suggested that there were nine constructs and all variables were loaded under the related constructs. The loading values were above 0.5 and there were no cross-loading issues or low loading values. The reliability of the research model was also good. The values for Cronbach's alpha coefficient were within the range from 0.81 to 0.97, noticeably exceeding the standard threshold value of 0.7 (Nunnally & Bernstein, 1994). Table 8 shows the results for exploratory factor analysis and reliability testing. The total variance explained by the seven constructs is 80.46%.

Table 8 – Validity and Reliability Tests

Factors	Items	Factor Loading	Eigenvalue	Percentage of Variance	Cronbach's Alpha
MC	2	0.81	1.09	3.41	0.88
	1	0.78			

	3	0.77			
AC	2	0.84	1.71	5.35	0.87
	3	0.77			
	1	0.76			
IC	2	0.83	1.44	4.49	0.90
	3	0.76			
	1	0.74			
CC	1	0.82	1.19	3.71	0.81
	2	0.81			
	3	0.79			
CR	1	0.83	2.35	7.36	0.93
	2	0.82			
	3	0.81			
	4	0.78			
ER	1	0.79	1.89	5.91	0.94
	2	0.78			
	3	0.78			
	4	0.74			
SR	1	0.93	12.30	38.43	0.97
	2	0.92			
	3	0.90			
	4	0.89			
BR	1	0.87	2.83	8.84	0.96
	2	0.85			
	3	0.85			
	4	0.85			
ICT	1	0.77	1.07	3.35	0.83
	2	0.76			
	3	0.70			
	4	0.68			

Note: MC: mission culture; AC: adaptability culture; IC: involvement culture; CC: consistency culture; CR: customer results; PR: people results; SR: society results; BR: business results; and ICT: information and communication technology.

5.5 Model Fit

The next step was to verify the factors extracted in the EFA analysis. The two-stage structural equation modeling (SEM) technique was used, the first stage for confirmation and the second for hypothesis testing. The confirmation stage was completed using AMOS software with maximum likelihood estimation (MLE). The CFA test supported the use of organizational culture as four separate constructs, mission culture, adaptability culture, involvement culture, and consistency culture ($\chi^2 = 72.29$, df = 22.01, χ^2/df = 3.28, GFI = 0.97, CFI = 0.99, RMSEA = 0.04, $p > 0.05$), rather than one combined construct ($\chi^2 = 140.23$, df = 20.65, χ^2/df = 6.79, GFI = 0.86, CFI = 0.87, RMSEA = 1.12, $\Delta\chi 2 = 67.94$, Δdf = 1.36, $p < 0.05$). The organizational culture construct was therefore maintained as a multi-dimensional construct.

The CFA test also supported the use of business excellence as four separate constructs, customer results, people results, society results, and business results ($\chi^2 = 120.50$, df = 36.4, χ^2/df = 3.31, GFI = 0.95, CFI = 0.96, RMSEA = 0.03, $p > 0.05$), rather than one combined construct ($\chi^2 = 188.66$, df = 34.30, χ^2/df = 5.50, GFI = 0.89, CFI = 0.84, RMSEA = 1.27, $\Delta\chi 2 = 68.16$, Δdf = 2.19, $p < 0.01$). The business excellence construct was therefore maintained as a multi-dimensional construct. The measurement model was evaluated based on the fit measures advocated in various previous studies (Byrne, 2010; Hair et al., 2013; Kline, 2011).

5.6 Correlation Analysis Results

Table 9 shows the Pearson product–moment correlation coefficient analysis results. The mission culture is positively related to customer results ($r = 0.47$, $p < 0.01$), people results ($r = 0.49$, $p < 0.01$), society results ($r = 0.36$, $p < 0.01$), and business results ($r = 0.46$, $p < 0.01$). The adaptability culture is positively related to customer results ($r = 0.49$, $p < 0.01$), people results ($r = 0.44$, $p < 0.01$), society results ($r = 0.27$, $p < 0.01$), and business results ($r = 0.47$, $p < 0.01$). The involvement culture is positively related to customer results ($r = 0.51$, $p < 0.01$), people results ($r = 0.56$, $p < 0.01$), society results ($r = 0.36$, $p < 0.01$), and business results ($r = 0.43$, $p < 0.01$). The consistency culture is positively related to customer results ($r = 0.34$, $p < 0.01$), people results (r = 0.45, p < 0.01), society results (r = 0.22, p < 0.01), and business results (r = 0.41, p < 0.01).

Table 9 – Mean, Standard Deviation, and Correlation Among Variables

	M	**SD**	**MC**	**AC**	**IC**	**CC**	**CR**	**PR**	**SR**	**BR**
MC	2.99	0.98	1							
AC	3.80	0.62	0.570**	1						
IC	3.40	1.00	0.505**	0.461**	1					
CC	3.75	0.93	0.475**	0.437**	0.425**	1				
CR	3.82	0.75	0.477**	0.497**	0.514**	0.349**	1			
PR	3.35	1.00	0.493**	0.442**	0.567**	0.451**	0.572**	1		
SR	2.91	0.99	0.360**	0.272**	0.366**	0.228**	0.352**	0.471**	1	
BR	3.75	0.96	0.462**	0.479**	0.435**	0.415**	0.547**	0.610**	0.343**	1

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

Note: MC: mission culture; AC: adaptability culture; IC: involvement culture; CC: consistency culture; CR: customer results; PR: people results; SR: society results; and BR: business results.

5.7 Hypothesis Testing

The SEM analysis provided estimated coefficient values for the hypothesized relations in the path diagram. The goodness-of-fit results for the structural model were acceptable and close to the values obtained for the measurement model fit indices (χ^2 = 145.13, df = 40.31, χ^2/df = 3.60, GFI = 0.96, CFI = 0.95, RMSEA = 0.03, $p > 0.05$). Figure 12 shows the estimated coefficients for organizational culture types and business excellence results criteria.

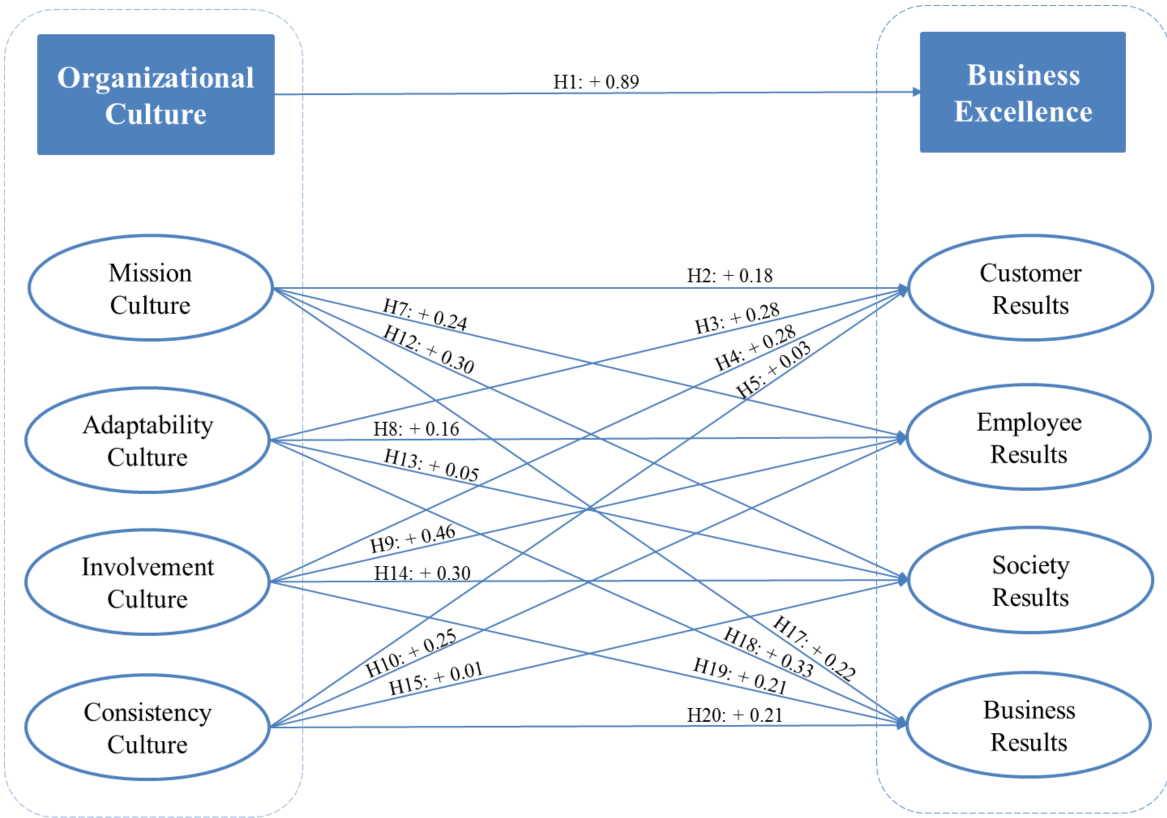

Figure 12 – Hypothesis Testing Results

H1: Organizational culture is positivity related to business excellence. This relationship is supported by the research model as significant at the 0.01 level, with a standardized coefficient of 0.89. That means organizational culture has a significant positive relationship with business excellence results and can explain 89% of their variance.

H2: Mission culture is positively related to customer results. Figure 13 shows that this relationship is supported by the research model. It had a standardized coefficient of 0.18 and was significant at the 0.01 level. That means a mission culture has a significant relationship with customer results and can explain 18% of variance in customer results. In this relationship, the highest contribution came from the second attribute of mission culture (My manager sets ambitious yet achievable goals), which scored 0.81.

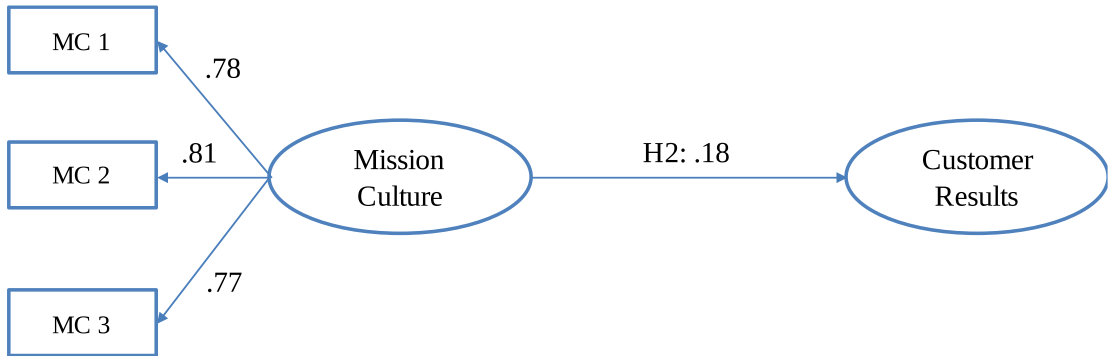

Figure 13 – Mission Culture and Customer Results

H3: Adaptability culture is positively related to customer results. Figure 14 shows that this relationship is supported by the research model, with a significance level of 0.01, and score of 0.28 for the standardized coefficient. That means adaptability culture has a significant positive relationship with customer results and can explain 28% of the variance. In this relationship, the highest contribution came from the second factor in adaptability culture (I feel encouraged to take risks at work), which scored 0.84.

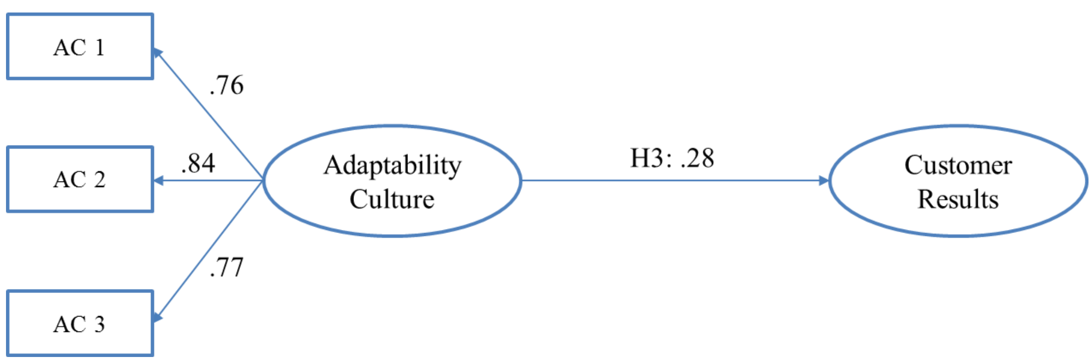

Figure 14 – Adaptability Culture and Customer Results

H4: Involvement culture is positively related to customer results. Figure 15 shows that this relationship is supported by the research model at a significance level of 0.01, and score of 0.28 for the standardized coefficient. An involvement culture therefore has a significant positive relationship with customer results and can explain 28% of the variance. In this relationship, the highest contribution came from the second element of the involvement culture (I feel like a member of the team), which scored 0.83.

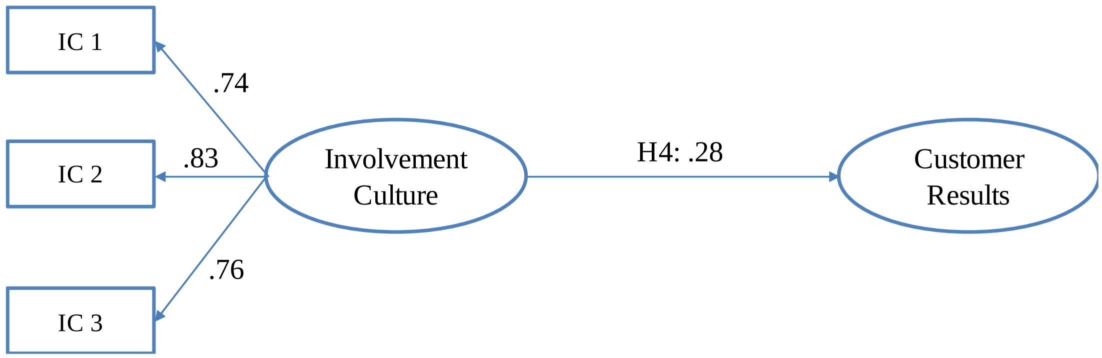

Figure 15 – Involvement Culture and Customer Results

H5: Consistency culture is positively related to customer results. Figure 16 shows that this relationship is not supported by the research model, as it had a very low standardized coefficient value (0.03) and the P value was not significant (0.49).

