

2016

THE IMPACT OF LEADERSHIP STYLE AND ORGANISATIONAL CULTURE ON THE IMPLEMENTATION OF E-SERVICES: AN EMPIRICAL STUDY IN SAUDI ARABIA

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<http://hdl.handle.net/10026.1/4343>

<http://dx.doi.org/10.24382/1564>

Plymouth University

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**THE IMPACT OF LEADERSHIP STYLE AND ORGANISATIONAL
CULTURE ON THE IMPLEMENTATION OF E-SERVICES:
AN EMPIRICAL STUDY IN SAUDI ARABIA**

by

HAMDI ALOMIRI

Thesis submitted to Plymouth University in fulfilment of requirements for the degree of

DOCTOR OF PHILOSOPHY

School of Management

Faculty of Plymouth Business School

July 2015

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ACKNOWLEDGEMENTS

My greatest thanks and gratitude to Almighty Allah who gave me the strength, ability, and opportunity to complete my studies.

I would like to thank and express my sincere appreciation to all those who have helped, assisted and contributed to the successful completion of this thesis. Without their help and support, this journey would not have been possible.

This thesis could never have been completed without the generous, kind, and professional guidance and help of Dr. Ibrahim Elbeltagi (expired May, 2015), Professor Donna Ladkin, Dr Dababrata Chowdhury and Smita Tripathi. I find it very difficult to find the appropriate words to express my gratitude for all the support and encouragement they have given me throughout the development of this thesis.

I am also extremely thankful to my father and my older brother Professor Mohammed for their continuous support and encouragement.

I would like to thank my wife, sons and daughter for their unwavering love, support and encouragement and for the tolerance they have shown over the many years of disruption to our family life.

Special thanks to Admiral Khalid Alhamdan and Admiral Fayez Albakri who have helped, supported and encouraged me in both my studies and my life.

I am also most grateful to the participating organisations, their leaders and their employees for giving me their precious time and support through the questionnaire responses they provided.

AUTHOR'S DECLARATION

At no time during the registration for the degree of Doctor of Philosophy has the author been registered for any other University award without prior agreement of the Graduate Sub-Committee.

Work submitted for this research degree at the Plymouth University has not formed part of any other degree either at Plymouth University or at another establishment.

Relevant scientific seminars and conferences were regularly attended at which work was often presented; external institutions were visited for consultation purposes and one paper prepared for publication.

Publications (or presentation of other forms of creative and performing work):

The role of servant leadership on e-service implementation in Saudi Arabia

Information Institute Conferences Las Vegas | Nevada May 21 - 23, 2014

Word count of main body of thesis: 86209

Signed:

Date: 15/07/2015

ABSTRACT

There is a general scarcity of empirical studies investigating the impact of leadership styles on e-Government use in the service industry. This is doubly true of styles such as transformational, transactional and servant leadership. Theorised models propose that leadership style forms the desired organisational culture for implementing e-services, organisational culture being the mediator and the national culture the moderator. This research fills the empirical gap by investigating how leadership forms the organisational culture that facilitates and enhances the implementation and use of e-government in organisations in Saudi Arabia.

The research was conducted through the sampling of employees in private and public sectors. While the data for the leadership styles, organisational culture and national culture were collected through the use of questionnaires designed for employees, the e-services were measured through organizations' official websites. All data were processed and analysed using computer software (WarPLS) and SPSS. The results support the hypothesized relationships proposed in the theoretical model, wherein all constructs under study (except for the mediating effect of National Culture (NC) on the relationship between leadership styles and organisational culture) positively affect e-services implementation, including Individualized Influence (IINF), Intellectual Stimulation (ISTIM), Individualized Support (ISUP), Contingent Reward (CR), Management by Exception (MbE), Servant Leadership (SL), Bureaucratic Culture (BC), Involvement Culture (INVC), Mission Culture (MC), Innovative Culture (INC), Task Culture (TC) and Future Culture (FC) and the mediating effect of National Culture (NC) on the relationship between organisational culture and e-services implementation.

The results also indicated that specific leadership styles have direct and positive impacts on e-services implementation and indirect influences through a mediating organisational culture and a moderating national culture. The empirical findings bring new evidence in support of this proposal, indicating that specific leadership styles play crucial roles in influencing processes and outcomes within organizations. According to these results, e-services differ from one organization to another, and these variations were correlated to leadership styles and organizational culture.

It was found that there were positive and significant correlations between total leadership styles (hybrid) and total organizational cultures (hybrid) in the full sample and in e-services implementation. E-services implementation increases when the mean for leadership styles rises, but types of organizational culture were also crucial factors in achieving better e-services. The national culture variable, which was used as a moderator, did not have a significant influence on the relationship between leadership style and organisational culture. Therefore, the moderating role of national culture in the relationship between leadership styles and organisational culture did not have any level of statistical significance, which means that regardless of the national culture (power distance or uncertainty avoidance) the effect of leadership style on organisational culture in the model adopted in this study appeared to be quite consistent.

The study links theory to practice by explaining the subject of modern leadership styles and shows their relevance to the Saudi organisations and business environment. As such, it opens up a domain for investigating the application of modern management theories in a different culture.

Although a plethora of studies have investigated the effect of factors such as organisational culture and/or national culture on e-services implementation in Saudi's organisations, no study (to the best of this writer's knowledge) has tackled the issue of e-

services implementation and leadership styles in those organisations. Therefore, studying e-services implementation and leadership styles in Saudi's organisations is a contribution to the literature on the service industry, adding to its knowledge with a case study from a different cultural setting. The study also opens up a horizon for future research on developing the business sector, as it uses standardized tools in terms of reliability and validity within the context of the e-services implementation. Therefore, this study contributes to existing knowledge in that leadership and organisational culture are revealed to be key contributors to e-services implementation. The three leadership styles - transformational, transactional, and servant leadership - were empirically found to be appropriate styles that work well in e-services implementation projects. These styles have direct and positive benefits to e-services implementation and an indirect impact through the mediating means of organisational culture, and empirical findings bring new evidence for this notion. Moreover, the six organisational cultural dimensions were judged to be appropriate supporters of e-services implementation, specifically: involvement, mission, innovation, task-orientation, bureaucracy, and future-orientation.

Key words

Transformational leadership, transactional leadership, servant leadership, organisational culture, implementation of e-Government, developing countries and Structure Equation Modelling.

DEDICATION

To my father, the soul of my mother,

To my great wife, my children, my family, and friends

A special dedication to my Supervisory Team:

Dr. Ibrahim Elbeltagi (expired May, 2015)

Professor Donna Ladkin (Director of the Study from 1/6/2015)

Dr Daba Chowdhury (Second Supervisor)

Smita Tripathi (Third Supervisor)

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CHAPTER ONE

1.1 Introduction:

The advances in digital connectivity and the significant improvements in information and communication technology are revolutionising the ways in which services are delivered and business is conducted, new web-based technologies now being accepted as convenient tools in the public domain. These rapid advances have motivated governments around the globe to explore, understand, adopt, and employ interactive electronic services with their customers (Michel, 2010). Furthermore, these developments have increased pressure on governments to improve the quality and expand the scope of internet-accessed government services worldwide.

Electronic government (e-Government) refers to the use of Information and Communication Technology (ICT), and specifically the internet, as a tool to achieve better government. “E-Government – once a bold experiment and now an important tool for public sector transformation – has developed to the point where it is now a force for effective governance and citizen participation, both at national and local levels” (Zukang, 2010). It has been adopted and implemented by countries around the world as a means of improving government performance. In addition to a broad range of new public-management practices, such as decentralisation, privatisation, and performance management, e-Government has rapidly been adopted as an important managerial reform (Chung et al, 2011) in order to achieve greater operational efficiencies and effectiveness.

E-Government initiatives worldwide have brought about fundamental changes in the structure, values, culture, and ways of conducting business throughout the public sector, and they have redefined relationships between government agencies, and between government agencies and individuals.

Recent reports on the development of e-Government show that different approaches have been taken to implementation (Ebbbers & Van Dijk 2007; Rose 2005), but there remains a serious divide between developed and developing countries in regard to the adoption and use of digital and internet-based communications (UN 2006).

According to a United Nations e-Government Survey (2010), in developed countries the citizens are benefiting from more advanced e-Services delivery, better access to information, more efficient government management and enhanced interactions with governments, primarily as a result of increasing use by the public sector of information and communications technology. Most countries have established websites which publish government information online, many providing national portals that connect users with different agencies.

In contrast, according to the Economist Intelligence Unit (2010, p.1), the United Arab Emirates is the only Arab country to be listed among the top fifty countries in digital economy rankings which “assess the quality of a country’s ICT infrastructure and the ability of its consumers, businesses and governments to use ICT to their benefit.” With particular reference to this study, Saudi Arabia was ranked 52nd.

Many Arab governments have deployed e-Governments during the past two decades in order to realise the promises inherent in the advancement of ICT. However, many e-Government projects seem to have fallen short of their objectives owing to the complex nature of e-Government and the complexity of the changes introduced to the public sector resulting from the internet and from a whole array of associated information and communication technologies (Hazri et al, 2009; Beynon-Davies & Williams, 2004). The implementation and diffusion of e-Government concerns much more than financial, technological, and policy issues, and as Hazri et al (2009, p.271) have commented, “There

are many issues, particularly ones that deal with the human side of technological implementation”.

Over the last few years a considerable amount of research has been carried out on the implementation and diffusion of e-Government in developed and developing countries. Furthermore, much of this research has focused on connectivity and technology infrastructure, business environments, social and culture environments, legal environments, and government policy and vision rather than factors such as leadership and organisational culture.

According to Porter (1990), organisations operating in the same sector do so with the same external influences. However, within any sector individual organisations are variously successful relative to each other. If organisations in the same sector experience the same external influences but have different outcomes then it is reasonable to assume that this is a result of differences within each organisation (Judson, 2009). There are numerous internal organisational variables that have different levels of influence on e-Government implementation. Two such variables are organisational culture and leadership style, both of which have become interrelated facets of organisational success.

Organisational culture and leadership style have been linked to other organisational features such as overall performance, job satisfaction, product development success, organizational commitment, responsiveness, and readiness. Some researchers have examined the links between leadership styles and organisational performance, outcomes, job satisfaction, sales, product development success, and readiness (Bycio et al., 1995; Howell & Avolio; 1993, Susita et al.; 2001, Al-Hamli, 2006; Chortatsiani, 2009; Horn-Turpin, 2009). Others have focused on the interplay between organisational culture and organisational performance, sales, and organizational change (Lok, 2003; Balthazard, 2006; Iivari, 2005; Deal & Kennedy, 1982; Denison, 1990; Ouchi, 1981; Pascale & Athos,

1981; Peters & Waterman, 1982; Kotter & Heskett, 1992). Furthermore, numerous aspects of organisational culture allude to the role of leaders in ‘creating’ and ‘formulating’ particular types of culture (Schein, 2010). Still other writers suggest that leadership effectiveness is a prerequisite to understanding and working within a culture (Hennessey, 1998).