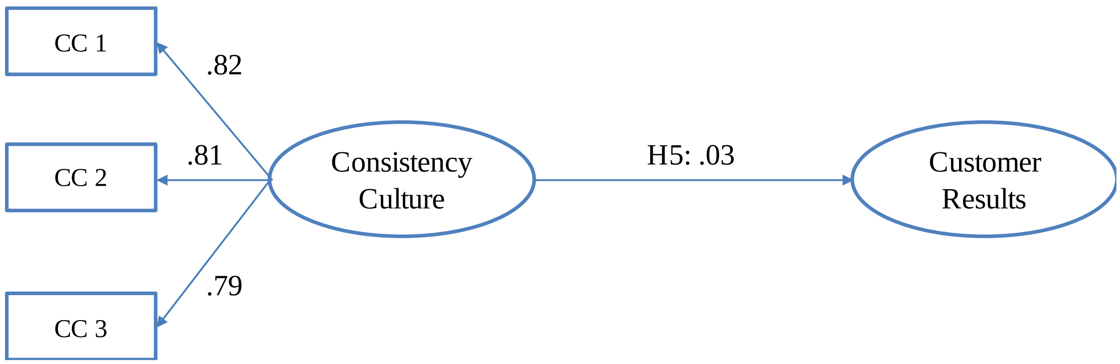

Figure 16 – Consistency Culture and Customer Results

H6: The relationship between culture types and customer results will vary. As expected, the relationship between each culture type and customer results was different. The strongest impact was from the adaptability culture (0.283), followed by involvement culture (0.281), then mission culture (0.18). Consistency culture had no significant impact on customer results (0.03).

H7: Mission culture is positively related to people results. Figure 17 shows that this relationship is supported by the research model, with a standardized coefficient of 0.24, and significance level of 0.01. That means mission culture has a significant positive relationship with people results and can explain 24% of variance in this area. As with customer results, the highest contribution was from the second element of mission culture (My manager sets ambitious yet achievable goals), which scored 0.81.

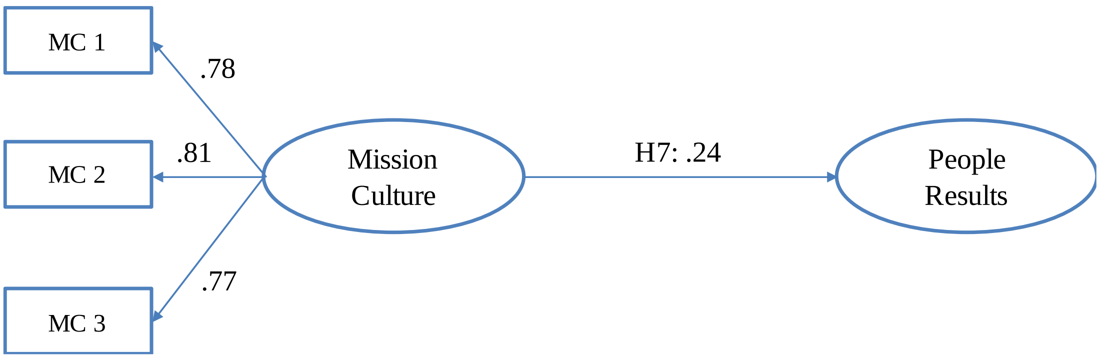

Figure 17 – Mission Culture and People Results

H8: Adaptability culture is positively related to people results. Figure 18 shows that this relationship is supported by the research model. The standardized coefficient was 0.16, and was significant at the 0.05 level. An adaptability culture therefore has a significant positive relationship with people results, and can explain 16% of its variance. Again, the greatest contribution was from the second element of adaptability culture (I feel encouraged to take risks at work), which scored 0.84.

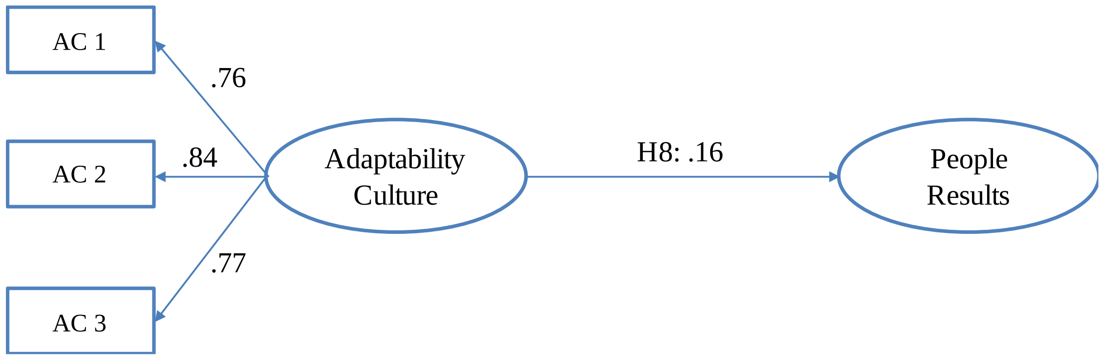

Figure 18 – Adaptability Culture and People Results

H9: Involvement culture is positively related to people results. Figure 19 shows that this relationship is supported by the research model, with a standardized coefficient of 0.46 and 0.01 significance level. An involvement culture therefore has a significant positive relationship with people results and can explain 46% of its variance. The greatest contribution came from the second element of involvement culture (I feel like a member of the team), which scored 0.83.

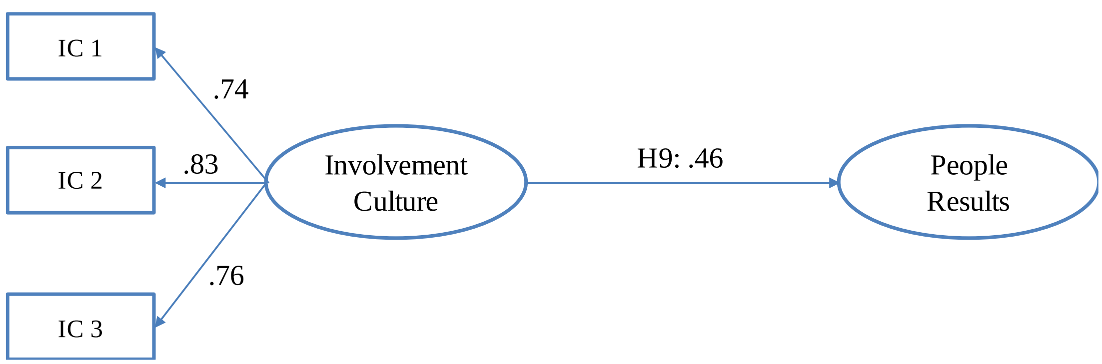

Figure 19 – Involvement Culture and People Results

H10: Consistency culture is positively related to people results. Figure 20 shows that this relationship is supported by the research model, with a standardized coefficient of 0.25, significant at the 0.01 level. A consistency culture has a significant positive relationship with people results and can explain 25% of the variance. The highest contribution came from the first element of consistency culture (I share common ideas about our organization with employees from different departments), which scored 0.82.

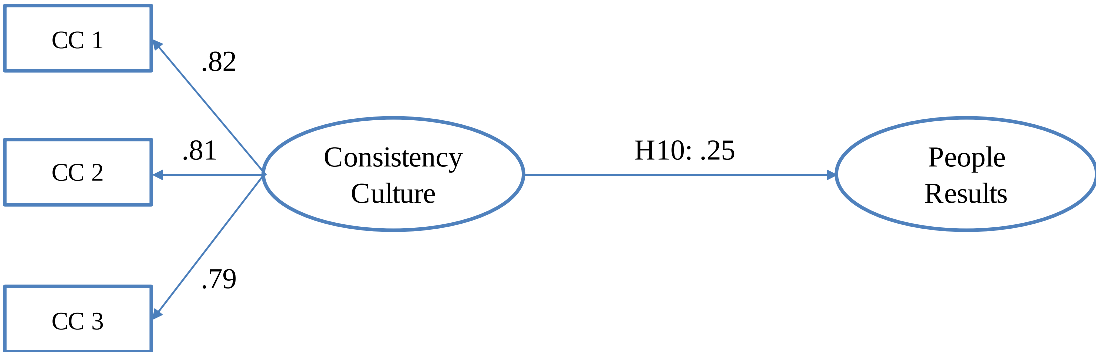

Figure 20 – Consistency Culture and People Results

H11: The relationship between culture types and people results will vary. As expected, the relationship between culture type and people results varied. The strongest impact was from an involvement culture (0.46), followed by consistency (0.25), then mission (0.24). An adaptability culture had the weakest impact on people results (0.16).

H12: Mission culture is positively related to society results. Figure 21 shows that this relationship is supported by the research model, with a standardized coefficient of 0.30, significant at the 0.01 level. That means mission culture has a significant positive relationship with society results and can explain 30% of its variance. The biggest contribution to the relationship was from the second element of a mission culture (My manager sets ambitious yet achievable goals), which scored 0.81.

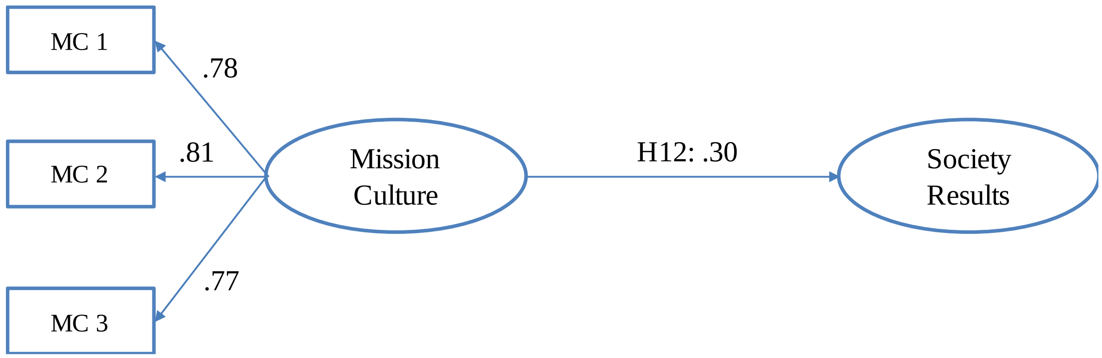

Figure 21 – Mission Culture and Society Results

H13: Adaptability culture is positively related to society results. Figure 22 shows that this relationship is not supported by the research model, because it had a very low standardized coefficient value (0.05) and no significant P value (0.53).

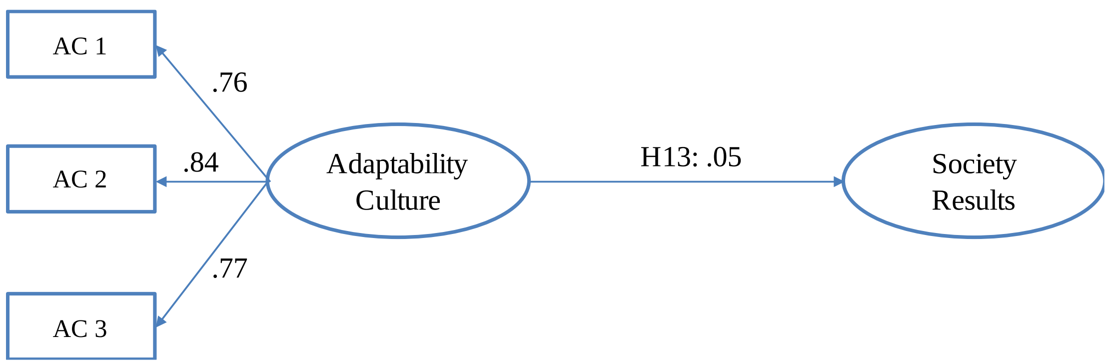

Figure 22 – Adaptability Culture and Society Results

H14: Involvement culture is positively related to society results. Figure 23 shows that this relationship is supported by the research model, with a standardized coefficient of 0.30, significant at the 0.01 level. Involvement culture therefore has a significant positive relationship with society results, and can explain 30% of its variance. The greatest contribution to the relationship was again from the second element of involvement culture (I feel like a member of the team), which scored 0.83.

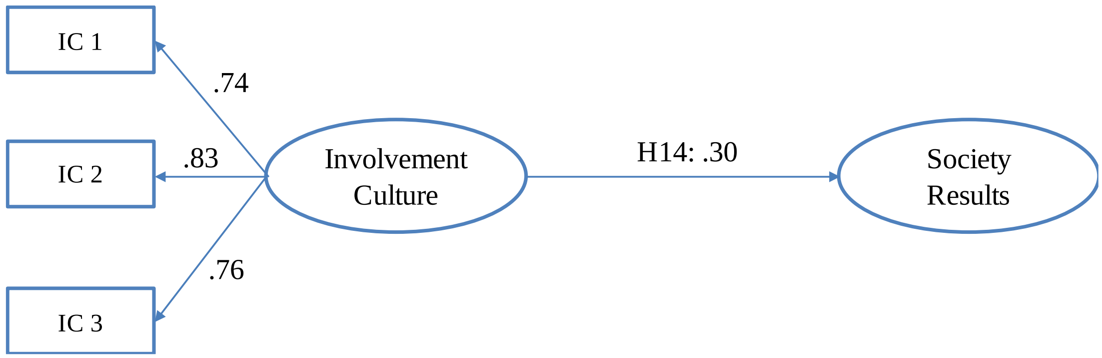

Figure 23 – Involvement Culture and Society Results

H15: Consistency culture is positively related to society results. Figure 24 shows that this relationship is not supported by the research model. It has a very low standardized coefficient value (0.01) and the P value is not significant (0.86).