Despite the implicit and explicit linking of leadership and culture in many parts of organisational theory, there has been no consensus on such linkages. Little critical research has been devoted to understanding the relationships between the two concepts and the impacts that such associations might have on e-services implementation. This suggests that there are two gaps in the research, and it poses the following questions: firstly, are there specific leadership styles and organisational cultures which can be considered for use as benchmarks for the implementation of e- services? Secondly, is there a predictive relationship between combinations of these leadership styles and organisational cultures and the rate of e- services implementation? This study was designed to address these gaps.

1.2 Research Background

Over the last two decades a series of initiatives have been taken in developed and developing countries to improve government services by using information technologies. This transformation of services is referred to as ‘e-Government’, ‘digital government’, ‘online government’, or ‘transformational government’ (Gupta et al., 2008). Many developed and developing countries are experiencing the transformative power of e-Government in revitalizing public administration, overhauling public management, fostering inclusive leadership, and moving civil services towards higher efficiency, transparency, and accountability (UN E-Government Survey, 2010). Liberalisation of many economies, and advances in information and communication technology, have

enabled numerous firms to use the internet and web-based technologies to undertake transactions. This new type of business exchange is often referred to as 'e-Commerce' or 'Electronic commerce', terms for any type of business or commercial transaction conducted online. It is usually associated with buying and selling over the internet, or conducting transactions electronically without barriers of time or distance (Zorayda et al., 2003). It is "the use of electronic communications and digital information processing technology in business transactions to create, transform and redefine relationships for value creation between or among organisations, and between organisations and customers" (Turban et al., 1997, p. 273).

The amount of business being conducted online is rising rapidly every year. For example, the United States went from \$175 billion in online sales in 2007 to \$335 billion in 2012 (Forrester Research). The Interactive Media in Retail Group (IMRG) and Capgemini (2011) have tracked online transactions in the UK, finding that £58.8bn had been spent online in 2010, and they predicted another 18 percent rise to £69bn in 2011. The US Federal government spent 4.6 billion on Information Technology projects during 2012, and for many years it has placed particular emphasis on strengthening e-Government (International Data Corp, cited in First Data, 2008; Jabri, 2012). Indeed, the massive success in the private sector through e-Commerce, the advancement of digital connectivity, and the significant improvements in information and communication technology over the last two decades have put enormous pressure on governments in developed and developing countries. They are being driven by the new facilities to adopt and improve their strategies to transform government services using ICTs. Such changes are expected to yield greater operational efficiency, service quality, accountability, and cost reduction, thus creating a new form of public administration that works better and costs less. Furthermore, as citizens have become more adept at using the internet and have interfaced with well-designed electronic services from the private sector, they have begun

to expect the same high standards from government agencies (Weerakkody et al., 2010). Indeed, a new age of well-being has emerged with the ICT revolution, and e-Government is one of the most visible examples of the ways in which ICTs can contribute to bringing this about.

Some writers define e-Government in terms of specific actions such as paying a tax or acquiring information. Others generalise the definition to automated services. Indeed, basic definitions of e-Government are: the ability of government to provide access to services and information 24/7; e-Government is an initiative starting with 'e' and ending with heightened efficiency, enhanced quality of service, and greater accountability. While perceptions vary widely, the World Bank website (2010) defined e-Government as the use by government agencies of information technology (such as wide-area networks, the internet, and mobile computing) that have the ability to transform relations with citizens, businesses and other arms of government, which can serve a variety of different ends: better delivery of management services to citizens, improved intersections with business and industry that can lead to less corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions." Indeed, establishing a consensus definition of e-Government for all countries seems to be fruitless because definitions vary between countries based on their policies, culture, and goals. In other words, there is a strong relationship between different governments' strategies in implementing e-Government and the political status and culture within the country. Some countries will not embrace all e-Government parameters such as e-Democracy or e-Participation. An analysis of the existing literature on e-Government shows there to be a partial consensus among writers that the public sector tries to emulate the private sector, particularly in developing countries.

E-Government has been adopted globally for the mutual benefit of governments and customers for a wide variety of reasons: to improve service quality, to bring about higher efficiency and transparency, to reduce costs and effort, to lessen (or perhaps end) corruption, and to increase accessibility. However, implicit in e-Government is the need to change the ways in which government agencies interact with customers. Therefore, public sector providers face challenges politically (e-Democracy and e-Participation) and culturally (resistance to change), and they face social issues (access to technology depending on income) and organisational inertia (rigid systems and resistance from senior levels). E-Government is not just a matter of providing computers and automating rigid government structures; this in itself will not create effective government and it may cause the situation to deteriorate. E-Government is a new challenge for nations with different requirements at each stage of its evolution. The three stages in the introduction of e-Government are pre-adoption, adoption (or implementation), and post-adoption; these entail specific financial, technological, social, and organisational changes as well as changes in culture and leadership at each stage.

Although there is consensus among researchers and practitioners, as a theoretical paradigm, that huge benefits are to be derived from the adoption of e-Government (World Bank, 2010; Weerakkody et al., 2010; Jaeger, 2003), at the implementation level reality confronts theory to highlight increasing concerns and challenges, particularly in developing countries, as to how governments can introduce the e-Government paradigm to bring about those benefits.

NASI et al (2010) have mentioned that many studies assessing the current status of the adoption of e-Government for service delivery in the USA have found on-line services limited – findings which at times seem counter-intuitive (Coursey & Norris, 2008; Moon, 2002; Norris & Moon, 2005; Reddick & Frank, 2007; Walker, 2006). In particular, the

diffusion of online services is still very limited in terms of the number and type of services. Even so, 86 percent of state and federal sites now have services that are fully executable online, as compared to 77 percent in 2006 (West, 2007).

In Europe, surveys have shown that the acceptance of public e-Services is rising where the online sophistication of public-service delivery in the EU member states has reached an overall score of 75 percent and the full availability online has reached almost 50 percent, but not at the expected speed as planned by national and union governments (Capgemini, 2006).

In contrast, in developing countries most implementations of e-Government have failed over the last decade. Heeks (2003), who has conducted substantial research into the implementation of e-Government in developing countries, categorised levels of achievement as 1) total failure, 2) partial failure, and 3) success. He reported that 35 percent of implementations were total failures (i.e. e-Government was not implemented or was implemented but immediately abandoned), 50 percent were partial failures (major goals were not attained and/or were undesirable), and 15 percent were successful (most stakeholder groups attained their major goals and did not experience significant undesirable outcomes).

It has been estimated that over the last decade about \$3 trillion has been spent on information technology (Gubbins, 2004), “Yet much of this investment seems likely to go to waste with estimates of the proportion of e-Government projects failing in some way ranging from 60 percent (Gartner, 2002) to 60–80 percent (UNDESA, 2003a) up to 85 percent (Symonds, 2000)”, (cited in Heeks et al., 2007). These statistics therefore support the belief that governments face many challenges including economic, social, managerial, and cultural, and indicate the complex nature of e-Government and the complexity of the changes that are introduced to the public sector. Indeed, these high

failure rates are not a surprise as numerous studies have shown that it is not just e-Government applications that have failed in developing countries but information systems in general. A literature review by Avgerou and Walsham (2000) in this field concluded with the remark that “successful examples of computerisation can be found.... but frustrating stories of systems which failed... are more frequent” (cited in Dada, 2006, p.2). According to Heek (2001) “... all points in one direction: toward high rates of IS failure in developing countries”. Furthermore, other studies showed that most IS projects in developing countries failed at some time (World Bank, 1993, Beeharry & Schneider, 1996). In this case, the current IS literature would suggest that a poor understanding of the technology and attendant organisational changes on the one hand, and human issues on the other, are the key shortcomings in helping to understand and explain the failure of IS in developing countries (Heek, 2001; Wood-Harper & Wood, 2005).

Over the past fifteen years there has been a considerable amount of research on the implementation and adoption of e-Government in developed and developing countries. While some of this research has mentioned the assessment of e-Government (Heeks, 2001; 2003; Chalhoub, 2010; Dada, 2010), only a few have examined the organisational and human aspects, such as organisational culture and leadership style, which also impact on e-Government implementation.

As Shaeffer (2006) has noted, in order to realise the full potential of e-Government initiatives, governments need to take into consideration four stages: 1) changes in environment, 2) pre-implementation with identification of SWOT factors (Strengths, Weaknesses, Opportunities, and Threats), 3) implementation (especially the management of the development process), and 4) post-implementation (monitoring and evaluation). However, this study focuses on the implementation level where management plays such a central role.

As a result of a study conducted by the United Nations Educational, Scientific and Cultural Organisation (UNESCO, Bangkok, 2006), and based on the experiences and lessons of the Republic of Korea (currently considered to be one of the global leaders in terms of e-Government), a tool kit has been constructed to help developing countries carry out e-Government projects. This kit introduces the tasks and best practices of the Republic of Korea which has adopted a centralised development strategy for e-Government appropriate to each stage of the implementation process. According to the UNESCO study, every level consists of different stages that need to be implemented before the next stage can begin. The pre-implementation level, for example, covers leadership and social awareness of a specific e-Government project and includes matters such as institution building, environmental analysis (including e-Readiness), and benchmarking. At the implementation level the vision and strategic goals of e-Government need to be set, and these comprise road-mapping, milestones, strategic priorities, managing critical factors (for example human, financial, technological resources), and system-development. At the last level, post-implementation, three tasks need to be completed: 1) evaluation of e-Government performance, 2) operations and maintenance, and 3) the promotion of e-Government services to people and feedback for the project.

While the e-Government initiative in the Kingdom of Saudi Arabia (KSA) (see Chapter Four) started in earnest in 2001, the implementation stage in the Kingdom started under the first action plan (2006-2010). Consequently, this study focuses on the second level of e-Government, the diffusion and implementation of e-Government systems, and how human factors such as leadership style and organisational culture may impact on the success or failure of e-Government.

1.3 Research Problem Statement

Advances in digital connectivity and the significant improvements in ICT have profoundly affected our political, economic, cultural, and social life. Since the early 1990s developed countries have provided the infrastructure needed for information technology to reach all sectors of their respective economies (Communication & Information Technology Commission, KSA, 2003). As for developing countries, they are beset by political and economic problems and are struggling to formulate their development plans and strategies, let alone cope with the failures of information systems. However, some have invested in ICTs to the extent possible within their financial means. They have drawn up their own IT agendas, and mostly they have sought to encourage local and foreign investors to invest in IT such as computer hardware and software, and in networks as well as using ICT for the development of basic services (Communication & Information Technology Commission in KSA, 2003).