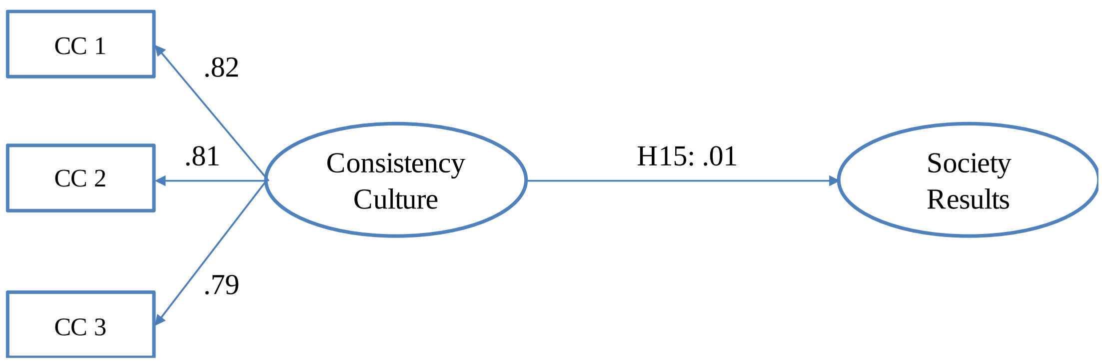

Figure 24 – Consistency Culture and Society Results

H16: The relationship between culture types and society results will vary. Again, as expected, the relationship is different between different culture types and society results. The strongest impact was from mission culture (0.302), followed by involvement (0.300). The adaptability culture and consistency culture had no significant impact (0.05 and 0.01).

H17: Mission culture is positively related to business results. Figure 25 shows that this relationship is supported by the research model, with a standardized coefficient of 0.22, significant at the 0.01 level. Mission culture has a significant positive relationship with business results and can explain 22% of the variance. The greatest contribution to this relationship again came from the second element of mission culture (My manager sets ambitious yet achievable goals), which scored 0.81.

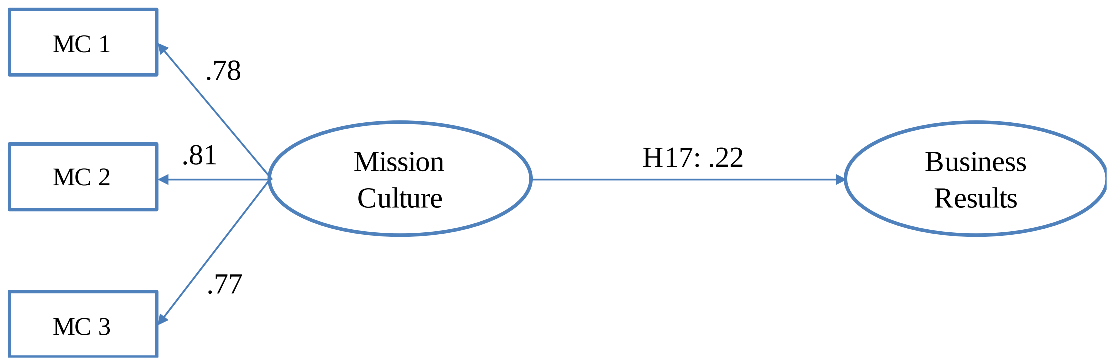

Figure 25 – Mission Culture and Business Results

H18: Adaptability culture is positively related to business results. Figure 26 shows that this relationship is supported by the research model. Its standardized coefficient was 0.33, and it is significant at the 0.01 level. An adaptability culture has significant positive relationship with business results and can explain 33% of the variance. The most important contribution again came from the second element of adaptability culture (I feel encouraged to take risks at work), which scored 0.84.

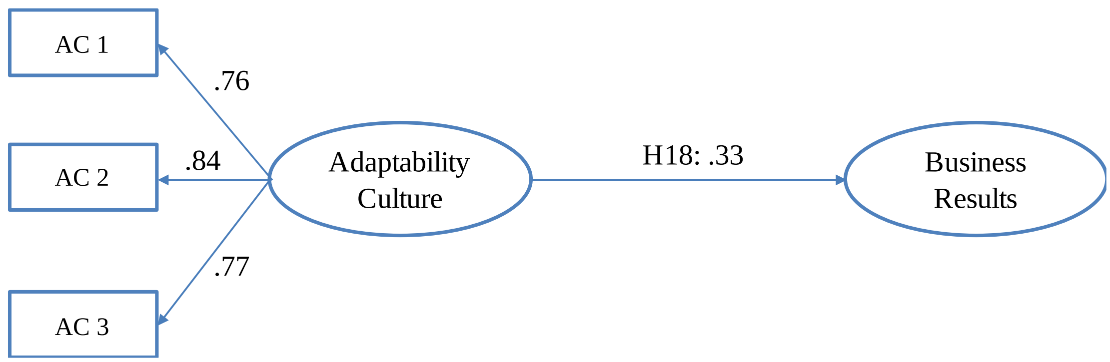

Figure 26 – Adaptability Culture and Business Results

H19: Involvement culture is positively related to business results. Figure 27 shows that this relationship is supported by the research model, with a standardized coefficient of 0.21, significant at the 0.01 level. Involvement culture has a significant positive relationship with business results and can explain 21% of its variance. Again, the biggest contribution was from the second element of involvement culture (I feel like a member of the team), which scored 0.83.

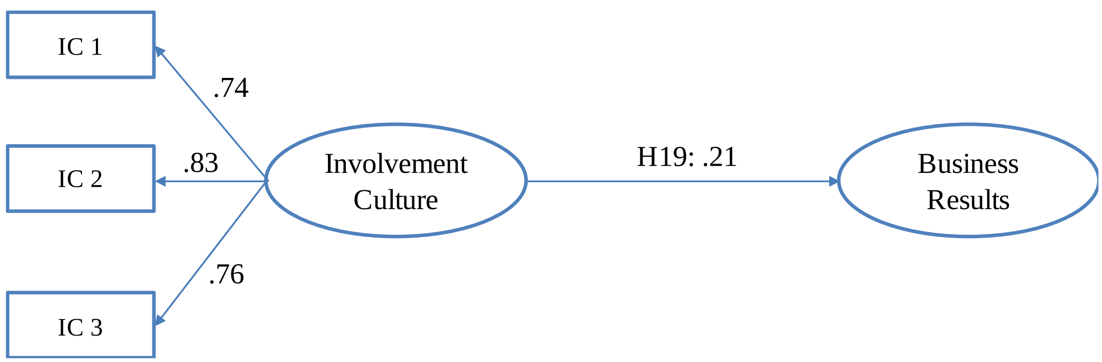

Figure 27 – Involvement Culture and Business Results

H20: Consistency culture is positively related to business results. Figure 28 shows that this relationship is supported by the research model. Its standardized coefficient was 0.21 and it was significant at the 0.01 level. Consistency culture has a significant positive relationship with business results and can explain 21% of the variance. The biggest contribution was again from the first factor (I share common ideas about our organization with employees from different departments), which scored 0.82.

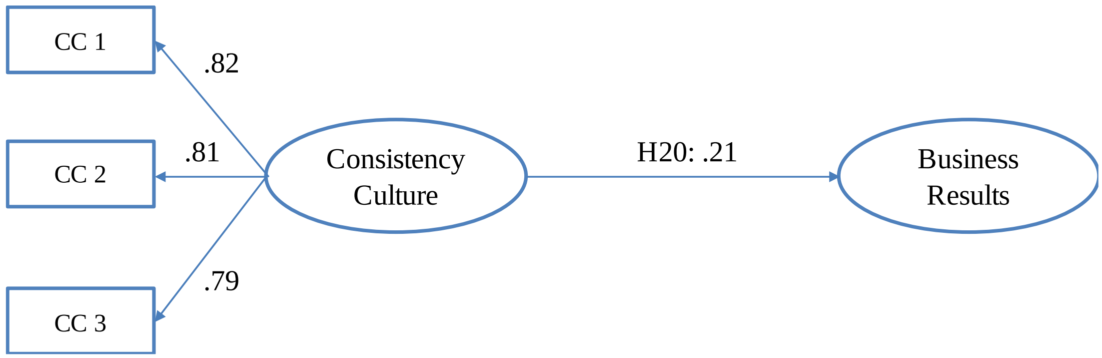

Figure 28 – Consistency Culture and Business Results

H21: The relationship between culture types and business results will vary. The four culture types all have a significant positive relationship with business results, and the standardized coefficients are very similar (mission culture = 0.22, adaptability culture = 0.33, involvement culture = 0.21, and consistency culture = 0.21). The influence of different culture types on business results is therefore relatively balanced.

H22: ICT use moderates the relationship between culture type and customer results. To test the moderating role of ICT use on the relationship between each organizational culture type and customer results, the interaction effect of each culture type was tested separately, by adding the moderation relationships to the global model.

Figure 29 shows that ICT use has a positive moderation effect on the mission culture–customer results relationship. The relationship between ICT use and customer results was not significant (p value = 0.927). The relationship between (mission culture * ICT use) and customer results was significant at the 0.001 level, as was the relationship between mission culture and customer results, which indicates partial moderation.

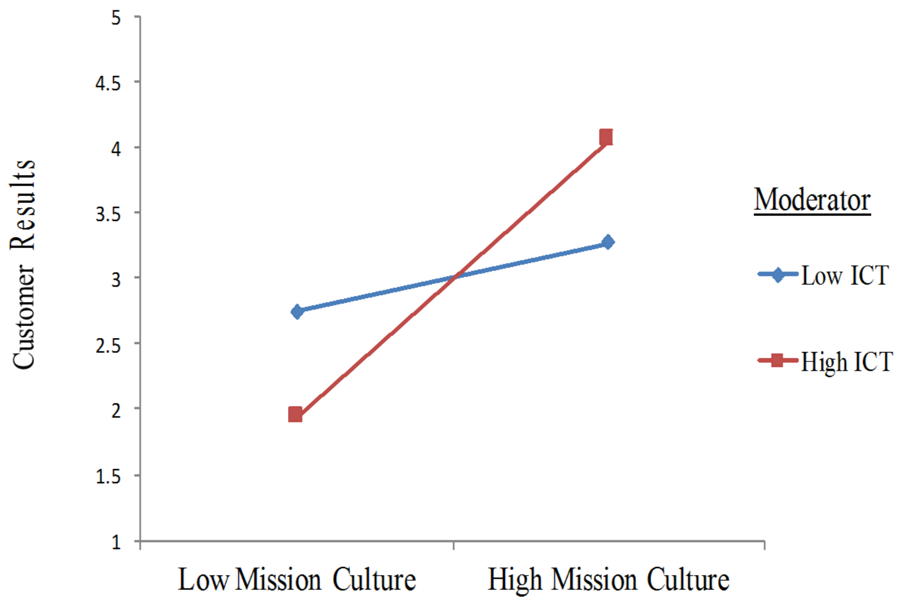

Figure 29 – ICT Moderation Effect (Mission Culture – Customer Results)

Figure 30 shows that ICT use has a positive moderation effect on the adaptability culture–customer results relationship. The relationship between ICT use and customer results was not significant (*p* value = 0.962). The relationship between (adaptability culture * ICT use) and customer results was significant at the 0.001 level, as was the relationship between adaptability culture and customer results. This indicates partial moderation.

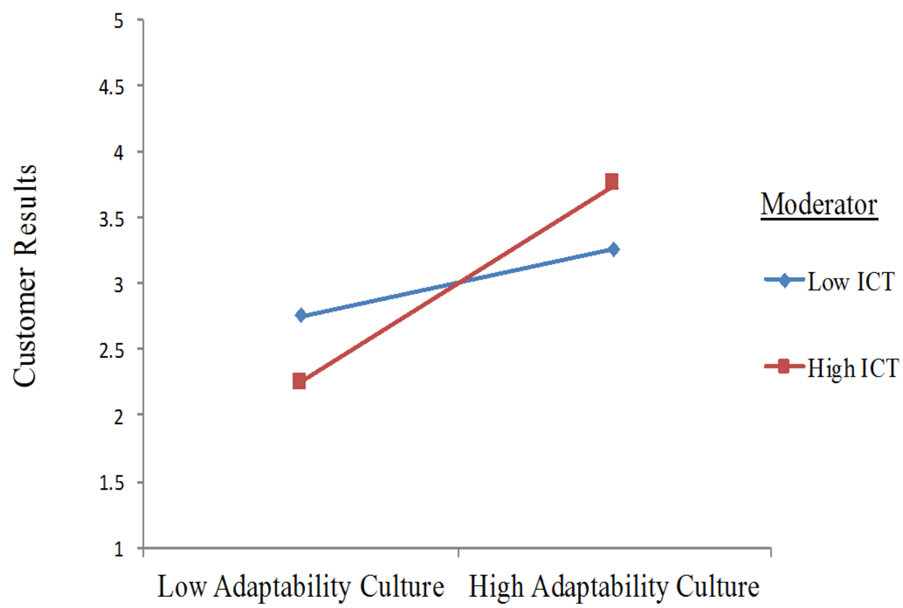

Figure 30 – ICT Moderation Effect (Adaptability Culture – Customer Results)

Figure 31 shows that ICT use has a positive moderation effect on the involvement culture–customer results relationship. As before, the relationship between ICT use and customer results was not significant (*p* value = 0.815), but both the relationship between (involvement culture * ICT usage) and customer results, and between involvement culture and customer results was significant at the 0.001 level, indicating partial moderation.

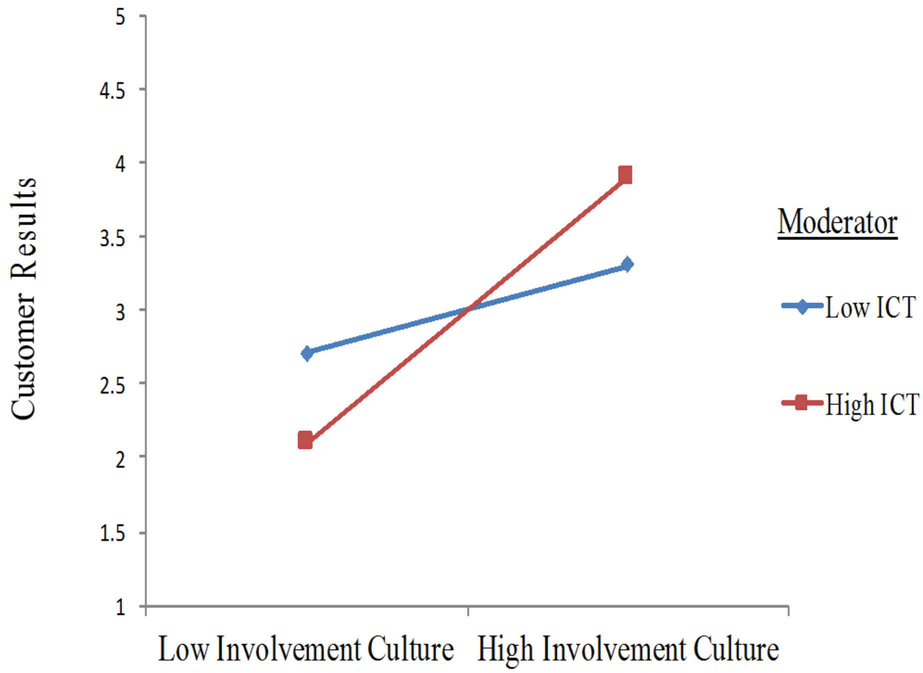

Figure 31 – ICT Moderation Effect (Involvement Culture – Customer Results)

Figure 32 shows that ICT use has a positive moderation effect on the consistency culture–customer results relationship. Again, the relationship between ICT use and customer results was not significant (*p* value = 0.834), and the relationships between (consistency culture * ICT usage) and customer results, and between consistency culture and customer results was significant at the 0.001 level, indicating partial moderation.