Since the late 1990s many countries in the Middle East, and especially the Gulf Countries Council (GCC), have invested heavily in ICT as a first stage in the implementation and diffusion of e-Government. The KSA, which is considered to be one of the richest countries in the Middle East and a member of the G20 (a group of the world's most powerful countries), is striving to establish itself among the leading countries of the world in an effort to demonstrate its economic and political stability and to show a willingness at the top levels of government to exploit the full potential of new e-Government initiatives. Therefore, KSA attaches special importance to ICT and has given it a prominence in national planning since the beginning of the new millennium. The Seventh Development Plan for Saudi Arabia (2000-2004) focused on the use of ICT to develop the national economy and to regulate the accessibility of information services to all segments of society. According to the Communication & Information Technology

Commission in KSA (2003, p.4), the Seventh Development Plan aimed to establish “a clear vision of the role of information technology in the economy....., envisages a national plan for the use of information technology (IT) for scientific and economic development..., facilitating the availability of and easy access to the most recent information, determining the roles of data producing and data collection entities, information integration, establishing information systems within the national information network, and making information technology and information services accessible to all segments of the society”. The plan set the country’s vision for “bridging the technological gap between Saudi Arabia and the developed world by 2020.... Strategies have been developed for investing in the use of information technology for human development along the lines of international standards in order to enhance local capabilities to handle modern technologies” (p. 4). Despite a comprehensive vision from the highest government levels with regard to state, political, and economic reforms; despite development plans (compiled by the Ministry of Communications and Information Technology), and despite the privatization of the telecommunications sector and many other recent royal decrees, Saudi Arabia lagged behind in the race to implement e-Government with the result that it is ranked 58th among 192 countries, as judged by UN (2010) readiness parameters for e-Government development. Saudi Arabia was also ranked outside the top ten countries in Asia (UN, 2010) and achieved a lower position in 2010 than in 2009, when it came 51st and 52nd respectively (Digital economy rankings, 2010). Consequently, the core questions which should be asked at this stage are, “What went wrong? Is e-Government merely a passing fad or is it here to stay?” Based on the discussion above, this study explores and broadens our understanding of e-Government, focusing on its implementation at both national and agency levels. Of specific interest are the major factors that have affected implementation positively or negatively, such as leadership style and organisational culture. Consequently, the main aim of this research

is to highlight and determine specific leadership styles and organisational cultures so they can be used as benchmarks for e-services implementation. A secondary aim is to explore the relationships between combinations of leadership styles and organisational cultures in regard to the implantation of e-services. Consequently, this study aims to build a new model relating the implementation of e-services with leadership style and organisational culture.

1.4 The Research Questions

To achieve the aims and objectives of the study, the following research questions have been addressed:

1. Which styles of leadership are best suited to e- services implementation?
2. Which styles of leadership are best suited to fostering an organisational culture which supports the implementation of e-services?
3. Which dimensions of organisational culture affect e-services implementation?
4. Which dimensions of national culture affect e-services implementation?
5. What are the appropriate measures for ensuring the implementation of e-services?
6. How can a new model be created that will help achieve the implementation of e-services, taking particular account of leadership style and organisational culture?
7. How can the proposed model be evaluated using public and private agencies in Kingdom of Saudi Arabia (KSA)?

1.5 Aims and Objectives of the Research

The main aim of this research was to examine the combined effects of defined leadership styles and organisational cultures on the implementation of e-Government.

This project had the following objectives:

1. To identify leadership styles that might contribute positively to e-services implementation.
2. To identify the organisational culture that might affect e-services implementation in Kingdom of Saudi Arabia.
3. To identify the national culture that might affect e-services implementation.
4. To observe measures for evaluating e-services implementation in organisations being studied.
5. To create a new model which might help the implementation of e-services, taking particular account of leadership style and organisational culture.

1.6 Significance of the Research

Leadership is considered to be a core influence on all organisations, and the presence or absence of sound leadership can make the difference between success and failure. Effective leadership is essential to bring about national missions, and a major project - such as the introduction of a system of e-Government - is intimately related to the leader and it may require a form of leadership which is very different from traditional methods. Consequently, this research highlights, firstly, the importance of understanding the adoption of e-Government as a fundamental issue; and secondly, it considers the interactions of leadership styles and organisational cultures on the implementation of e-Government. Most importantly, the research aims to have practical value for both researchers and practitioners by providing guidelines to e-Government implementers and policy makers. The guidelines aim to support the fulfilment of government visions and missions and their underlying objective of maximising the full potential of e-Government projects. In the context of Saudi Arabia, such a study, which focuses on the combined effects of leadership style and organisational culture, is relatively new and needs a careful

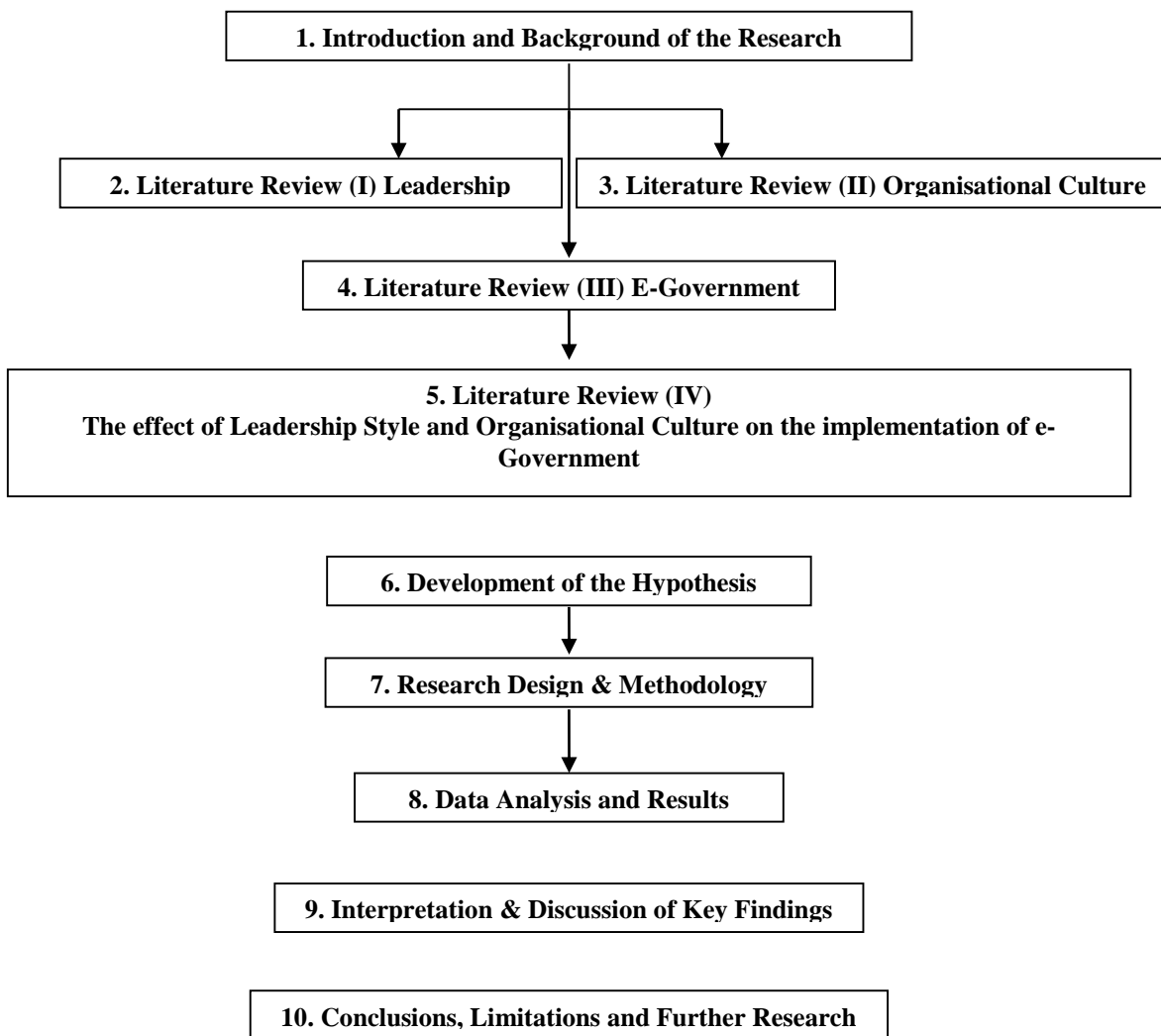
approach. Studies in this area are scarce and there are rarely attempts to study such concepts directly, especially in Saudi Arabia. This study will provide conclusions and recommendations that will benefit future studies in this area. At the same time it will identify the leadership style and organisational cultures which promise the best possible results for the implementation of e-Government.

1.7 Research Methodology

In academic research there are two fundamental approaches to the study of the social world, namely quantitative and qualitative methods (Denzin & Lincoln, 2000), but this division has given rise to an on-going debate as to their relative merits. Most researchers place their emphasis on one form or another, or both, partly out of conviction, but also because of the training and the nature of the problems being studied (Strauss & Corbin, 1990).

Researchers who have examined leadership and cultural issues have frequently used specially-designed questionnaires for measuring these two variables because they can implement large-scale surveys and longitudinal studies to study and compare cultures and leadership styles across organisations. A great advantage of questionnaires is that it is possible to investigate a large sample at minimum cost (Lim, 1995). Moreover, questionnaires are more objective and allow precise, quantitative comparisons between one questionnaire and another (Sackman, 1991). Consequently, this research will adopt the quantitative research method.

Fig. 1.1: Research Structure Overview



CHAPTER TWO

LEADERSHIP

2.1 Introduction

Leadership has been extensively researched because it is believed that it plays a most important role in the success of countries, organizations, and communities. It is considered to be the main and crucial factor in influencing group processes and outcomes. The issue of leadership-development is rich with theories, models, and techniques designed to nurture and prepare people to lead. Researchers have covered numerous areas of leadership, such as its nature, definition, theories, skills, qualities, and styles. However, the special areas of interest in this study are concepts and definitions of leadership as well as leadership theories, leadership styles, classification of leadership styles, and the relationship between leadership styles and the implementation of e-Government.

2.2 Concept of Leadership

*‘Ten soldiers wisely led,
Will beat a hundred without a head’*

EURIPIDES (480-406 BC)

Bass (2008) suggested that leadership is a dynamic process in which both the situation and the perceptions of those involved undergo constant change. Leadership is not rank, privilege, position, title or money: rather it is the responsibility of a father for his family, of teachers for their classes, of ministers for their ministries, as well as each member in a society responsible for a specific role which, if they achieve it, could mark them out as leaders (Drucker, 1995).

2.3 Definitions of Leadership

Although leadership has been researched extensively, no agreed definition of either the concept of leadership or its nature seems to have been reached. Rost (1993) examined 587 publications within which he found 221 different definitions of leadership. During the 20th century, and in the first decade of this millennium, leadership definitions have passed through many stages in their evolution. According to Bass (2008), in the period between 1920 and the first decade of this millennium the understanding of leadership experienced constant evolution. Commencing with the basic idea that leadership was simply a matter of the leader imposing his will on others and gaining their obedience, by the 1990s leadership had come to be defined in terms of personal charisma and the ability to persuade and inspire those being led to share a common vision. The past decades has seen yet another change which considers leaders as being, first and foremost, responsible and accountable for the success of an organisation. In the wake of the global financial crisis which struck in 2008, this would explain the growing fury at bankers who failed to demonstrate responsible leadership, who enjoy large salaries, but who damaged both the organisations they worked for and their country.

Bass (1991, 2008) categorised leadership definitions into three categories:

1. Leader-centric,
2. Leadership as an effect, and
3. Leadership as an interaction between the leader and the followers.

‘Leader-centric’ definitions, for example, are ‘one-directional’ insofar as they focus on the leader’s personality and characteristics. ‘Leadership as an effect’ refers to a situation in which a leader is considered as an instrument of goal achievement.

‘Leadership as an interaction between the leader and the followers’ describes a scenario in which a leader works collaboratively with staff or others in the organisation.

Bennis and Nanus (1985) complained that despite numerous studies conducted over the last 75 years there is still no clear consensus as to the meaning of leadership. This is a complaint echoed by Stogdill (1974) and Burns (1978) and need not surprise us since the phenomenon of leadership is not readily accessible to rigorous empirical investigation. Indeed, there are just about as many definitions of leadership as there are those who attempt to define it. Arguably, leadership is *per se* intuitive; we know how to do it but are hard put to define it formally.

Fundamentally, leadership is the process of moving people towards accepted goal(s), and this notion of leadership recognises all factors in that system: people, goal, and ability (influence). The main argument against this concept is that it restricts influence only to the leader rather than integrating the whole process, and it supposes that the leader drags the followers towards a goal.

Although leaders are often considered to be the main factor controlling the many outcomes which affect organisations and their employees (e.g., strategies, goal-setting, promotions, directions, appraisals, and resources), the reality is that in the modern model of leadership innovation and creation do not necessarily just follow the leader; instead, leaders look to staff, colleagues, and peers for ideas and inspiration.

To define leadership it is necessary to give attention to many factors: individual personal traits, leader behaviour, followers’ behaviour and perceptions, task goals, and situations.

According to Kofman (2006, p. 9), “Leadership is a process by which a person sets a purpose for others to follow and motivates them to pursue it with effectiveness and full

commitment". For Yukl (2006, p. 8) leadership is "the process of influencing others to understand and agree about what needs to be done and how to do it. It is also the process of facilitating individual and collective efforts to accomplish shared objectives". Although these definitions can be categorised as leader-centric, they could be categorised also as an effect because they include influence, goals, and directions. Northouse (2010) agreed with Yukl (2006) and Kofman (2006) that leadership is mainly a process between the leader and the followers to influence others to achieve a common goal. Therefore, such definitions reflect several components that describe leadership as: (a) a process (b) influence (c) context of a group (d) goal-attainment and (e) leaders and their followers sharing the same goals. Consequently, in the case of leadership as a process, for example, the concept of leadership goes beyond the personal characteristics or traits of the leader. There is a transactional component which unites the leader and his followers. Furthermore, if leadership is considered to be a process then leadership is available to everyone, not just to a person who is a born leader, and in this sense leadership is a skill that can be learned.

Dwight D. Eisenhower defined leadership as "The art of getting others to do something you want done because they want to do it" (quoted in Axelrod, 2006: 120). Bundel (1930) suggested leadership to be "The art of including others to do what one wants them to do" (cited in AL-Anazi, 1993, p. 1). In a similar vein Truman (1958) stated that "A leader is a man who has the ability to get other people to do what needs to be done and what they don't want to do, and like it" (p.139 cited in Bass, 1990(a)). These definitions, however, lead us to distinguish between a leader and a great leader. Rosalynn Carter, former US First Lady, made this distinction when she stated "A leader takes people where they want to go. A great leader takes people where they don't necessarily want to go, but ought to be." (cited in Al-Farsi, 2007, p.31)

Cohen (2009) has criticised many definitions of leadership. He commenced with Drucker's definition that the only definition of a leader is someone who has followers and he added that to have followers is not enough to be a leader, as National Football League teams and pop stars have followers. Leaders should inspire their followers to achieve high performance. In fact, the followers that Drucker mentioned in his definition are different from those in Cohen's comments. Sport teams, pop stars, and others have admirers; they don't have followers leading them towards a goal. Another definition criticised by Cohen (2009) is leadership as a process of influencing others to achieve a common goal (Northouse, 2007). Although this definition includes influence and a common goal to be achieved, Cohen (2009) criticised it saying that the process is vague and doesn't answer exactly how could leaders influence followers? After criticising many leadership definitions, Cohen gives his own definition of a leader as someone who asks the right questions, and finds the right people to do the job while consulting people at all levels. He is ethical in his approach at all times but manages to stretch people beyond what they would normally be capable of. He prioritises, allocating resources where the need is greatest. In his definition, goal and vision are valued and take all people into account without using the word 'followers', although most researchers and practitioners use the word in their definitions of leadership. However, it is a word of ambiguous meaning which can certainly be viewed as patronising: in the Oxford Thesaurus the word 'follower' is a synonym for aspirant, retainer, minion, companion, lackey, toady, servant, disciple, adherent, admirer and devotee. The main problem with Cohen's definition of leadership is that it does not just speak of leadership but also of management. Furthermore, he restricts leadership to two styles, participative and consultative, and ignores the possible different styles that leaders may adopt.

An alternative approach to defining leadership is to describe the differences between leadership and management rather than giving a clear definition. According to Alswedan

et al. (2003) managers and leaders have different roles in that leaders focus on human relations, care about the future, and provide vision and strategic orientation; they practice a role-model style and spend more time with, and pay greater attention to, their followers' welfare. Managers, on the other hand, focus on immediate achievement and progress, on criteria and problem solving, on perfect performance, on rules and regulations, and the use of authority. This difference is confirmed by Furnham (2005) who stated that the essential difference between leaders and managers is that while managers perform a rational, analytic, and intellectual function, leaders inspire by vision, values, confidence, and determination.

Thus a review of the literature has demonstrated that leadership has been defined from different methodological and substantive aspects and the search for only one proper and true definition of leadership appears to be fruitless (Bass, 2008). However, the definition of leadership that should serve the purposes of the study is concerned with how leadership affects e-Government implementation. Furthermore, it will explore areas such as leadership as an effect, where a leader is behaving as an instrument of goal achievement (transactional leader), as well as leadership as an interaction between the leader and the followers, where followers try to identify with the leader (transformational leadership).

2.4 Leadership Theories

To understand leadership it is necessary to understand the various theories from 'Great Man' to 'transformational' leadership, and the evolution of these theories over the last century. Researchers have classified leadership in different ways; for example, theories, approaches, and schools. Bass (1990), for example, classified leadership theories into the following five groups:

1. Personal and situational groups.

2. Interaction and social learning groups.
3. Interactive processes groups.
4. Perceptual and cognitive groups.
5. Hybrid groups.

In 2008, the same author classified leadership theories in other ways: Instrumental group, Inspirational group, and Informal group.

The instrumental group focuses on:

1. The leader's orientation to the task or to the person.
2. The leader's direction or followers' participation.
3. Leader's initiative or consideration of their followers.
4. Leader's promises and rewards, or threats and disciplinary action.

The inspirational group includes:

1. Charismatic theories.
2. Transformational theories.
3. Visionary theories.

The informal leadership group deals with the emergence and service of effective leaders; there is no formal position of leader.

Other researchers, (Stogdill, 1948, 1974: Yukl, 1989, 1994, 2002, 2010) have classified leadership into four different schools, each school focusing on a different aspect of leadership.

1. The trait approach explains leadership in terms of general characteristics.
2. The behaviour approach focuses on the behaviour and style of the leader.
3. The power-influence approach looks at the situational traits or responses in specific circumstances.
4. The situational approach emphasizes different elements, such as the external environment, the nature of the work, and the characteristics of the followers.

The literature on leadership shows that leadership theories have evolved from the ‘Great Man’ theory to the new ‘transformational’ theory of leadership. The former assumes that a leader is born to lead and no further questions need to be asked. The latter focuses on behaviours which can be learned and imitated, such as the ability to inspire and enthuse followers. In other words, leadership is no more than a mechanical skill and, consequently, individuals can be trained to perform as leaders by applying defined rules in specific contexts. In other words, the context in which leadership is to be exercised will determine what leadership skills are appropriate and which skills need to be learnt.

According to Bass (1991, 2008) until the late 1940s most theories focused on the personal traits and qualities of successful leaders. Then the focus shifted to the personal style of leaders, and between the 1960s and 1980s the concept of leadership broadened to include the importance of the interplay, and the respective traits, between leaders and followers, together with the situations within which they functioned. By the 1990s transformational theories of leadership had become prominent, but in the present century leadership and management theories have become more sophisticated, being strongly influenced by the advent of computerisation, information science, and globalisation (Bass, 2008, Yammarino & Dansereau, 2009; Yukle, 2010).

The main leadership theories are plotted against time in Table (2.1) below. All theories are cited although new leadership theories have dominated in leadership studies since the middle of the last century.

Table (2.1): Leadership Theories

Theories	Pre	1930	1930	1940	1950	1960	1970	1980	1990	2000
Great man	→	→	→	→	→	→				
Traits	→	→	→	→	→	→	→			
Power-Influence				→	→	→	→	→	→	
X&Y						→	→	→		
Z							→	→		
Servant Leadership							→	→	→	→
Situational		→	→	→	→	→	→			
Normative				→	→	→	→			
Contingency						→	→	→		
Path Goal					→	→	→	→		
Transactional						→	→	→	→	
Transformational						→	→	→	→	→
Charismatic						→	→	→	→	→
Visionary							→	→	→	→

Source: (adapted from Judson, 2009)

2.4.1 Servant Leadership Theory

Many reviews of contemporary literature on servant leadership commence with the work of Greenleaf (1977). It was he who formulated the Servant Leadership Theory in his first essay, *The Servant as Leader*, which contains a concept derived from the story *Journey to the East* by Hermann Hesse. According to Greenleaf (1991), the story concerns a group of men who set out on a journey. Of these, Leo is the central figure, and it is his job to perform menial chores whilst taking care of the group. He carries an extraordinary presence, and he sustains the group with his spirit and song. The journey goes smoothly until Leo disappears, causing the group to fall into disarray and the expedition to be

aborted. After many years, the narrator of the story finds Leo (whom he first knew as a servant) to be the titular head of their order and thus their actual and noble leader. His desire to serve the group of men stemmed from his innate nature. Greenleaf believed that the key message of the story is that one has to first serve one's people, community, and society before being recognised - by dint of personal service - as a leader (Ming, 2009).

The core value of servant leadership has its roots in Islamic and Arabic traditions, and Arabic people have long believed that the leader of a people is their servant. In other words, the leader serves those whom he or she leads, both as a group and also as a set of individuals.

Greenleaf (1970) went on to define the notion of 'servant-leader': to be a servant-leader means to be a servant first, possessed with the natural feeling that one wants to serve; this then develops into a conscious aspiration to lead. The servant-leader is diametrically opposed to the one who is first and foremost a leader. The care he shows manifests itself in different ways, but does so primarily by giving the highest priority to other people's needs. The theory is premised on the notion that leaders need to curb their own egos, convert their people into leaders, and become 'first-among-equals'. The fulfilment of the needs of others has the highest priority for the servant-leader, according to Greenleaf (1991), the servant-leader focuses on others rather than himself and on understanding his/her role as a servant.

With this definition, Greenleaf tried to cultivate social values and principles based on love and service to others and focus on building an ideal society. At the level of the organisation, knowledge is used, rather than power, to lead, and values such as cooperation, care of others, love, and interpersonal relations are emphasised. Greenleaf (2002) identified a servant-leader's characteristics as being imbued with initiative,

persuasion, conceptualisation, foresight, healing, awareness, empathy, commitment, community-building, and stewardship.