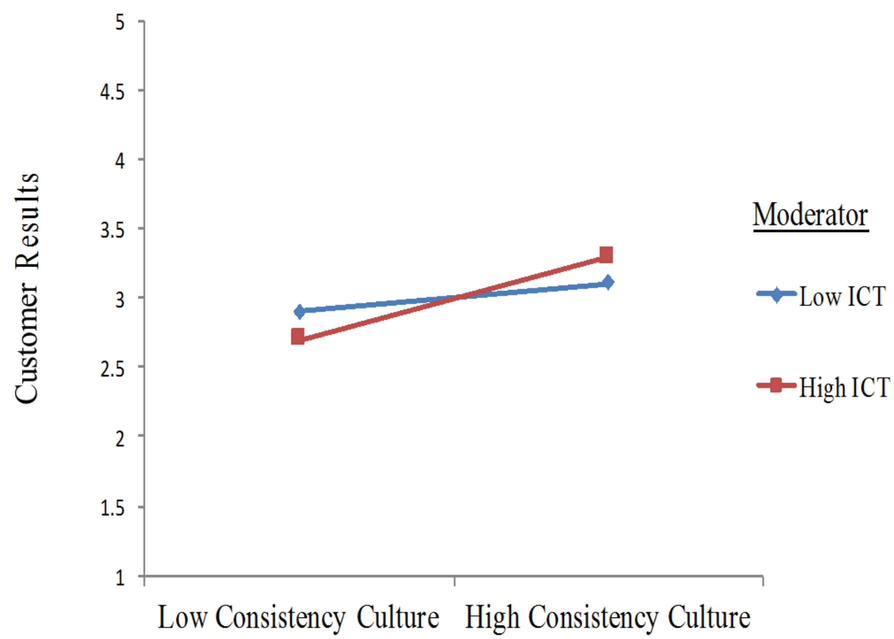

Figure 32 – ICT Moderation Effect (Consistency Culture – Customer Results)

These results show that ICT use moderates the relationship between organizational culture type and customer results.

H23: ICT use moderates the relationship between organizational culture types and people results. Again, the interaction effect of each culture type was tested separately by adding the moderation relationships to the global model. Figure 33 shows that ICT use has a positive moderation effect on the mission culture–people results relationship. The relationship between ICT use and people results was not significant (*p* value = 0.297), the relationship between (mission culture * ICT use) and people results was significant at the 0.01 level, and the relationship between mission culture and people results was significant at the 0.05 level. Together, this indicates partial moderation of the relationship.

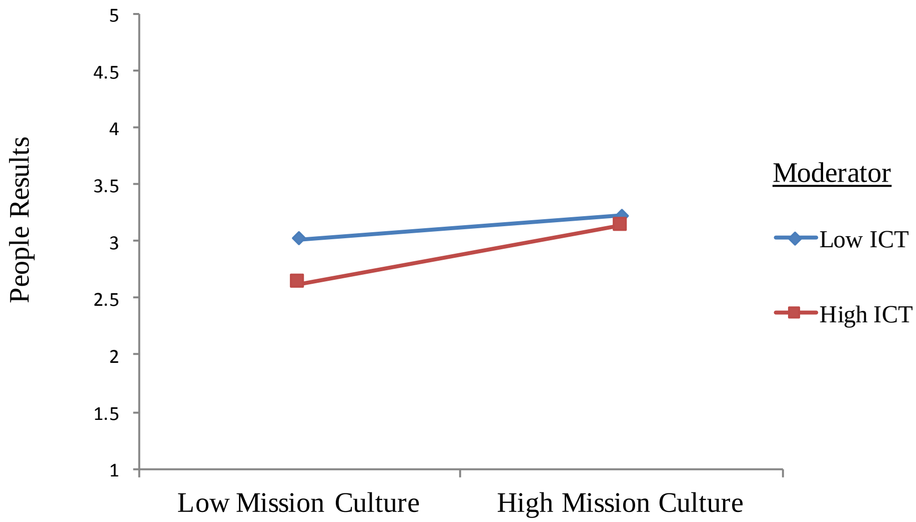

Figure 33 – ICT Moderation Effect (Mission Culture – People Results)

Figure 34 shows that ICT use also has a positive moderation effect on the adaptability culture–people results relationship. The relationship between ICT use and people results was not significant (*p* value = 0.305), the relationship between (adaptability culture * ICT use) and people results was significant at the 0.01 level, and the relationship between adaptability culture and people results was not significant (*p* value = 0.224). This indicates full moderation of the relationship.

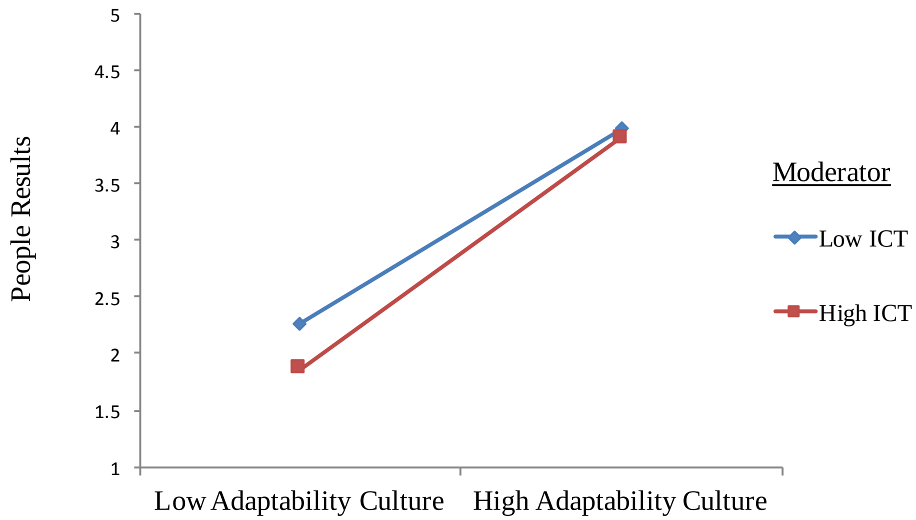

Figure 34 – ICT Moderation Effect (Adaptability Culture – People Results)

Figure 35 shows that ICT use has a positive moderation effect on the involvement culture–people results relationship. The relationship between ICT use and people results was not significant (*p* value = 0.315), but both other relationships were significant, that between (involvement culture * ICT use) and people results at the 0.01 level, and that between adaptability culture and people results at the 0.001 level. Again, this indicates partial moderation.

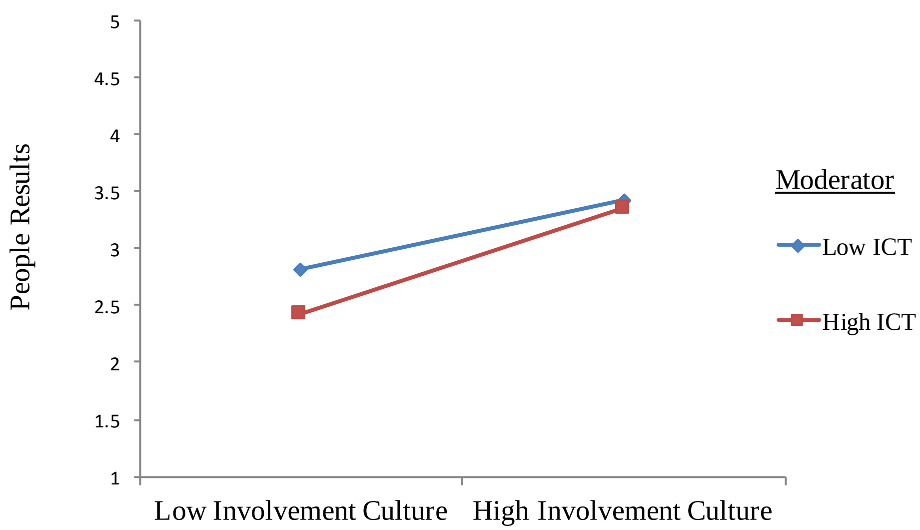

Figure 35 – ICT Moderation Effect (Involvement Culture – People Results)

Figure 36 shows that ICT use has a positive moderation effect on the consistency culture–people results relationship. The relationship between ICT use and people results was not significant (p value = 0.333), the relationship between (consistency culture * ICT use) and people results was significant at the 0.01 level, and the relationship between consistency culture and people results was significant at the 0.05 level, indicating partial moderation.

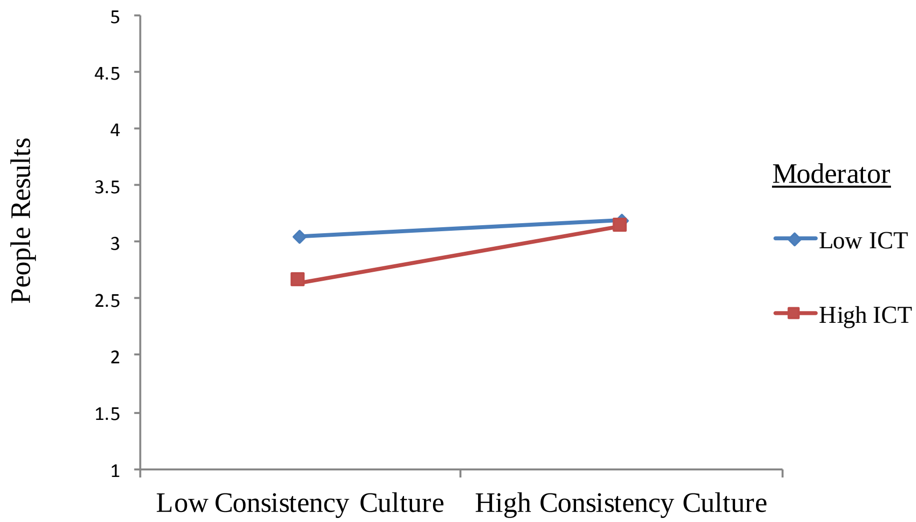

Figure 36 – ICT Moderation Effect (Consistency Culture – People Results)

These results show that ICT use moderates the relationships between individual organizational culture type and people results.

H24: ICT use moderates the relationship between organizational culture types and society results. Again, the interaction effect of each culture type was tested separately by adding the moderation relationships to the global model. Figure 37 shows that ICT use has no positive moderation effect on the mission culture–society results relationship. The relationships between ICT use and society results and between (mission culture * ICT use) and society results were not significant (*p* values = 0.822 and 0.865). The relationship between mission culture and society results was significant at the 0.05 level. This indicates that there was no moderation effect.

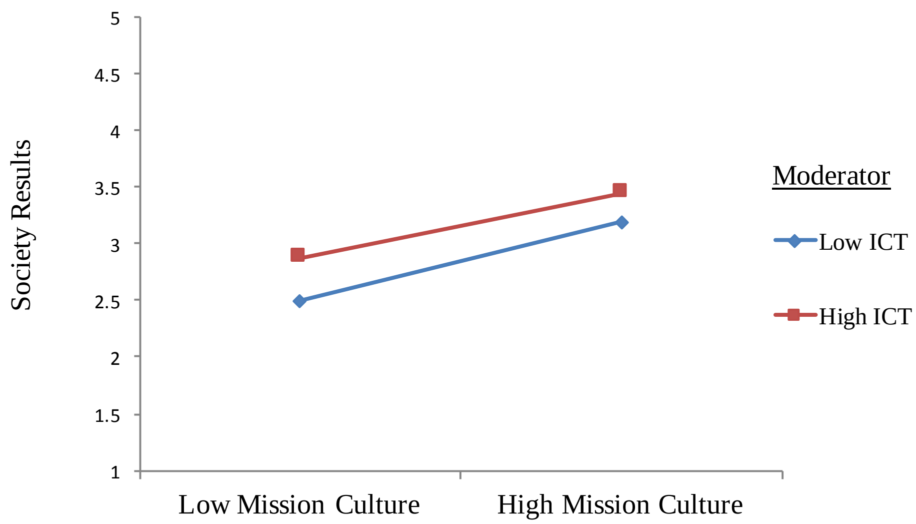

Figure 37 – ICT Moderation Effect (Mission Culture – Society Results)

Figure 38 shows that ICT use also has no positive moderation effect on the adaptability culture–society results relationship. Again, the relationships between ICT use and society results and between (adaptability culture * ICT use) and society results were not significant (*p* value = 0.274 and 0.290), and neither was the relationship between adaptability culture and society results (*p* value = 0.221).

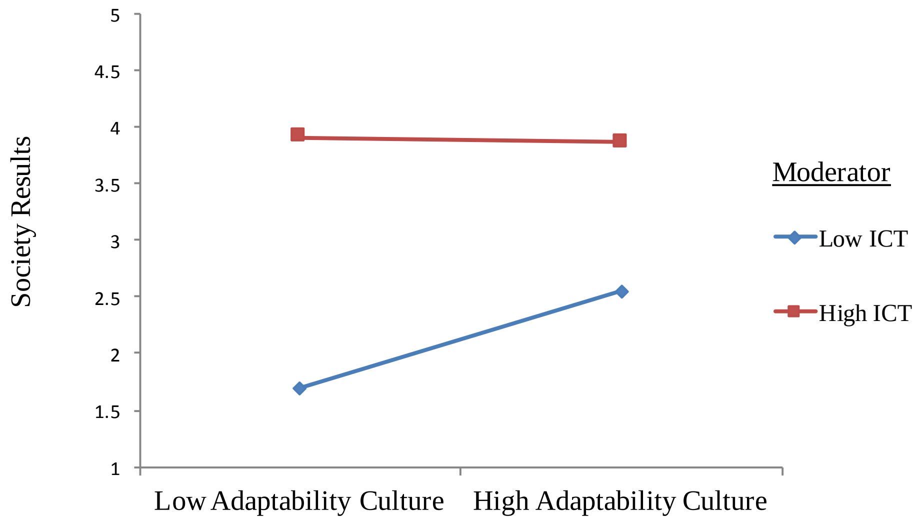

Figure 38 – ICT Moderation Effect (Adaptability Culture – Society Results)

Figure 39 shows that ICT use also has no positive moderation effect on the involvement culture–society results relationship. Again, all three relationships were not significant (*p* values = 0.519, 0.468 and 0.064), which indicates that there was no moderation effect.

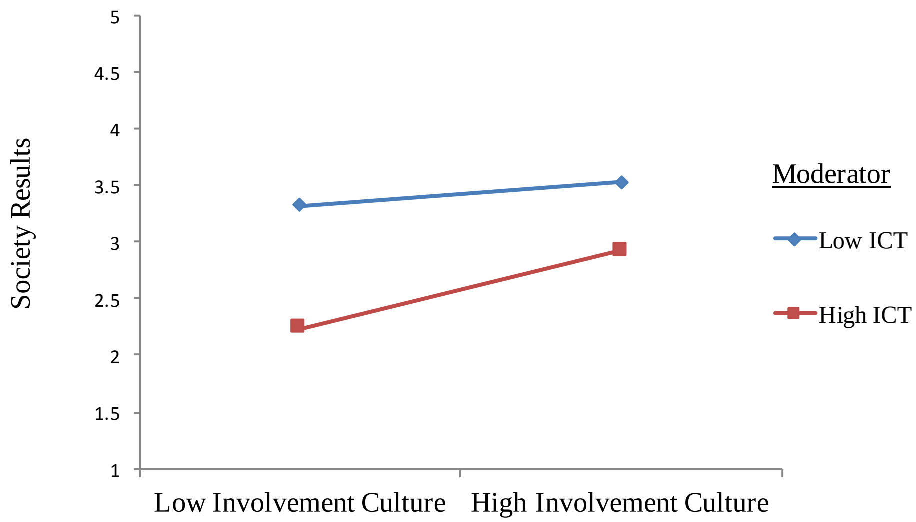

Figure 39 – ICT Moderation Effect (Involvement Culture – Society Results)

Figure 40 shows that ICT use had no moderation effect on the consistency culture–society results relationship. The relationship between ICT usage and society results was not significant (*p* value = 0.993), and neither were the relationships between (consistency culture * ICT use) and society results (*p* value = 0.945) and consistency culture and society results (*p* value = 0.969). Together, this indicates no moderation effect.

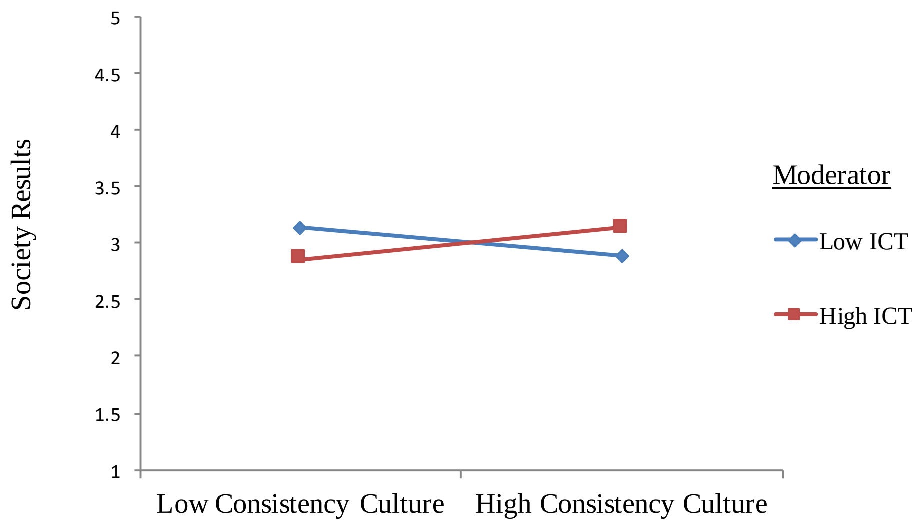

Figure 40 – ICT Moderation Effect (Consistency Culture – Society Results)

These results show that ICT use does not moderate the relationships between each type of organizational culture and society results.

H25: ICT use moderates the relationships between organizational culture types and business results. Again, the interaction effect of each culture type was tested separately by adding the moderation relationships to the global model. Figure 41 shows that ICT use had a positive moderation effect on the mission culture–business results relationship. The relationship between ICT use and business results was not significant (*p* value = 0.147), the relationship between (mission culture * ICT use) and business results was significant at the 0.01 level, and the relationship between mission culture and business results was significant at the 0.05 level. This indicates a partial moderation effect.

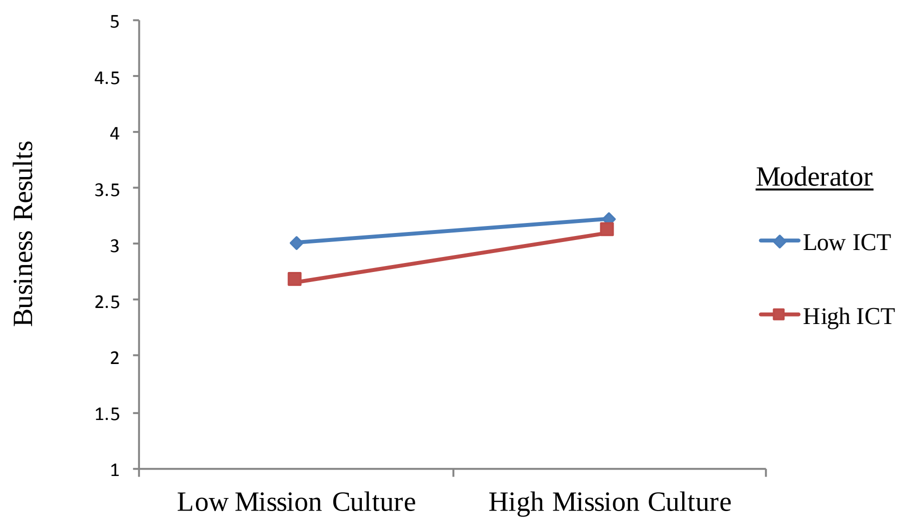

Figure 41 – ICT Moderation Effect (Mission Culture – Business Results)

Figure 42 shows that ICT use has a positive moderation effect on the adaptability culture–business results relationship. The relationship between ICT use and business results was not significant (*p* value = 0.156), the relationship between (adaptability culture * ICT use) and business results was significant at the 0.01 level, and the relationship between adaptability culture and business results was significant at the 0.001 level. This indicates a partial moderation effect.

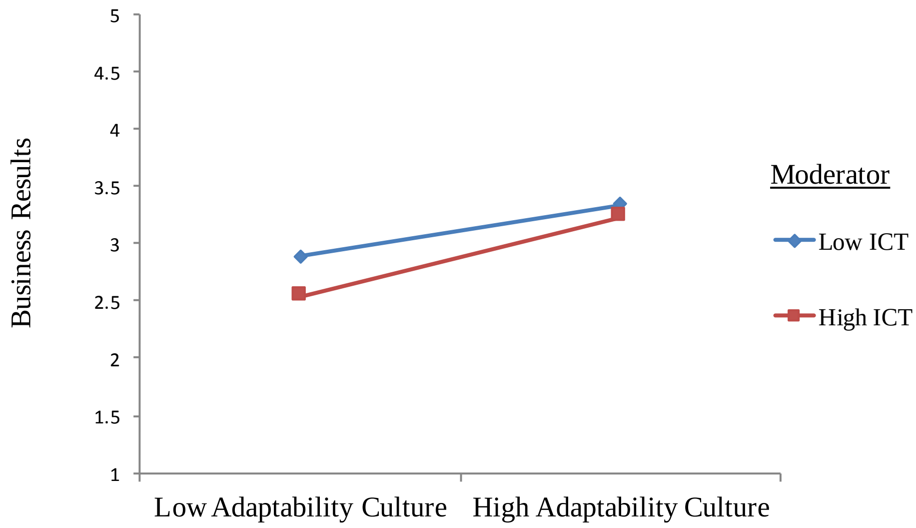

Figure 42 – ICT Moderation Effect (Adaptability Culture – Business Results)

Figure 43 shows that ICT use has a positive moderation effect on the involvement culture–business results relationship. The relationship between ICT use and business results was not significant (*p* value = 0.135), and the relationships between (involvement culture * ICT use) and business results, and between involvement culture and business results, were both significant at the 0.01 level, showing a partial moderation effect.

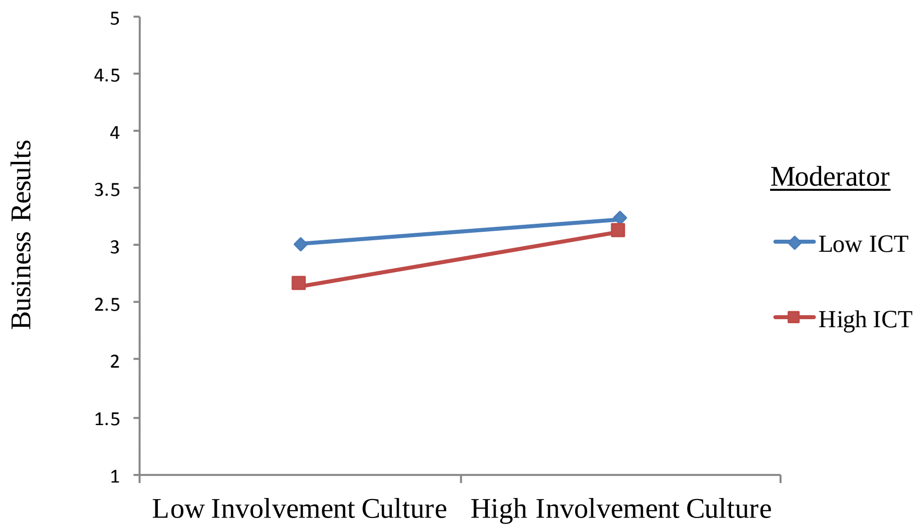

Figure 43 – ICT Moderation Effect (Involvement Culture – Business Results)

ICT use also has a positive moderation effect on the consistency culture–business results relationship (Figure 44). The relationship between ICT use and business results was not significant (p value = 0.161), and the relationships between (consistency culture * ICT use) and business results, and between consistency culture and business results, were significant at the 0.05 level, again showing a partial moderation effect.

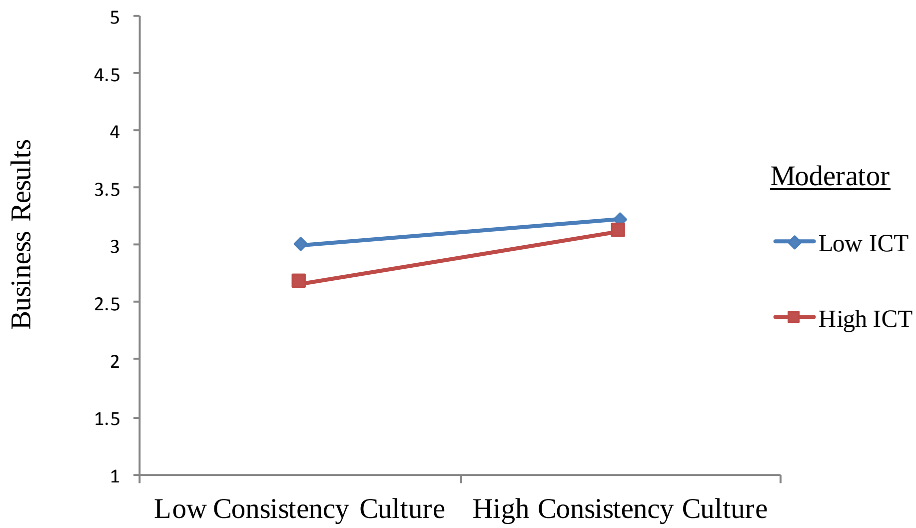

Figure 44 – ICT Moderation Effect (Consistency Culture – Business Results)

Table 10 summarizes the results and conclusions of the hypothesis testing.

Table 10 – Summary of hypothesis testing

Hypo. No.	**Description**	**Type of Relationship**	**Result**
H_1	There is a significant relationship between organizational culture and business excellence.	+	Supported

H_2	A mission culture has a significant positive relationship with customer results.	+	Supported
H_3	An adaptability culture has a significant positive relationship with customer results.	+	Supported
H_4	An involvement culture has a significant positive relationship with customer results.	+	Supported
H_5	A consistency culture has a significant positive relationship with customer results.	None	Not supported
H_6	The relationships between culture types and customer results will vary. Adaptability will have the strongest impact, followed by mission, involvement, and then consistency	+	Supported
H_7	A mission culture has a significant positive relationship with people results.	+	Supported
H_8	An adaptability culture has a significant positive relationship with people results.	+	Supported
H_9	An involvement culture has a significant positive relationship with people results.	+	Supported
H_{10}	A consistency culture has a significant positive relationship with people results	+	Supported
H_{11}	The relationships between culture types and people results will vary. Involvement will have the strongest impact, followed by consistency, mission, and then adaptability.	+	Supported
H_{12}	A mission culture has a significant positive relationship with results.	+	Supported
H_{13}	An adaptability culture has a significant positive relationship with society results.	None	Not supported
H_{14}	An involvement culture has a significant positive relationship with society results.	+	Supported
H_{15}	A consistency culture has a significant positive relationship with society results	None	Not supported
H_{16}	The relationships between culture types and society results will vary. Mission will have the strongest impact, followed by involvement, adaptability, and then consistency	+	Supported
H_{17}	A mission culture has a significant positive relationship with business results.	+	Supported
H_{18}	An adaptability culture has a significant positive relationship with business results.	+	Supported
H_{19}	An involvement culture has a significant positive relationship with business results.	+	Supported
H_{20}	A consistency culture has a significant positive relationship with business results.	+	Supported
H_{21}	A balanced organizational culture has a significant positive relationship with business results	+	Supported

H_{22}	ICT moderates the relationships between organizational culture types and customer results	+	Partial moderation
H_{23}	ICT moderates the relationships between organizational culture types and people results	+	Partial moderation
H_{24}	ICT moderates the relationships between organizational culture types and society results	None	No moderation
H_{25}	ICT moderates the relationships between organizational culture types and business results	+	Partial moderation

5.8 Summary

This chapter has set out how multivariate analysis and structural equation modeling were used as an advanced statistical technique to test the research hypotheses. The results showed that most hypotheses were supported. Three types of organizational culture were found to have a significant positive relationship with excellent customer results. The adaptability and involvement cultures had the strongest influence, followed by mission culture. The consistency culture had no significant relationship with customer results. The four types of organizational culture all had a positive relationship with excellent people results, with the involvement culture having the biggest influence, followed by consistency, mission, and finally adaptability culture.