The idea of servant-leadership was widely accepted among researchers and writers in the 1990s (Fields & Winston, 2010; Smith, 2005; Laub, 2005; Stone et al. 2003). At the beginning of the new millennium, eight international offices of the Greenleaf Centre for Servant Leadership were founded in different countries (e.g. Canada, Korea, Singapore, South Africa, the United Kingdom and Australia), demonstrating that the message of servant-leadership has expanded and gained an increased level of acceptance globally and across cultural borders (Laub, 2005).

Although there are some similarities between the transformational leadership style (discussed below) and the servant style, variations do exist (Liden, Wayne et al., 2008; Fields & Winston, 2010; Smith, 2005; Stone et al. 2003). According to Stone et al. (2003), both transformational leaders and servant-leaders are visionaries, create high levels of trust, behave as role models, show consideration for others, delegate responsibilities, empower followers, monitor and coach, communicate, listen, and influence followers.

Although transformational leaders empower and elevate followers, thereby increasing their motivation and commitment to their work, followers do not necessarily obtain personal benefits. Graham (1991, p. 110) stated that “there is nothing in the Transformational Leadership Model that says leaders should serve followers for the good of followers, while servant leaders lead their followers to the followers’ own ultimate good.” Furthermore, according to (Graham, 1991), servant leaders’ tenets are based on followers first, organisations second, and their own needs last. Therefore, servant-leadership as a concept places the main emphasis on employees and community, and it revolutionises interpersonal work relationships; hence the primary difference between

them is that transformational leaders concern themselves more with organisational objectives whereas servant-leaders focus more on their followers.

Indeed, servant-leadership can be effective for attaining organisational goals and objectives on a long-term basis. Stone et al. (2004, p. 355) summarised the reason behind focusing on followers, stating that “organisational goals will be achieved on a long-term basis only by first facilitating the growth, development, and general well-being of the individuals who comprise the organisation”.

The servant-leadership model relates, to some extent, to Abraham Maslow's ‘hierarchy of needs’ theory (1954). Servant-leaders try to meet their followers’ needs, this being considered to be the prime motivation for leadership (Russell & Stone, 2002). They stress personal integrity and serving others. They develop their followers, helping them to strive and flourish (McMinn, 2001). They provide service and stewardship, and gain credibility and trust from followers; they influence others (Sokoll, 2011; Russell & Stone, 2002; Farling et al., 1999) and are strongly influenced by their organisation’s needs (Bass, 2008).

Liden et al. (2008) tested this construct and its effectiveness in a mid-western university in the US. Their research empirically validated seven servant-leadership dimensions (conceptual skills, empowering, helping subordinates grow and succeed, putting subordinates first, behaving ethically, emotional healing, and creating value for the community). Sokoll (2011) studied the relationship between future-orientation and servant-leadership, finding that there is a positive relationship between the level of future orientation and servant leadership in the sense that a high future orientation culture will value servant-leadership behaviour, and vice versa.

To avoid overlap between the two styles (transformational and servant-leadership), Fields and Winston (2010) suggested distinctive behaviours of servant-leaders. Their

model of servant-leadership contains a single dimension that focuses on the leader's service to, and development of, followers as represented in Table 2.2.

Table 2.2: The single-dimension that focuses on the leader's service to, and development of, followers.

Leadership Dimension	Items
Servant-leadership behaviour	Practices what he/she preaches
	Serves people without regard to their nationality, gender or race.
	Sees serving as a mission of responsibility to others
	Genuinely interested in employees as people
	Understands that serving others is most important
	Willing to make sacrifices to help others
	Seeks to instil trust rather than fear or insecurity
	Is always honest
	Is driven by a sense of higher calling
	Promotes values that transcend self-interest and material success

Source: Fields and Winston (2010)

In summary, although many theorists, researchers, and organisations embrace servant-leadership as a viable model for organisational leadership (Stone et al., 2003), it has received much criticism for its lack of empirical validation. Servant-leadership theory may also be criticised on the grounds that it ignores issues such as accountability and the aggression of people in the workplace. At the same time it fails to take into account the widely varying levels of competence among individuals (Lee & Zemke, 1993).

2.5 A New Paradigm

The literature on leadership shows a progression which commences by focusing on the attributes and characteristics of leaders, then moves to analyses of their behaviour, and later emphasizes the context of leadership (Riaz & Haider, 2010, Edwards & Gill, 2012). In the early 1970s the leadership field was characterised by the emergence of the 'new leadership' approach which recognised good management as being more important than leaders mainly getting the work done with their followers and maintaining a good relationship with them (Bass & Avolio, 1994). The emergence of the 'new leadership'

approach has changed the focus from individual leaders to the process of leadership as a whole.

Burns (1978) opened wide the impetus for research to contrast transformational leadership to transactional leadership as its opposite. Although much of the current literature on leadership focuses on studying leaders to understand leadership phenomena, Burns delved into the philosophy of leadership “in what it conceptually is” (Fairholm, 2001). In his new conceptualisations, he emphasises leadership *per se* rather than focusing on the complexity of interchange between the followers and the leader that enables an analysis of the main forces and processes involved (Kelly, 2008; Northouse, 2010).

Burns (1978, p 2) describes the leadership process as “a continuous flow of developing exchanges that involve on-going and varying appeals to the higher level motivators of the followers”. The ‘new leadership’ approach helps us to think about how leaders behave to influence followers to make sacrifices and to raise them above their own materialistic self-interest (Yukl, 2010). According to Yukl and Van Fleet (1992) these theories are a hybrid approach to leadership, including components of many other approaches such as traits, behaviours, attributes, and situations. A key feature of these theories is that they have shifted the focus from leaders being task-achievers (by controlling and directing followers’ behaviour) to a leadership model that enables the development of active relationships between followers and leaders. The new model relates to some extent to Maslow’s ‘hierarchy of needs’ (1954) and his ‘Theory of Human Motivation’. The new model entails raising followers’ motivation beyond exchange values and thus achieves each follower’s ‘self-actualisation’ and higher levels of performance (Edwards & Gill, 2--9012). This model enables leaders to energise their

followers to fulfil their visions and to achieve an organisation's goals with little more than the message they have to offer.

The concepts of transformational and transactional leadership were introduced by Burns (1978) who contrasted the two, noting that the difference between them was how the two parties, leaders and followers, behave and achieve their goals. To Burns, most leadership is transactional and is more commonplace than transformational; leaders enter into relationships with followers on the basis of mutual benefits (Judge and Piccolo, 2004, Bass, 2008; Yukl, 2010). By way of contrast, transforming leaders motivate followers to do more than is initially required (Avolio, 2011). Bass (2008) claimed that the transformational leader emphasizes what you can do for your country; the transactional leader - what your country can do for you.

Judge and Piccolo (2004) argued that transformational leadership theory was based on a greatly modified and widely elaborated conceptualisation of Burns (1978). Unlike Burns, however, Bass (2008) does not see transformational and transactional leadership styles as lying along a single continuum. For Bass (2008), they are separate but positively-correlated dimensions which can be combined to a greater or lesser extent by the best leaders. The two types of leadership were defined in terms of the discrete behaviours exhibited by leaders in order to influence followers and identify the effects on them (Yukl, 2010), thus providing a heuristic approach to the investigation of leadership styles.

2.5.1 Transactional Leadership Theory

By the early 1960s the study of leadership had moved to Transactional Leadership Theory, which is included in Bass's hybrid group. The basis of transactional leadership, according to Pearce et al. (2002), lies in previous theories such as Expectancy Theory, Path-Goal Theory, Exchange/Equity Theory, and Reinforcement Theory. According to Bass (2008), until the late 1970s leadership theory and empirical work were concentrated

on transactional leadership. Today both transactional and transformational leadership have a wide range of applications.

A leader is transactional if he/she rewards followers for meeting agreements or punishes them for failing to achieve their goal (Bass, 2008). Furthermore, transactional relationships entail an element of mutual dependence. The transactional leader recognises what rewards followers expect from their work and ensures that they achieve them (Almansour, 2012). The leader-follower relationship can be considered as an exchange of benefits – “*you scratch my back and I'll scratch yours*”. Inherent in the exchange process between leader and followers are clear directions from the leader about the requirements of the task and the nature of the conditions and rewards.

The most recent version of transactional behaviour falls along three dimensions. The original formulation of the theory, according to Yukl (2010), included only two types of transactional behaviour: ‘contingent reward’ and ‘management by exception’. The latter dimension was subsequently divided into ‘active management by exception’ and ‘passive management by exception’ (Bass & Avolio 1990a). Laissez-fair leadership has been added to the newer versions of the theory as a third dimension (Yukl, 2010; Avolio, 2011). ‘Contingent reward’ refers to constructive transactions or exchanges between leaders and followers, such as clarification of the expectations and the work required to be done, and establishes psychological rewards (e.g. positive feedback, praise, appreciation letter and approval) or material rewards (e.g. raise in salary, promotion, and awards) for meeting these expectations. In this dimension, leaders transact with their followers by rewarding effort contractually, and by directing them as to what to do in order to obtain rewards (Lievens et al, 1997) or to avoid punishment. The transactional leader is not concerned with changing followers’ personal values, or building their trust or commitment to organisational goals. Instead, the transactional leader works in

accordance with Maslow's (1954) hierarchy of lower-level needs (safety and security) and tries to satisfy those needs when the desired outcomes are achieved in line with pre-agreed standards. 'Management by exception' is a corrective transaction whereby the active leader monitors mistakes and errors in the performance of followers and takes corrective action (Yukl, 2010). In 'Management by exception-passive', the leader takes no corrective action before a problem comes to his or her attention; that is, "*if it ain't broke, don't fix it*" (Bass & Avolio, 1990; Bass, 2008; Yukl, 2010). The corrective actions which the passive leader uses include contingent punishments (Nikaïen et al, 2012), negative feedback, reproof, or disciplinary action. The main difference between active and passive leaders in management by exception lies primarily in the timing of the leader's intervention (Howell & Avolio, 1993). That is, the active leader continuously monitors his followers' behaviour, anticipates mistakes, and takes corrective action before they become a problem. Passive leaders do not clarify standards for the followers: instead they wait until the task is completed and the followers have created a problem and then intervene with criticism and reproof because the followers did not meet the required standards.

A final type of leadership, or rather 'non-leadership', is laissez-faire leadership in which the leader shows passive indifference to the task and the followers. He/she avoids intervening or making decisions, ignoring both problems and followers' needs; he/she hesitates in taking action and is absent when needed. It is best described as the absence of leadership rather than as a dimension of transactional leadership. According to most research on this style of leadership, it is the most inactive and ineffective style of leadership and some researchers (Bass & Avolio, 1994; Avolio, 1999; Bass, 2008; Yammarino & Dansereau, 2009; Yukl, 2010; Avolio, 2011) have argued that the laissez-faire leadership style should be treated separately from transactional leadership because it represents no leadership.