Only two organizational culture types had a significant positive relationship with excellent society results. The mission and involvement cultures were significantly related, but the adaptability and consistency cultures were not. The data analysis findings supported the hypothesis that a balanced organizational culture would have a positive relationship with excellent business results.

ICT use was found to moderate the relationship between organizational culture and customer, people, and business results, but not between organizational culture and society results.

Chapter 6: Discussion

6.1 Introduction

This chapter aims to discuss the data analysis results and relate them to previous studies. Some tentative proposals and arguments are put forward, justified within the UAE context. The discussion is split into five sections. The first section covers the relationship between organizational culture types and customer results, the second the relationship between culture types and people results, the third society results, the fourth business results, and the final section the moderating role of ICT use on the relationships between organizational culture types and each business excellence criterion.

6.2 Organizational Culture and Customer Results

The results show that there is a significant relationship between organizational culture and business excellence. This is consistent with the conclusion drawn by Bolboli and Reiche (2013) that organizational culture is crucial to sustained organizational excellence. The findings also support previous research that found that some organizational culture types can ease the successful implementation of business excellence (Kujala & Lillrank, 2004; Metri, 2005).

Three of the four organizational culture types were positively related to customer results. Aydin and Ceylan (2011) concluded that organizational culture is positively correlated with customer orientation, which is essential to achieving positive customer results. Having more than one culture type correlated with excellent customer results is supported by the literature. Conrad et al. (1997) found that a balance of different culture types (a robust culture) had a positive association with customer satisfaction.

Different organizational culture types had different effects on customer results. The adaptability culture had the biggest effect on customer results, which is consistent with previous findings (Gillespie et al., 2008). By comparing the different attributes of an adaptability culture, organizational learning was found to make the biggest contribution to this relationship; encouraging employees to take risks at work and try new things should help to provide better services and increase customer satisfaction. Sponsoring innovation and finding new ways to work was also positively associated with achieving excellent customer results. The ability to identify customer needs accurately and create and implement changes that respond to these needs have a positive role in achieving good customer results. This effect of the adaptability culture is logical, because of its external focus.

The involvement culture also had a significant positive relationship with customer results. This culture type focuses on building team work among employees and empowering them to do their work, and this finding suggests that involvement activities lead employees to be more satisfied and do a better job, thus providing better services to customers, and in turn improving customer satisfaction and related customer results. The adaptability and involvement cultures explain more than 50% of the changes in customer results.

The mission culture also had a positive relationship with customer results. Organizations that set a clear mission and build solid goals and objectives and share these with their employees to guarantee a common understanding will be in a better position to achieve high customer satisfaction. Company goals should be both long and short term and also realistic, because unrealistic goals will drain company resources and will limit ability to deliver promises to customers. Conrad et al. (1997) found that managers are more customer-focused when they have a clear strategic direction.

The consistency culture had no significant relationship with customer results. The consistency culture implies a high level of coordination across departments, and that employees share common perspectives and have the ability to reach consensus in difficult situations. The internal focus of the consistency culture, plus its stable nature, may limit its effect on customer results. The defensive national culture style in the UAE (Klein et al., 2009) may also affect employee behaviors and push them towards consistency and being less sensitive to customer needs and changing requirements.

6.3 Organizational Culture and People Results

Unlike customer results, employee results were most closely related to the involvement culture, a finding consistent with previous studies, especially on the relationship between the indices of the involvement culture and employee satisfaction, as the most important factor in employee results. Reddy et al. (2013) found that staff satisfaction is strongly related to involving and empowering employees. Another study found that providing effective training and development opportunities will increase job satisfaction among employees (Noor & Jamil, 2014). The practices within the involvement culture that most affected employee satisfaction were a team spirit and team working. When employees work within a team, they feel protected and supported, which increases their satisfaction. If companies want to improve employee results and increase satisfaction they should focus on three areas. Firstly, they should empower employees and involve them in decision-making, providing the right information at the right time. Secondly, they should encourage team work and cross-departmental collaboration, and support horizontal management instead of hierarchical control. Thirdly, they should focus on skills development.

The consistency culture was also significantly related to excellent people results. This finding was expected, given the internal focus of this culture type’s attributes. Previous studies have found that consistency among employees increases satisfaction and that conflicts have harmful effects on employee morale (Mukhtar, 2013). Companies can increase employee satisfaction by strengthening the consistency culture by increasing coordination across business units and agreeing organizational goals and core values. Having consensus about corporate core values is a predictor for job satisfaction (Kumar, 2012).

Setting a clear strategic plan and objectives, as indices for the mission culture, had a positive relationship with people results. This is consistent with the work of Ángel Calderón Molina et al. (2014), who found that implementing a management performance system to measure strategic achievements had a positive effect on employee satisfaction. Employee agreement with the company’s vision, mission and strategic goals can also increase job satisfaction (Testa, 1999). Strategic planning practices in specific areas within organizations has been suggested as a factor in employee satisfaction (Kashfi et al., 2015).

The adaptability culture had a weak positive relationship with employee satisfaction, less than other culture types. That reflects the two themes in the literature. Some studies have found that the adaptability culture has a significant association with job satisfaction, especially through provision of a learning environment (Su-Chao & Ming-Shing, 2007), and enabling an environment of innovation (Belias & Koustelios, 2014). Others have found that companies with a high level of the adaptability culture, particularly those that implement a lot of changes and updates to respond to the external environment, have low levels of employee satisfaction (Rawashdeh et al., 2015).

6.4 Organizational Culture and Society Results

Only two culture types had a significant positive relationship with society results. The mission culture, with its external focus, plays an important role in achieving excellent society results. Strategic planning activities should consider the needs and expectations of different stakeholder groups including society and social partners. Most companies in the UAE consider social aspects in developing strategic plans, and some have a standalone CSR strategy. Satisfying the needs of social partners through proper plans and strategic initiatives will strengthen the company's ability to achieve improved society results. Galbreath (2010) concluded that strategic planning activities are positively related to the successful implementation of CSR. Looking at the elements of the mission culture, setting ambitious and achievable targets had the greatest weight in achieving society results, including the social aspects.

The link between the involvement culture and society results can be better understood if we explore the human contribution to these results. When companies involve employees in corporate activities, and make them feel emotionally attached to the company's targets and strategic initiatives, employees will be more likely to contribute to the company's activities internally and externally. This contribution can be articulated as participation in social events, charities and not-for-profit activities. Employees working in a company with an involvement culture will therefore be more supportive of the corporate social contribution, leading to better society results.

In contrast, the adaptability culture was not related to society results. This finding is contradictory to the conclusions of some previous studies, perhaps because many companies in the UAE are relatively new, and were established after the oil revolution in the Gulf region. The adaptability culture indices, such as fostering innovation and enhancing organizational learning and focusing on creating change, may therefore be concentrated on building internal capabilities and increasing profitability and efficiency in these companies, rather than improving their social contribution. The consistency culture was also found to be unrelated to society results. This is probably because of the internal focus of the consistency culture indices, since this culture emphasizes building agreement among employees and consensus on organizational values, which are not directly linked to social activities.

6.5 Organizational Culture and Business Results

This study found that the four culture types all had a positive relationship with excellent business results. Business results in the business excellence model refer to the strategic and operational performance of the company and cover both financial and non-financial performance. The findings support a strong theme in the literature that suggests that a balanced and strong organizational culture is essential for high performance. The four types of organizational culture in the Denison model have previously been found to be valid criteria for high-performing organizations (D. Denison, Hooijberg, Lane, & Lief, 2012; Daniel R. Denison, Haaland, & Goelzer, 2004; Fey & Denison, 2003).

The results of this study suggest that the Denison culture types and indices are applicable to top performing organizations in the UAE. This complements the previously-established relationships between a balanced organizational culture (mission, adaptability, involvement, and consistency) and organizational performance in many other countries (D. Denison et al., 2012; Daniel R. Denison, Hart, & Kahn, 1996; Daniel R. Denison & Mishra, 1995).

In this study, the mission culture had a positive relationship with customer results. There have been similar findings previously in the SME sector (Sandada et al., 2014). Gelard and Saeedi (2015) reported that some mission culture practices, including strategic orientation, are positively associated with high organizational performance in the banking sector.

Learning organizations can improve the way they do business and find new ways to improve efficiency, elevating their level of performance. Innovation will enable companies to deliver new products and services or provide them in different ways, both of which will increase the level of performance. Previous studies found a positive correlation between managing changes and organizational learning, and company performance (Babaei & Ghafari, 2016; Ratna et al., 2014).

The association between the involvement culture and business results indicates that empowering employees will enable them to do a better job and achieve more. This will support organizational achievements and may have a positive impact on overall company performance. This also applies to encouraging team work and building employee skills and capabilities. Yusoff et al. (2016) concluded that staff empowerment positively affected organizational performance.

The results of this study showed that the consistency culture has a positive relationship with business results. This finding is logical because elements of consistency culture such as agreement among employees, good cooperation, and consensus on core organizational values will create harmony that will increase productivity and improve performance. This is consistent with previous studies; Podsakoof et al. (2000), for example, stated that creating agreement between employees will enhance performance on an individual and organizational level, and Jin and Drozdenko (2010) reported that companies with common core values among employees had better levels of performance.

Some organizational culture types were found to have significant positive relationships with customer results, people results, and society results, and association between each type of organizational culture and each results criterion varied. The four culture types are, however, related to business results in a balanced way. This is in line with the concept behind business excellence, suggesting that for excellence, companies need to achieve across all the business excellence criteria.

6.6 The Moderation Role of ICT

This study found that ICT use moderates the relationships between some organizational culture types and most of the business excellence results criteria. Some researchers have previously suggested that some organizational culture types support ICT use (Lopez-nicolas & Meroño-cerdán, 2009; Welch & Feeney, 2014). The conclusion of this study provides a new insight on the relationships between ICT use, business excellence, and organizational culture, and therefore adds to the findings of previous studies. National culture often has an association with ICT use , particularly the uncertainty avoidance and power distance elements (Erumban & de Jong, 2006). The UAE’s national culture scores high for both those attributes (G. Hofstede, 1980), which may encourage use of ICT.

The use of ICT tools was found to partially moderate the relationships between the four organizational culture types and customer results. Using ICT is therefore going to strengthen these relationships. Using effective ICT tools will help companies to increase customer satisfaction. This may be by mechanisms such as using technology to communicate more effectively with customers, through electronic call centers and online complaints facilities. Adopting these tools will also help companies to change and so build a stronger adaptability culture, using feedback information as an input to strategy and decisions on future direction. That will help to strengthen the mission culture too. Companies may also use ICT tools to provide better customer services, including e-services through the company’s websites or smartphone apps.

The results also showed that ICT moderates the relationships between the four organizational culture types and people results. The moderation is partial for mission, involvement and consistency cultures, and full for adaptability culture. This suggests that using ICT tools to improve communication between employees, including telephone, email and video conferencing, will help to build stronger interactions among staff, and enable the company to implement internal plans efficiently, creating the right organizational culture. Adopting ICT will help to enhance team work, collaboration among employees, employee skills, communicating core values, creating change, and sharing goals and objectives. This is supported by the literature, where use of ICT often has either a direct (Bellary et al., 2015; Webster-Trotman, 2010) or indirect positive impact on job satisfaction (Limbu et al., 2014).

In contrast, ICT use was not found to moderate the relationship between organizational culture types and society results. This may be because companies in the UAE tend to use ICT to provide better services, take care of their customers and enable employees to communicate more effectively, rather than to improve CSR. The concept of CSR is still relatively new to the UAE, which may be why there are few mature and structured CSR practices among local companies to affect the optimal use of ICT tools in this domain.

ICT use also partially moderated the relationship between the four culture types and business results, which means using ICT tools will strengthen this relationship. These findings are consistent with previous studies about the relationship between ICT use and corporate performance. In some industries, ICT is crucial for business success and even required to achieve good results (Peña et al., 2011). Using ICT tools has been found to improve not only firm performance but also team performance, especially in virtual environments (Timmerman & Scott, 2006). This finding suggests that using ICT tools such as email, websites, and internal portals will help to communicate organizational goals and objectives, increasing the chances of successful implementation of initiatives and improving business results. Social media tools and video conferences will also help companies to become aware of changes in the external environment, increasing innovation, and again improving performance. Internally, using appropriate ICT tools will help to involve and empower employees and create a consistent culture built on a common understanding of the organization's strategic direction. This will unify employee efforts towards improved performance.

6.7 Summary

This section has highlighted the importance of organizational culture in achieving business excellence, and explored the relationships between different organizational culture types and business excellence criteria. Most of the findings are consistent with previous studies, although a few results were contradictory, such as the significance of the relationship between consistency culture and customer results, and between adaptability and consistency cultures and society results. Justification was provided for these findings by setting out the UAE context of this study. Some results provided new contributions and insights, especially the moderation role of ICT use on the relationships between organizational culture and business excellence. ICT use was found to strengthen this association in most cases.

Chapter 7: Implications, Limitations, and Future Research

7.1 Introduction

This chapter aims to explain the different implications of the research results, including theoretical implications, and how the findings contribute to the body of knowledge, and the practical implications for managers and decision-makers in organizations. These include how they could use the research findings to achieve better results in customer, employee, society, and overall performance areas by developing the right types of organizational culture and using the right ICT tools.

This chapter also sets out the research limitations and provides recommendations for future research, based on the findings and experience from this study.

7.2 Implications

This research has several implications at both theoretical and practical levels.

7.2.1 Theoretical Implications. This research had clear theoretical implications. As far as is known, no previous studies have examined the relationship between organizational culture and the four results criteria of business excellence, together with the moderating effect of ICT use. Most previous studies have focused only on the relationship between organizational culture and financial and non-financial performance, and none have been conducted in the UAE. A few previous studies have examined the relationships between one or more index of organizational culture type and one of the excellence results criteria, but dealt with those indices as standalone constructs and not part of an overall construct of organizational culture. This study considered business excellence criteria from a wider perspective than other studies. For example, customer results were considered in this study as the results of customer satisfaction and other internal customer-related KPIs used by companies to manage their customer services and related strategies. Many previous studies dealt with customer results from a customer satisfaction perspective only.

The results of this research also expand the body of knowledge about the influence of organizational culture, by showing that organizational culture types are differently related to business excellence criteria. For example, the adaptability, involvement, and mission cultures are positively related to customer results, but the relationships have different strengths, while the consistency culture has no relationship at all with customer results. The four organizational culture types are also related to employee results with different intensities, and society results are influenced only by the mission and involvement cultures. The study also proved that ICT use has a moderating role on the relationships between organizational culture and business excellence. Finally, the results confirmed the findings of the previous studies that a robust and balanced culture has a positive relationship with business performance.

7.2.2 Practical Implications. Companies can use these research findings to improve their overall performance. This may be by building a balanced and robust organizational culture. It is crucial for companies to start by assessing the existing organizational culture and then make improvements designed to achieve a more balanced status. To encourage particular organizational culture types, companies should pay attention to the underlying indices and attributes for that culture type. It takes time to change culture, and managers should be patient and plan improvement actions carefully, with regular follow up to make sure of the implementation process.

Managers can use the research findings to improve customer satisfaction and the results of other KPIs related to customers. To do so, they should work on three particular types of organizational culture (adaptability, involvement, and mission cultures). When considering what actions to take, priority should be given to the significance of the relationship with good customer results. Managers should start by thinking about the right mechanism to read and understand the signals from the external environment, for example, through regular market research, participating in professional networks and specialized conferences, or building a network of partnerships, and use that to improve the company's learning and innovation capabilities. Current and future customer needs and expectations should be at the heart of these activities. Managers should take action to encourage team working and a feeling of shared responsibility, and ensure all employees are working towards the same overall goals and objectives. Managers should also make sure that the company has a clear mission and purpose, and do as much as possible to influence the attitude of competitors and introduce new market practices.

Companies may also use the results to improve employee satisfaction and other KPIs related to people results. To do so, managers should take action to improve all four types of organizational culture. Priority should be given to involvement culture-related indices, for example, by authorizing employees to use their initiative and also involving them in decision-making and planning processes. Managers should improve consistency between employees by encouraging sections and departments to work together on shared tasks, reduce organizational politics to the minimum, and enhance problem-solving skills and consensus-building capabilities among employees. This should be based on clear and shared organizational values. Managers should actively work to set clear and ambitious goals and objectives for the organization and use regular performance measurement to check achievements. They should encourage employees to find new ways to do their work and make positive changes.

The social contributions and CSR strategy can be improved by a focus on improving the mission and involvement cultures. Priority should be given to setting a long-term vision for the company so that it is clear to employees what the company wants to achieve in the future. The concepts underlying social responsibility should be embedded in the company's future vision and translated into short term actions and projects. Managers should delegate responsibilities to employees to develop their skills, and provide other resources where necessary to improve capabilities. More awareness of social standards such as health, safety and environmental issues, and the importance of CSR, is also important.

The research findings can also be used to improve practice within companies. Organizational culture can be improved and aligned based on a business excellence assessment outcome, whether from self-assessment or as part of participation in a quality and excellence award. Managers can analyze and compare the scores for each business excellence results criterion and identify areas for improvement. The findings from this study may help them to draft an improvement plan, including how to develop the right type of organizational culture.

Finally, managers can use ICT tools to amplify the impact of planned organizational culture improvements. The research findings suggest that this would be beneficial when the intention is to improve customer satisfaction, employee satisfaction, and business results. For example, investment is recommended in automating call centers, staff suggestion and customer complaints management processes, and offer more channels for communication with customers, including mobile apps and interactive websites. Further automation, e-services and electronic payments are also recommended. Equally importantly, managers are advised to use technology to improve internal communications, drawing on tools such as smartphones, email, video conferences, internal portals, and e-newsletters to improve employee interactions.

7.3 Limitations

As with any study, this one had a number of limitations. First, it studied only companies that had won the top levels of the SKEA award over the last three cycles, and did not include the winners of any other quality and business excellence awards in the UAE, which may limit the ability to generalize the results. Second, the research design was cross-sectional and so could not capture changes in employee opinions over time. Third, no control variables were included. Fourth, the study used an online self- administered questionnaire to collect data, which required respondents to interpret the questions for themselves, and may have introduced some errors into the data.

7.4 Future Research

This research covered the four types of organizational culture in the Denison model. Future studies may focus on the indices related to each culture type, to provide more contributions to the body of knowledge. The business excellence construct was measured subjectively, using a questionnaire, and future studies may instead use assessment results and scores from excellence awards. These score are usually given by external assessors, so this may help researchers to test the association of organizational culture with business results from a different angle.

The role of ICT use should also be studied in more detail, using the findings of this research as a foundation. The moderating role of ICT use was seen in most of the culture–excellence relationships, so researchers may focus on particular aspects of ICT use, such as the role of social media use in the UAE and how it affects the study variables. This is an important topic, especially given the current focus in the UAE on improving e-government, smart services, and stakeholder satisfaction.

Future studies may expand the range of target companies and include winners of other UAE-based quality and business excellence awards such as the DQA, the Abu Dhabi Award for Excellence in Government Sector, the Mohamad Bin Rashid Government Excellence Award, and the Dubai Government Excellence program. That will produce more generalizable results.

Future researchers may also take actions to avoid the limitations of this study, for example, by including control variables such as the industry sector and company size, adopt a longitudinal technique to capture changes in employee views over time, or add interviews to the data collection process to make sure respondents fully understand the questions and respond consistently.

7.5 Summary

The theoretical implications of this study include a contribution to understanding the relationship between organizational culture types and excellent customer, people, society, and business results. It also shed light on the moderating role of ICT use on these relationships. Managers have been offered clear and specific recommendations on how to change the current organizational culture to suit organizational objectives and fill the gaps in the existing organizational culture.

The limitations of this study were largely related to the cross-sectional study design and the use of online self-administered questionnaires, as well as the limitation on participating companies to SKEA winners. Future studies could address these limitations and also focus on the detailed indices for each organizational culture type and analyze the effect of using specific ICT tools such as social media platforms on the culture–excellence relationships.

Chapter 8: Conclusion

8.1 Introduction

This chapter consists of the study conclusion, references and appendixes. The conclusion recaps the research objectives and provides the answers to the research questions, linking them to the findings of previous studies.

8.2 Conclusion

The main research questions were designed to explore the relationship between the dimensions of organizational culture and the components of business excellence and to see if information and communication technology played a moderating role on these relationships.

The results confirmed that organizational culture is positively related to business excellence. However, these effects are different for different business excellence criterion. Three organizational culture types (adaptability, involvement, and mission) had a significant positive relationship with excellent customer results, but the consistency culture had no relationship. The four types of organizational culture all had a positive relationship with excellent people results. The mission and involvement cultures had a significant association with excellent society results but the adaptability and consistency cultures had no relationship with this area. Business results were positively related to all the four types of organizational culture, and this effect is particularly significant when the four culture types are balanced. ICT use was found to moderate the relationship between organizational culture and customer, people, and business results, but not society results.

These findings are consistent with previous studies. For example, several studies have found that organizational culture is related to business excellence, and supports its implementation (Bolboli & Reiche, 2014; Kujala & Lillrank, 2004; Metri, 2005). Organizational culture types have also been found to be positivity related to customer satisfaction (Aydin & Ceylan, 2011; Conrad et al., 1997). Some organizational culture indices have a positive relationship with employee satisfaction indicators, such as employee involvement and empowerment (Reddy et al., 2013), training and development (Noor & Jamil, 2014), and consensus on core values (Kumar, 2012). Strategic planning, as an attribute of mission culture, was positively related to the successful implementation of CSR (Galbreath, 2010). The four organizational culture types have a positive relationship with organizational performance (D. Denison et al., 2012; Daniel R. Denison et al., 1996; Daniel R. Denison & Mishra, 1995). Finally, ICT use was affected by organizational culture (Lopez-nicolas & Meroño-cerdán, 2009; Welch & Feeney, 2014), associated with national culture (Erumban & de Jong, 2006) and had an indirect impact on job satisfaction (Limbu et al., 2014) and a direct positive influence on firm performance (Peña et al., 2011).

This study has conceptual limitations, particularly that it considered organizational culture as four types, without going into further detail, for example, by structuring the indices underlying each type. The study also has methodological limitations since it is cross-sectional and used self-administered questionnaire, as well as limiting participating companies to the winners of one excellence award. It is, however, a solid foundation upon which to build future research, and makes an effective contribution to the body of knowledge in this area.

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Appendix A: Survey Questions

Demographic Information المعلومات الديموغرافية

Please start to fill in the below demographic information section
يرجى البدء بتعبئة المعلومات الديموغرافية أدناه

1. Gender الجنس

- ◯ Female انثى
- ◯ Male ذكر

2. Nationality الجنسية

- ◯ Local إماراتي
- ◯ Non Local غير إماراتي

3. Age العمر

- ◯ 18 - 24
- ◯ 25 - 29
- ◯ 30 - 39
- ◯ 40 - 49
- ◯ 50 or older ٥٠ او اكثر

4. Education المستوى التعليمي

- ◯ High School ثانوية عامة
- ◯ Diploma دبلوم
- ◯ Bachelor جامعي
- ◯ Master ماجستير
- ◯ Doctorate دكتوراه
- ◯ Other اخر

2

5. Job level المستوى الوظيفي

- ◯ Senior Management إدارة عليا
- ◯ Middle Management إدارة وسطى
- ◯ Supervisory Management إدارة إشرافية
- ◯ Other (please specify) أخرى (يرجى التوضيح)

6. Years of experience with the current employer عدد سنوات الخبرة في المؤسسة الحالية

- ◯ 0 - 4
- ◯ 5 - 9
- ◯ 10 - 14
- ◯ 15 - 19
- ◯ 20 or more ٢٠ أو أكثر

7. Total years of work experience إجمالي عدد سنوات الخبرة المهنية

- ◯ 0 - 4
- ◯ 5 - 9
- ◯ 10 - 14
- ◯ 15 - 19
- ◯ 20 or more ٢٠ أو أكثر

8. Type of organization business نوع نشاط المؤسسة

- ◯ Manufacturing صناعي
- ◯ Service خدمي

9. Organization ownership طبيعة المؤسسة

- ◯ Government حكومية
- ◯ Semi-Government شبه حكومية
- ◯ Private خاصة

3

جائزة الشيخ خليفة للإمتياز
SHEIKH KHALIFA EXCELLENCE AWARD

Organizational Culture الثقافة التنظيمية

For each of the items below, choose the response that best characterizes how you feel about the statement

يرجى اختيار الإجابة الأنسب من وجهة نظرك لكل عبارة من العبارات التالية

1. I feel like a member of the team
أشعر في هذه المؤسسة أنني عضو ضمن فريق

○ Strongly Disagree لا اوافق بشدة ○ Disagree لا اوافق ○ Neutral محايد ○ Agree اوافق ○ Strongly Agree اوافق بشدة

2. I can do my job under the supervision of my direct manger; there is no need to approach top management
أستطيع أن أنجز عملي بالتعاون مع مديري المباشر بدون الحاجة للتواصل مع الإدارة العليا

○ Strongly Disagree لا اوافق بشدة ○ Disagree لا اوافق ○ Neutral محايد ○ Agree اوافق ○ Strongly Agree اوافق بشدة

3. Team work is the preferable way to do the job here
فرق العمل هي الطريقة المفضلة لإنجاز العمل هنا

○ Strongly Disagree لا اوافق بشدة ○ Disagree لا اوافق ○ Neutral محايد ○ Agree اوافق ○ Strongly Agree اوافق بشدة

4. I share common ideas about our organization with employees from different departments
أنا أتشارك مع الموظفين في الإدارات /الأقسام الأخرى رؤية واحدة حول المؤسسة

○ Strongly Disagree لا اوافق بشدة ○ Disagree لا اوافق ○ Neutral محايد ○ Agree اوافق ○ Strongly Agree اوافق بشدة

5. It is easy to successfully do cross-departmental projects
من السهل إنجاز المشاريع المشتركة مع وحدات عمل أخرى بنجاح

○ Strongly Disagree لا اوافق بشدة ○ Disagree لا اوافق ○ Neutral محايد ○ Agree اوافق ○ Strongly Agree اوافق بشدة

6. My goals are aligned with the department and the organization goals
أهدافي الوظيفية مرتبطة بأهداف إدارتي / قسمي وأهداف المؤسسة

○ Strongly Disagree لا اوافق بشدة ○ Disagree لا اوافق ○ Neutral محايد ○ Agree اوافق ○ Strongly Agree اوافق بشدة

4

7. My work mistakes are considered by my manager as learning opportunities
يعتبر مديري المباشر أخطائي في العمل كفرص أتعلم منها

◯ Strongly Disagree لا أوافق بشدة ◯ Disagree لا أوافق ◯ Neutral محايد ◯ Agree أوافق ◯ Strongly Agree أوافق بشدة

8. I feel encouraged to take risk at work
يتم تشجيعي لإنجاز أعمال رغم مخاطر أو احتمالات عدم نجاحها

◯ Strongly Disagree لا أوافق بشدة ◯ Disagree لا أوافق ◯ Neutral محايد ◯ Agree أوافق ◯ Strongly Agree أوافق بشدة