The literature on transactional leadership shows that this style is easy to adopt as it does not demand extraordinary attributes or characteristics from leaders. The transactional leader focuses on short-term commitments. Consequently, this form of leadership is said to be responsive to followers as it raises their level of need on Maslow's (1954) hierarchy. Therefore it will work well in certain environments (Yammarino & Dansereau, 2009), however, as the followers become more demanding the ability to encourage and motivate them to achieve ever-higher levels of performance will not succeed. This was confirmed by Bass (1990, 1985) who claimed that this form of leadership could never elicit the highest levels of performance from followers, and a simple exchange of mutual benefits between leader and followers would never override a commitment to attitudes and beliefs. The transactional leader may express values, but they are values pertinent to the immediate exchange process, such as honesty, fairness, reciprocity, and responsibility (Yukl, 2010; Avolio, 2011). In short, as managers focus on immediate achievements, on caring about rules and regulations, and on using authority, it is evident that transactional leadership is more akin to management than leadership. This was confirmed by Kouzes and Posner (1995:321, cited in Bass, 2008) who asserted; "The transactional leader closely resembles the traditional definition of manager".

2.5.2 Transformational Leadership Theory

Transformational leadership as a competing theory to transactional leadership entered the academic arena in the late 1970s with the work of Burns (1978) and, later, Bass (1985a), who included it in his hybrid group.

Burns (1978) defined transforming leaders as those who (1) raise their followers' levels of consciousness about the designated goals and how these goals can be achieved;

(2) convince followers to transcend their own self-interests for the good of the team or organisation; and (3) activate their followers' higher-order needs.

Transformational leaders move beyond the simple exchange process with their followers (Kara, 2012). They motivate their followers to do more than they originally thought possible, convincing them that through extraordinary effort, motivation, and self-sacrifice they attain higher levels of personal performance.

Between 1980 and 1985 Bass (1985a) postulated a multidimensional theory of transformational leadership based on Burns's (1978) conceptualisation. Many researchers (Bass, 1985; 2008; Bass & Avolio, 1994; Hunt & Conger, 1999; Yammarino & Dansereau, 2009; Avolio, 2011) claim that early research on transformational leadership focused on the needs of the leader, but the focus has been widened in later studies to make a stronger connection to followers' emotional needs. Transformational leadership goes beyond the attempt to gratify followers' current needs by contingent reward. Instead, transformational leadership attempts to motivate followers to work for a higher level of self-actualisation and to promote positive change for individuals, groups, and organisations.

Transformational leadership causes the leader to move individuals and groups beyond immediate self-interests through four different behaviours. These behaviours fall along four dimensions: charisma (or idealized influence), inspirational motivation, intellectual stimulation, and individualized consideration, while in the original formulation of the theory Bass (1985) included three types of behaviour: idealized influence, intellectual stimulation, and individualized consideration.

Charismatic leadership (idealised influence): this concept emphasises that transformational leaders behave as role models for their followers and colleagues (Bass & Avolio, 1994; Yukl, 2010; Avolio, 2011). They are admired, respected and trusted.

Charismatic leaders have a clear vision and sense of purpose and they are willing to share risks with their followers. They are the ones who do the right thing and display high standards of ethical and moral behaviour.

Inspirational motivation: transformational leaders motivate and inspire others, generate enthusiasm, and communicate optimism about future goal attainment. They communicate expectations, demonstrate a commitment to goals (Bass & Avolio, 1994; Bass, 2008; Avolio, 2011) and communicate an appealing vision (Yukl, 2010).

Intellectual stimulation: leaders behave in ways that encourage others to be more innovative and creative (Bass 1998, Avolio & Bass 2002; Yammarino & Dansereau, 2009; Yukl 2010; Avolio, 2011) and increase followers' awareness of problems. Transformational leaders ask followers for new ideas and create solutions to problems (Avolio & Bass, 1994). There is no public criticism of individual members' mistakes, and creativity is openly encouraged (Avolio & Bass, 2002; Bass, 1998).

Individualized consideration: transformational leaders allocate special attention to individual followers' needs and differences. They act as coach or mentor for achievement (Avolio & Bass, 2002; Bass, 1998; Avolio & Bass, 1994). They provide support and encouragement (Yukl, 2010) and listen to the followers' concerns and needs. Transformational leaders foster the managerial and leadership skills of followers by delegating them some responsibility and mentoring them unobtrusively if they need additional support or direction (Avolio & Bass, 2002; Bass, 1998). As people have different needs and desires, transformational leaders recognise those needs and demonstrate acceptance of individual differences.

2.5.3 Charismatic Leadership Theory

‘Charisma’ as a personal quality was first used to describe a special gift that enables individuals to do extraordinary things (Northouse, 2010). The German sociologist Max Weber (1947) introduced it to the study of leadership, describing charismatic leadership as having four components: (1) an extraordinary person, (2) a crisis and a solution, (3) the ability to attract followers, (4) the validation of that person’s gifts (Trice & Beyer, 1989). The interaction of all of these components will result in the concept of charisma, and all of these components have to be present to some degree for charisma to be achieved (House, 1999). Weber (1922/1968:241; cited by Leavy, 2010), suggested that a leader could be described as being charismatic when “considered as extraordinary and treated as one endowed with supernatural, superhuman, or at least specifically exceptional powers or qualities”. The key word in the definition is the word ‘considered’, which means that a leader is perceived to possess such qualities and powers by his followers; however, the notion of a leader being an extraordinary person or possessing exceptional powers or qualities alone is still inadequate as a concept. Weber emphasised charisma as being a characteristic of personality. He asserted in his theory that charismatic leaders are extraordinary people but, as noted by House (1999), he did not explain the psychological aspect of charisma or in what way charismatic leaders are extraordinary.

Charismatic leadership has received a great deal of attention from researchers. Newer versions of the theory (House, 1977; Conger & Kanungo, 1987, 1998; Shamir, House, & Arthur, 1993; Hunt & Conger, 1999) have been formulated which describe charismatic leadership in organisations. As noted by Yukl (2010), House (1976) identifies how charismatic leaders behave, their respective traits and skills, and the conditions in which those qualities and skills are most likely to emerge. He suggested that charismatic leaders were individuals who possess personal traits and skills that allow them to create

profound and unusual effects on followers. House et al. (1991, p. 366) suggested that charismatic leadership is “the ability of a leader to exercise, diffuse, and intensely influence the beliefs, values, behaviour, and performance of others through his or her own behaviour, beliefs and personal example”. Bass (1985, 2008), Bass and Jung (1999), Bass and Avolio (1994), Avolio (2011) as well as others considered charisma as a component of transformational leadership. Bass (2008) suggested that the charismatic leader is likely to be transformational. Some researchers (Conger & Kanungo, 1987; Conger, 1989) proposed and developed a theory of charismatic leadership as an attributional phenomenon; that is, it is typically accompanied by a set of clearly identifiable characteristics. Yukl (2010) summarised leaders’ traits and behaviour in the following way: charismatic leaders are those who present a vision that transcends the status quo; they act and behave in unusual ways to achieve their vision; they make self-sacrifices and take personal risk; they are highly confident about the success of their mission; they arouse emotions in their followers; they see opportunities that others fail to recognise. Conger and Kanungo (1994) developed a model for studying the behaviour of charismatic leaders focusing on six behavioural elements: strategic visioning and communication behaviour, sensitivity to the environment, unconventional behaviour, personal risk, sensitivity to the needs of the members of the organization, and positive deviation from the status quo.

The literature on charismatic leadership shows that a value and personality idea of charisma is based on how followers perceive the leader, whether they are convinced by him/her, and whether they feel compelled to follow. Charismatic leaders arouse enthusiasm and commitment in followers by self-sacrifice and leading by example. The charismatic leader is a person of strong convictions, self-confident, and emotionally expressive. The Charismatic Leaders gather followers through their personality and charm, rather than any form of their power or authority

2.5.4 Visionary Leadership Theory

Visionary Leadership Theory is a category which refers to the leader's ability as a visionary to be a key feature (Kirkpatrick, 2011). A vision is often described as a picture of an ideal future that the leader wants to achieve. Visions and goals are, to some extent, similar. Basically, visions and goals are something that people want to reach. Westley and Mintzberg (1989) defined visionary leadership as a process consisting of three components: the vision (idea), communication (words), and empowerment (action). They also suggest that visionary leaders use a transformational style to realise their vision.

Research by Westley and Mintzberg (1989) concluded that visionary leadership is not always synonymous with good leadership. They found that leaders with visionary behaviour had reputations for being difficult to work with, although they are described as having positive influences on followers, resulting in high trust in the leader, high commitment to the leader, high levels of performance among followers, and high overall organizational performance (Kirkpatrick, 2011). Consequently, visionary leadership might offered answers of how do some leaders attract followers and inspire them to pursue a shared goal and how let them achieving beyond ordinary expectations.

In fact, visionary behaviour is part of leadership as whole and is included in most leadership theories. Furthermore, an exciting vision is not sufficient to assure a successful outcome. The most successful combinations entail the visionary leader providing a mission and goals (what needs to be done) and strategies (how to accomplish that mission).

2.6 Leadership Theories - Summary

Various leadership theories have been explained and discussed, and over the past century various theories have emerged and evolved according to culture, situation,

economic circumstances, and prevailing lifestyle. The evolution of leadership theories appears to mirror the trends and fashions in organisations, institutions, and communities.

Until the late 1940s most leadership theories focussed on the personal traits of leaders. The focus then shifted to the personal style, and later it expanded to include followers' and leaders' traits and the situations in which they found themselves. Leadership theories of inspiration and transformation became prominent in the 1990s and early 2000s. Leadership and management theories have subsequently become more sophisticated and have been strongly influenced by the advent of computerisation, information science, and globalisation.

Leadership theories have been classified in different ways depending on the researcher's methodological preferences and his/her understanding of leadership. Researchers have classified leadership according to different schools of thought, where every school focuses on a different aspect of leadership phenomena (trait, behaviour, power-influence, and circumstances). These theories have evolved from the 'Great Man' theory to the 'New Transformational Leadership'. The former held that "the leader was born and not made; thus, the qualities were innate and not developed or taught" and focused on the characteristics and personal traits of successful leaders. The latter was concerned with the charismatic, visionary, and inspirational aspects of leadership, which included the behaviour of both leaders and followers, and the context of leadership. According to Yukl (2010:41), leadership theories can be classified as prescriptive or descriptive according to whether the emphasis is on 'what should be' or on 'what is currently happening'. Leadership plays a most important role in the success of countries and organisations, and is widely considered to be the main, crucial factor in influencing group processes and outcomes. Consequently some leadership theories have focused on outcomes resulting from incentives. These incentives could be psychological or material

rewards in the case of transactional leadership, or, as in the case of transformational leadership, something more meaningful such as a higher level of self-actualisation. No leadership theories have been disproven entirely. Consequently, leadership theories seem to have been a product ‘of their time’, and for this reason none appear to have the whole answer.

In the next section, the researcher considers the various leadership styles and translates some of the theories described above into the types of behaviour that might be adopted in the different situations which leaders might face.

2.7 Leadership Style

Leadership style is different from leadership theory. Leadership style reflects what leaders ‘do’ and how they ‘behave’, while leadership theory reflects what leaders ‘are’. Hersey and Blanchard (1981: 34) defined leadership style as “the consistent patterns of behaviour which one exhibits, as perceived by others, when one is attempting to influence the activities of people”. The behaviour of a leader tends to be either relationship-centric or task-centric, or some combination of the two (Hersey & Blanchard 1981). Fiedler (1974) differentiates between leadership styles and leadership behaviour, the former indicating the motivational system of the leader, the latter being the specific actions of a leader. Thus, leadership style is defined in terms of how a leader interacts with his or her followers in order to accomplish objectives.

Throughout the Twentieth Century many leadership theories and approaches emerged and evolved, but no single style of leadership has been identified as being ‘best’ for all situations; thus, there is no one style that can be considered as having all the answers. In addition to his classification of leadership theories into five distinct groups, Bass (1990 & 2008) suggested four leadership-style paradigms which were compromises between two competing options. While suggesting two opposing approaches and

summarising their respective advantages and disadvantages, Bass did not, however, reach a clear conclusion as to which was the best method of classification.

2.7.1 Classification of Leadership Styles

Management and leadership styles have been examined, over many decades, in an attempt to find the most effective way to lead. In this section two opposing approaches proposed by Bass (2008) will be introduced and explained.

2.7.2 Autocratic versus Democratic

According to Bass (2008) the autocratic/authoritarian leader is characterised as being arbitrary, controlling, power-oriented, coercive, legitimate, punitive, and with a closed mind. Such leaders stress loyalty and obedience and are defined by Lewin (1939) as those who make decisions alone and demand strict adherence to rules. The decision-making process is centralised; autocratic leaders take full responsibility for decisions and control of their followers' performance. Praise and criticism of followers play a significant role in autocratic leadership. In contrast, democratic/egalitarian leaders are relationship-centred, showing concern for their followers. They are adopters of McGregor's (1960) Theory Y whereby they seek advice, opinions, and information from their followers (Bass, 2008). Democratic leaders are decentralised and work with followers to establish goals, empowering them with sufficient authority to achieve the goals on their own. Democratic leaders depend on their followers' skills and ability. But who is to say which style is right? In any organisation, leaders are free to match their styles according to their subordinates' maturity (Hersey & Blanchard, 1972). Hunt et al. (1988) claimed that different styles are required at different times in the organisation's life cycle, which supports the idea that each situation requires its own leadership style. Bass (2008), Hersey and Blanchard (1972), and Geir et al. (2009) suggested that in less mature organisations with low-skilled workers possessing low levels of maturity,

autocratic/authoritarian leadership works best. In mature organisations comprising skilled workers who possess very high degrees of maturity, a democratic/egalitarian style is considered to be more appropriate. Culture and the organisation's nature are other important factors to be considered when determining the appropriate style to adopt. According to House and Javidian (2004), Kabasakal and Dastmalchian (2001), Schwartz, (2004), and Malallah (2010), research into cross-cultural leadership has determined that significant differences exist in the methods and styles used for leadership among various nations and cultures. In Japan, for example, the level of difficulty of a task can determine the most appropriate approach to leadership, a democratic style being found to be more effective for easier tasks, otherwise an autocratic method was seen to be more effective. In India, on the other hand, the autocratic style was generally found to be more acceptable (Smith & Peterson, 1988: Smith et al, 1989). Bass (1990, 2008) concluded that performance might be enhanced more in the short term by autocratic leadership, whereas in the long term the positive effects of a democratic leadership style are more apparent.

2.7.3 Directive Versus Participative

Directive leadership describes an approach in which the leader guides and governs in one direction. Directive leaders play the central and active role in making decisions and directing their followers, and according to Bass (2008), the leader takes decisions alone and without explanation, discussion, persuasion, or informing his followers until the instruction is given to carry them out. This pattern of leadership is common (and should be) in a military environment which requires the immediate execution of orders on the battlefield without question; there is no time for discussion and persuasion. In contrast, participative leaders prefer to share the problem with followers individually or as a group so as to reach a consensus. A participative leadership style entails the leader asking for input and suggestions from others before deciding on the direction for the

group. The directive-versus-participative leadership differences fit to some extent with the Situational, Normative, and Contingency theories which emerged in the second half of the last century. Some of the earliest studies of leadership behaviour sought to answer the question as to which style is more effective - directive or participative - but none of these studies provided conclusive proof that one style worked better than the other. Judson (2009) and Staw and Cummings (1979) reviewed the results of a number of investigations into the effects of directive and participative styles of leadership, but the findings were inconclusive for they were unable to find any overall trend to suggest that one particular form of leadership improved the productivity of organisations. In many firms in the KSA, for example, foreign managers use participative methods, consulting with subordinates prior to making decisions (Malallah, 2010). This is because the participative or consultative approach to management is part of the Saudi Islamic leadership tradition. But arguably, leaders should be able to switch between both styles as necessary. The participative method works best when acceptance, satisfaction, and commitment are important when both leaders and followers need to be in possession of the required information. On the other hand, directive leadership is more effective when priority is an issue, when only the leader has the information, and when the decision is more important than followers' commitment.

2.7.4 Task-Versus-Relationship

Leaders differ from each other in their orientations, some focusing on getting the job done in a specific way while others do the same thing in a more roundabout way. Such leaders are concerned with three aspects of their work: the task, the people, or both. Task-oriented leaders are primarily concerned with completing the task in an efficient and reliable way (Yukl, 2010). They direct instructions and supervision to subordinates, and are more concerned with production and outcomes (Blake & Mouton, 1964). Task-

oriented leaders are identified as achievement-oriented, production-oriented, production-emphasising, goal-achieving, work-facilitating, and performance-planning (Misumi, 1985; Indvik, 1986b; Peterson, Smith, & Tayeb, 1993). Leaders are labelled as 'task-oriented' when they direct their followers in what to do, and direct them when, where, and how each function is to be achieved. In contrast, relationship-oriented leaders show concern for people and are primarily concerned with increasing mutual relationships, cooperation, job satisfaction, organisational commitment, and identification with the organisation (Yukl, 2010). Bass (2008) claimed that most experimental studies have concluded that the satisfaction of subordinates is positively correlated with relationship-oriented leaders, and task-oriented leaders are associated positively with followers' performance. However, he found relationship-oriented leaders to be positively correlated to group performance. Some researchers (Nealey & Blood, 1968; Lowe et al. 1996) have asserted that leadership styles can be varied across hierarchy levels. Nealey and Blood (1968) showed that at operative levels task-oriented leaders received higher performance ratings while at the executive level relationship-oriented leaders performed better. This was supported by Lowe et al. (1996, cited in Oshagbemi & Gill, 2004) who investigated transformational and transactional leadership at different organisational levels. They concluded that transactional leadership appears to be a dominant style at the executive level whereas a transformational approach is commonly applied at operative levels. This conclusion contradicted the findings of Bass et al. (1987) and Avolio and Bass (1988) who claimed that the leadership behaviour observed at one organisational level would appear in the next level of the organisation. That is, leaders influence their followers (second level of command) to achieve their goals and by adopting the same leadership style too.

The task-versus-relationship paradigm includes Blake and Mouton's Managerial Grid of 1964 (later updated in 1985) and Hersey and Blanchard's leadership classification

methods (1981). The consensus between theorists is that leaders high in both relationship- and task-orientation (that is, those with a high-high or the 9,9 leadership style according to Blake and Mouton's grid) are the most effective. Blake and Mouton (1965) were closely followed by Hersey and Blanchard (1972) who claimed that leaders could match their styles according to the maturity of their subordinates.

Bass (2008) concluded that leaders who combine high performance with relationships, cooperation, job satisfaction, organisational commitment, and identification with the organisation are likely to be both relationship-oriented and task-oriented.

2.7.5 'Laissez-Faire' Versus 'Motivation to Manage'

These paradigms represent two opposite styles of leadership. At one end, the laissez-faire leader allows his/her followers to work autonomously. This style occurs when there is an absence or avoidance of leadership. The laissez-faire leader shows passive indifference to the task and to the followers, avoiding intervening or making decisions, ignoring both problems and followers' needs, hesitating to take action, and absent when needed (Bass & Avolio, 1994; Bass, 2008; Yukl, 2010). No attempt is made to motivate followers (Bass & Avolio, 1997). It could be described as the absence or avoidance of leadership. At the other end of the spectrum the motivational leader sees him/herself as a role model and an example to others. A motivational leader is driven by the desire for recognition or success for themselves or their organisation. Such leaders can motivate others if motivated themselves. Miner et al. (1995) defined the motivation to manage (or managerial motivation) as an internal force which leads individuals to seek out managerial positions, to enjoy such positions, and to perform well in them. Miner et al. (1995) identified six motivational factors which combine to constitute the motivation to manage: (1) favourable attitudes to superiors, (2) the desire to compete, (3) the desire to

exercise power, (4) the desire to assert oneself (5) the desire to be distinct and different (6) and perform duties responsibly. These opposing approaches reveal the greatest contradiction in styles: the laissez-faire leader being absent when needed while the motivational leader being prepared, present, and perceptive.

2.8 Classification Methods - Summary

Four main leadership styles have been explored and explained. Each approach addresses a different range and different aspects of leadership. Although all four approaches focus on the relationship between the task and those entrusted to carry it out, the dominant paradigm is based on Bass's (2008) task-versus-relationship approach. Within the task- and relationship-orientation of the past 40 years, there are different dominant models regarding the classification of leadership styles: the Blake and Mouton Grid (1964), Hersey and Blanchard's Situational Leadership (1969 a, b), and Fiedler's Contingency Model (1964a, 1967). Hersey and Blanchard, and Fiedler, focus on how leaders should behave in different situations, and they emphasise how these situations affect the leader's effectiveness. For Blake and Mouton (1964), effective leadership is a function of both the task and human considerations. These models have prescriptive methods for identifying the style of a particular leader. Most significantly, these models have been extensively tested and therefore have some empirical validity.

2.9 The New Leadership

The four leadership-style paradigms have been discussed and explained and it is apparent that each approach addresses a different aspect of leadership (e.g. the task, relationships, decision-making, power, coercion, legitimacy, rules, centralisation or decentralization).

According to Dixon (2008), full identification with an organisation's goals and better performance occurs when a workforce trusts, respects, and admires its leaders and has a clear understanding of what they are doing, why they are doing it, and what the result will be. This led to the 'new leadership' approach which goes beyond the basic view that leaders "mainly get the work done with their followers and maintain good relationship with them". The new leadership pattern encompasses the three leadership styles discussed above; that is, transformational, transactional and servant. Leaders are transformational when they broaden and elevate the interests of their followers, when they generate awareness and acceptance of the purposes and the mission of the group, and when they stir their followers to look beyond their own self-interest for the good of the group (Bass, 1990, 2008). In contrast, transactional behaviour occurs when leaders motivate followers by appealing to their self-interest through an exchange of benefits. Furthermore, a servant-leader is a servant first, possessed with the natural feeling that one wants to serve; this then develops into a conscious aspiration to lead.

2.9.1 Transformational and Transactional Styles

Burns (1978) was the first to conceptualize leadership styles as having transactional and transformational characteristics. He argued that transformational leadership is more than an exchange of relationships with followers. By force of character such a style imbues followers with the enthusiasm and will of the leader to such an extent that his/her goals and aspirations also become theirs. It has been defined as a style which combines the motivating of followers to achieve organisational goals with the promoting of followers' well-being and needs (Panopoulos, 1999).