9. I coordinate my work with other departments
أنا أحرص على مشاركة جهودي وعملي مع وحدات العمل الأخرى

◯ Strongly Disagree لا أوافق بشدة ◯ Disagree لا أوافق ◯ Neutral محايد ◯ Agree أوافق ◯ Strongly Agree أوافق بشدة

10. I commonly agree with my work colleagues about strategic organizational goals
هناك اتفاق بيني وبين زملاء العمل على الأهداف الإستراتيجية للمؤسسة

◯ Strongly Disagree لا أوافق بشدة ◯ Disagree لا أوافق ◯ Neutral محايد ◯ Agree أوافق ◯ Strongly Agree أوافق بشدة

11. My manager sets ambitious yet achievable goals
مديري المباشر يضع أهداف طموحة ولكن قابلة للتحقيق

◯ Strongly Disagree لا أوافق بشدة ◯ Disagree لا أوافق ◯ Neutral محايد ◯ Agree أوافق ◯ Strongly Agree أوافق بشدة

12. My manager clearly states the department objectives
يقوم مديري المباشر بشرح أهداف الإدارة/ القسم لي بشكل واضح

◯ Strongly Disagree لا أوافق بشدة ◯ Disagree لا أوافق ◯ Neutral محايد ◯ Agree أوافق ◯ Strongly Agree أوافق بشدة

5

Business Excellence التميز المؤسسي

For each of the items below, choose the response that best characterizes how you feel about the statement

يرجى اختيار الإجابة الأنسب من وجهة نظرك لكل عبارة من العبارات التالية

1. We have defined the key customer results required to achieve our strategy

تم تحديد نتائج المتعاملين الرئيسية المطلوبة لدعم تحقيق إستراتيجية المؤسسة

- No results لا يوجد نتائج
- In a few areas في بعض الحالات
- About half نصف الحالات تقريباً
- In most areas في معظم الحالات
- In all areas في جميع الحالات

2. We achieved positive customer perception results for the last 3 years

حققت المؤسسة نتائج إيجابية في قياسات انطباعات المتعاملين لآخر ثلاث سنوات

- No results لا يوجد نتائج
- In a few areas في بعض الحالات
- About half نصف الحالات تقريباً
- In most areas في معظم الحالات
- In all areas في جميع الحالات

3. Our internal measures for customers are positive for the last 3 years

نتائج مقاييس الأداء الداخلية المتعلقة بالمتعاملين كانت إيجابية في آخر ثلاث سنوات

- No results لا يوجد نتائج
- In a few areas في بعض الحالات
- About half نصف الحالات تقريباً
- In most areas في معظم الحالات
- In all areas في جميع الحالات

8

4. Benchmarks show that we out-perform our competitors in customer results
أظهرت المقارنات المعيارية أننا نتفوق على منافسينا / أقراننا في نتائج المتعاملين

- ◯ No results لا يوجد نتائج
- ◯ In a few areas في بعض الحالات
- ◯ About half صف الحالات تقريباً
- ◯ In most areas في معظم الحالات
- ◯ In all areas في جميع الحالات

5. We have defined the key employees results required to achieve our strategy
تم تحديد نتائج العاملين الرئيسية المطلوبة لدعم تحقيق إستراتيجية المؤسسة

- ◯ No results لا يوجد نتائج
- ◯ In a few areas في بعض الحالات
- ◯ About half صف الحالات تقريباً
- ◯ In most areas في معظم الحالات
- ◯ In all areas في جميع الحالات

6. We achieved positive results for employees perceptions for the last 3 years
حققت المؤسسة نتائج إيجابية في قياسات انطباعات العاملين لآخر ثلاث سنوات

- ◯ No results لا يوجد نتائج
- ◯ In a few areas في بعض الحالات
- ◯ About half صف الحالات تقريباً
- ◯ In most areas في معظم الحالات
- ◯ In all areas في جميع الحالات

7. Our internal employees measures are positive for the last 3 years
نتائج مقاييس الأداء الداخلية المتعلقة بالعاملين كانت إيجابية في آخر ثلاث سنوات

- ◯ No results لا يوجد نتائج
- ◯ In a few areas في بعض الحالات
- ◯ About half صف الحالات تقريباً
- ◯ In most areas في معظم الحالات
- ◯ In all areas في جميع الحالات

9

8. Benchmarks show that we out-perform our competitors in employees results
أظهرت المقارنات المعيارية أننا نتفوق على منافسينا / أقراننا في نتائج العاملين

- ◯ No results لا يوجد نتائج
- ◯ In a few areas في بعض الحالات
- ◯ About half نصف الحالات تقريباً
- ◯ In most areas في معظم الحالات
- ◯ In all areas في جميع الحالات

9. We have defined the key society results required to achieve our strategy
تم تحديد نتائج المجتمع الرئيسية المطلوبة لدعم تحقيق إستراتيجية المؤسسة

- ◯ No results لا يوجد نتائج
- ◯ In a few areas في بعض الحالات
- ◯ About half نصف الحالات تقريباً
- ◯ In most areas في معظم الحالات
- ◯ In all areas في جميع الحالات

10. We achieved positive society perception results for the last 3 years
حققت المؤسسة نتائج إيجابية في قياسات انطباعات المجتمع لآخر ثلاث سنوات

- ◯ No results لا يوجد نتائج
- ◯ In a few areas في بعض الحالات
- ◯ About half نصف الحالات تقريباً
- ◯ In most areas في معظم الحالات
- ◯ In all areas في جميع الحالات

11. Our internal society measures are positive for the last 3 years
نتائج مقاييس الأداء الداخلية المتعلقة بالمجتمع كانت إيجابية في آخر ثلاث سنوات

- ◯ No results لا يوجد نتائج
- ◯ In a few areas في بعض الحالات
- ◯ About half نصف الحالات تقريباً
- ◯ In most areas في معظم الحالات
- ◯ In all areas في جميع الحالات

10

12. Benchmarks show that we out-perform our competitors in society results
أظهرت المقارنات المعيارية أننا نتفوق على منافسينا / أقراننا في نتائج المجتمع

- No results لا يوجد نتائج
- In a few areas في بعض الحالات
- About half صف الحالات تقريباً
- In most areas في معظم الحالات
- In all areas في جميع الحالات

13. We have defined the key business results required to achieve our strategy
تم تحديد نتائج الأعمال الرئيسية المطلوبة لدعم تحقيق إستراتيجية المؤسسة

- No results لا يوجد نتائج
- In a few areas في بعض الحالات
- About half صف الحالات تقريباً
- In most areas في معظم الحالات
- In all areas في جميع الحالات

14. Our strategic results are positive for the last 3 years
حققت المؤسسة نتائج إستراتيجية إيجابية في آخر ثلاث سنوات

- No results لا يوجد نتائج
- In a few areas في بعض الحالات
- About half صف الحالات تقريباً
- In most areas في معظم الحالات
- In all areas في جميع الحالات

15. Our operational results are positive for the last 3 years
حققت المؤسسة نتائج تشغيلية إيجابية في آخر ثلاث سنوات

- No results لا يوجد نتائج
- In a few areas في بعض الحالات
- About half نصف الحالات تقريباً
- In most areas في معظم الحالات
- In all areas في جميع الحالات

11

16. Benchmarks show that we out-perform our competitors in business results (strategic and operational)
أظهرت المقارنات المعيارية أننا نتفوق على منافسينا / أقراننا في نتائج الأعمال الإستراتيجية والتشغيلية

- ◯ No results لا يوجد نتائج
- ◯ In a few areas في بعض الحالات
- ◯ About half نصف الحالات تقريباً
- ◯ In most areas في معظم الحالات
- ◯ In all areas في جميع الحالات

Information Communication Technology تقنية المعلومات والاتصالات

1. I send and receive work emails through my mobile phone
أقوم بإرسال واستقبال رسائل البريد الإلكتروني الخاصة بالعمل من هاتفي المحمول

- ◯ Yes نعم
- ◯ No لا

2. I do video conferences with my colleagues / customers
أقوم باستخدام تقنية الاجتماعات الفيديوية مع زملائي في العمل أو مع المتعاملين

- ◯ Yes نعم
- ◯ No لا

3. Customers can get services through my organization website
يمكن للمتعاملين الحصول على الخدمات من خلال الموقع الإلكتروني للمؤسسة

- ◯ Yes نعم
- ◯ No لا

4. My organization has a mobile application
يوجد تطبيق للمؤسسة على الهواتف الذكية لتقديم خدمات / معلومات للمتعاملين

- ◯ Yes نعم
- ◯ No لا

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Appendix B: Confidentially Letter

Undertaking of Confidentiality

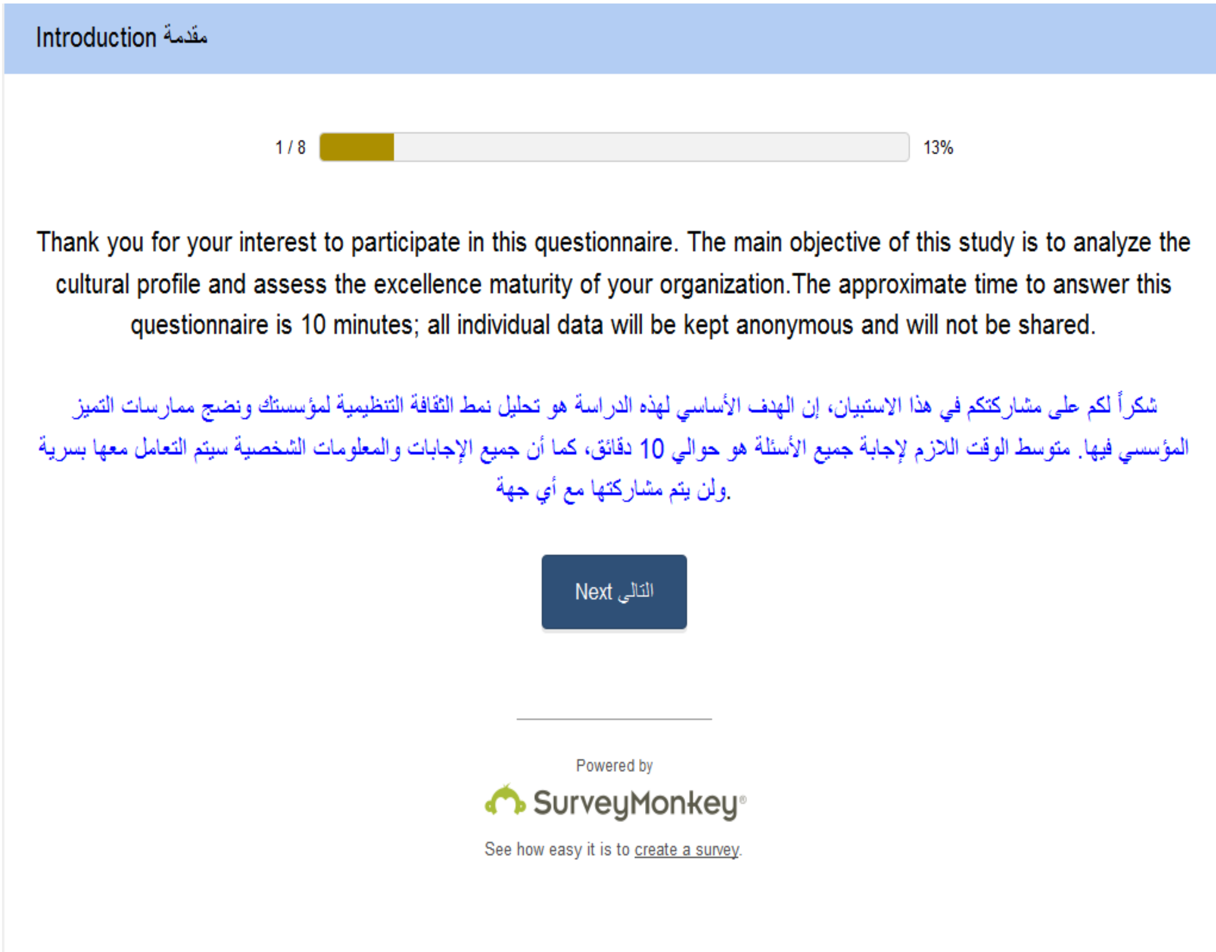
I the undersigned below, agree that the information received form the applicants for the purpose of academic research study (the impact of organizational culture and leadership style on business excellence) shall be strictly treated as very confidential and data collected will not be shared with anyone except the applicant (through SKEA office). And the names of applicants will be kept confidential and will not be used for any other purpose or whatsoever in kind.

Name : Rassel Kassem

Signature:

Date : 28/3/2016

Appendix C: Confidentially Statement – Survey Introduction



Appendix D: SKEA Invitation Letter

Date: 26 April 2016

Dear SKEA Winner,

Greetings from SKEA!

"Excellence/Perfection is not a destination; it is a continuous journey that never ends" - Brian Tracy.

As an excellence award winner, you have the desire to advance your excellence practices and build a robust culture of organizational excellence. To do so, it's very crucial to know where you are standing now and to identify the related critical success factors to focus on. Several researches revealed the important role of organizational culture and leadership in achieving excellent results, in addition, other factors like organizational commitment, strategy awareness, and usage of information communication technology found to contribute to this relationship.

In this context, SKEA is conducting a questionnaire as part of a research study to increase understanding of how the above mentioned factors affect achieving excellence; your company is invited to participate by distributing the below electronic questionnaire to managers and supervisors of all levels except top management, the questionnaire has been made available online for your company through the following link, and a copy is attached for your documentation:

https://www.surveymonkey.com/r/[redacted]

Upon receiving the responses from your respective employees, the data will be analyzed and a free detailed report will be shared with you which may serve as a quality input to your improvement plans. It's important to mention that the more responses we get, the more accurate feedback we are able to provide, and please be assured that all received information will be treated as very confidential; and your company name will be kept anonymous and will not be shared or used in any kind or whatsoever.

For any further clarifications or support needed, please do not hesitate to contact us.

Looking forward to your ACTIVE participation!

Best regards,

SKEA Office

02-6177472 - 02-6177552