According to some researchers, transforming a desired vision of the future is one of the most integral components of this style (Bass, 2008; Yukle, 2010; Yammarino, 2010). The attainment of such a transformation requires a leader to align followers' interests

with organisations' interests. Intellectually stimulating followers and paying high attention to differences among them are two additional components that distinguish transformational leaders (Yammarino, 2010).

Transactional leaders, by contrast, are characterised as contractual leaders who offer a 'swapping' or 'trading' motive in an exchange process with their followers (Jamaludin et al., 2011). Transactional leaders mainly articulate the job requirements to their followers and what they should receive if they achieve it. Transactional leaders establish reward (and punishment) systems and they agree with their followers on the conditions for the rewards and punishments. Therefore, transactional leaders control followers' behaviours and eliminate performance problems using corrective transactions with their followers (Groves & LaRocca, 2011).

Several theorists (Bennis & Nanus, 1985; Yukl, 1999; Bass 1985, 1998; Tichy & Devanna 1986, 1990; Saskin 1988; Alimo-Metcalfe & Alban-Metcalfe, 2001) have proposed versions of the Transformational and Transactional Leadership Model. According to Yukl (1999), the model that has generated the most research is the three-dimensional 'Full Range Leadership Model' which was formulated by Bass and his colleagues (Bass, 1985, 1996; Bass & Avolio, 1994). This model encompasses three dimensions: transformational, transactional, and laissez-faire leadership. Transformational leadership motivates followers by raising their awareness of the importance of task outcomes and encouraging them to transcend their own self-interest for the good of the group, organisation, and society (Bass, 1985, 1990; Bass & Avolio, 1994; Yukl, 1999). Transactional leadership motivates followers to comply with the leader's requests and the organizations rules. Laissez-faire leadership could be considered 'non-leadership'. The 'Full Range Leadership Model' provides us with a theoretical framework within which to identify the enormous influence and effect leaders have on

followers and the behaviour that leaders use to achieve this influence and effect (Bass, 1985, 1996; Yukl, 1999). The framework includes such parameters as clarity of vision, the sharing of risks with followers, inspiring followers, generating enthusiasm, communicating optimism about future goal attainment, communicating expectations, demonstrating a commitment to goals, stimulation to be innovative and creative, increasing followers' awareness of problems, re-framing problems, coaching and mentoring, developing followers' managerial and leadership skills, directing followers, exchanging benefits between leaders and followers, and rewarding or punishing (Bass et al, 1987; Yammarino, 1994; Avolio & Bass, 2002; Ferreira, 2010).

The third style of leadership is servant leadership. As noted above, a servant-leader is concerned mainly with serving followers and achieving organisational goals and objectives on a long-term basis. Stone et al. (2004, p.355) summarised the reason behind focusing on followers, stating that “organisational goals and objectives could be accomplished on a long-term basis by first facilitating the growth, development and the needs of the individuals who comprise the organisation”. It is a unique leadership style (Black et al., 2012), Laub (1999: p.30) defining it as “more than a style of leadership. It is a different way of thinking about the purpose of leadership, the true role of a leader, and the potential of those being led”.

This style of leadership creates safe and strong relationships within organisations. In addition to servant-leaders' primary goal (serving others), they possess traits and characteristics that make them eligible to lead. Therefore, the need to serve, combined with a motivation to lead, is the basis of a servant leader. These characteristics make them respected and admired. They have high integrity, lead with generosity and become role models to their followers. They understand and practice a style of leadership that places the good of those led over the self-interests of the leader (Laub, 1999: p.81). Servant

leadership is democratic in nature, as followers participate in decision-making processes. These, together with the other characteristics a servant-leader possesses (see Servant Leadership Theory, Section 2.1.7), can contribute markedly to organizational performance. Additionally, the servant leadership style is believed to have a positive influence on team effectiveness (Dierendonck, 2011). As this genre of leadership is built on fairness, encouragement, and empowerment, followers feel safe and trusted; this, in turn, encourages positive job attitudes and organizational citizenship behaviour, which then contributes to many organizational functions such as team effectiveness and organizational performance (Rivenq, 2011). Several writers (Vondey, 2010; Walumbwa et al., 2010) have claimed that servant leadership has a positive relationship with organizational citizenship behaviour because the servant leadership style is associated with higher commitment among employees (Ebener & O'Connell, 2010).

Hamilton (2008) claimed that there are several positive outcomes relating to servant leadership such as mission-focus, employee loyalty, creativity, innovation, responsiveness and flexibility. Although some of these assertions have been supported by empirical evidence, others, such as creativity and innovation, have not. Joseph and Winston (2005) assert that servant leadership could enhance an organization's productivity and financial performance, although they, too, could not provide empirical evidence to support this (Melchar & Bosco, 2010).

To sum up, these three distinct leadership styles have been connected to a higher level of follower performance and to enhanced achievement of organizational goals. Therefore, in the e-Government environment - in particular during the implementation phase - leadership plays an important role. This stage of e-Government needs a clear vision, long-term goals, coaching and mentoring, and innovative and creative leadership. Furthermore, it needs employee involvement in the decision-making process and it must

focus on the development of followers. Consequently, based on the discussion above, the transformational, transactional, and servant leadership styles have been identified as the most appropriate styles to create a positive effect on the implementation of e-services in Saudi Arabia.

CHATER THREE

ORGANISATIONAL CULTURE

3.1 Introduction

Over the past 40 years or so, extensive, wide-ranging research on the cultures of organisations has been undertaken. The importance of culture in this research has been identified as a vital element in the motivation and productivity of the human resource. Organizational culture is deemed central to organizational success, reflecting the level of continuing interest in the subject. The success of the Japanese economy and the impact of the Japanese management style in the 1970s and 1980s has encouraged and motivated scholars and writers to look more closely at Japanese companies. Many studies compared Japanese companies with their American counterparts. Furthermore, the rapid development of information and communication technology in the late 1900s and the first decade of the new millennium has drawn the attention of writers and researchers to the phenomenon of organisational culture. This interest has been stimulated by the belief that organisational culture can be the major determinant of the development and use of information and communication technology.

Researchers on organisational culture have examined numerous, quite separate areas of organisational culture; for example, the concept of organisational culture, its levels, dimensions, and typologies. However, in this study the focus has been on four relevant characteristics; namely the definition, the levels of organisational culture, dimensions of organisational culture, organisational culture typologies and Saudi national culture. To understand these characteristics, it is first necessary to arrive at a definition of ‘culture’.

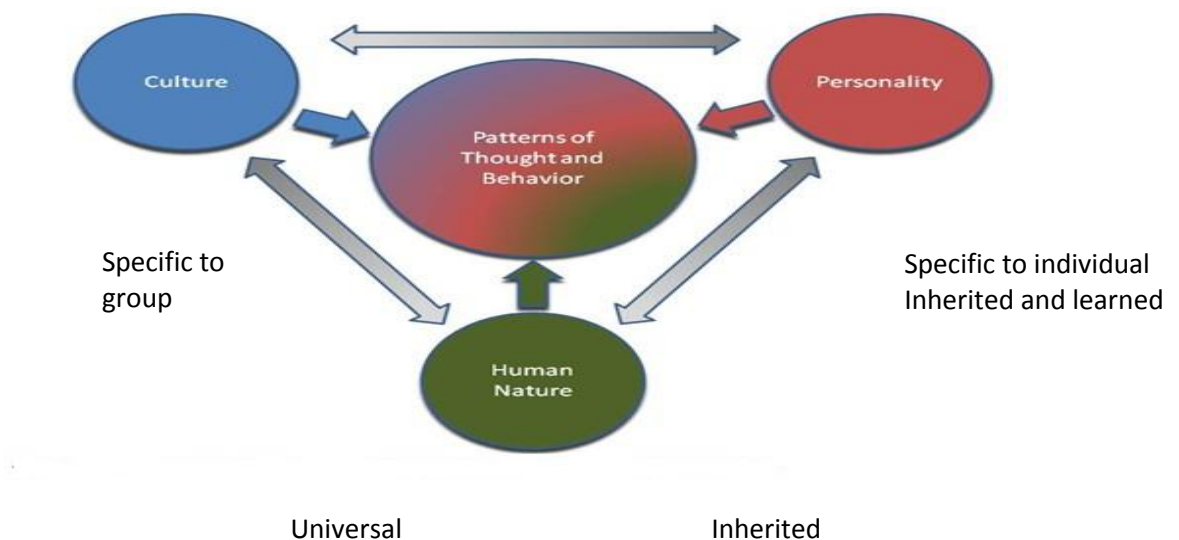
3.2 Culture

According to the Oxford Dictionary the word ‘culture’ relates back to the Middle English meaning a piece of cultivated land and was borrowed from the French word culture or from the Latin word cultura. Over time it has taken on several other connotations, such as ‘civilization’ (Merriam-Webster/Dictionary; Oxford Dictionary) or ‘refinement of the mind’ (Hofstede et al, 2010), which is the commonly understood meaning of the word.

It was Edward B Taylor who, in 1841, used the word culture as integral to civilisation for the first time, describing it as “that complex whole which includes knowledge, beliefs, art, morals, law, custom and any other capabilities and habits acquired by man as a member of society” (Brown, 1998, p. 4). Others, such as sociologists and anthropologists, might see culture as an individual’s thought process, a propensity to act upon feelings, and they might view it as partly responsible for a form of pre-determinism in human behaviour. Conversely, our culture is shaped by our behaviour and our interactions with others. Schein (2010) claimed that culture implies stability and rigidity in the way we are supposed to perceive, think, feel, and act in our social life or occupation. Culture is learnt as a result of our various socialising experiences and becomes accepted as the way to maintain the ‘social order’. There is a collectivism in the word ‘culture’ if it is considered as a major influence on those who live and learn within the same social and educational environment. Hofstede (2010) and others maintain that culture is not innate but rather it is something that can be taught and learned. They view culture as unwritten rules and define it as “the collective programming of the mind that distinguishes the members of one group or category of people from others” (Hofstede et al, 2010: 6). Culture, however, is not the same as human nature or the personality of any one individual (see Figure 3.1). Hofstede et al (2010) claim that human nature is that which all human beings have in

common and is part of our genetic heritage. It is a constant which binds human beings together as a species. Personality, on the other hand, is unique to an individual and is the sum of those psycho-physical systems which constitute a person's characteristic patterns of behaviour, thoughts, and feelings (Allport, 1961). Personality distinguishes one person from another and is the result of traits that have been either inherited and/or learned.

Figure (3.1) the relationships between human nature, culture, and personality



Source: Parrish & Linder (2010)

Cultural differences manifest themselves variously (see Figure 3.2) in the form of symbols, heroes, rituals, and values (Schein, 2010; Hofstede et al., 2010). They are akin to the layers of an onion.

1. At the most superficial level there are symbols: words, gestures, pictures, or objects that signify something shared between those of a specific culture. For example, the beard kept by many Saudi men is a highly respected symbol from religious and cultural standpoints.
2. Heroes are the second layer of the 'onion': people who possess characteristics that are highly prized in a culture and thus considered to be a role model for behaviour.

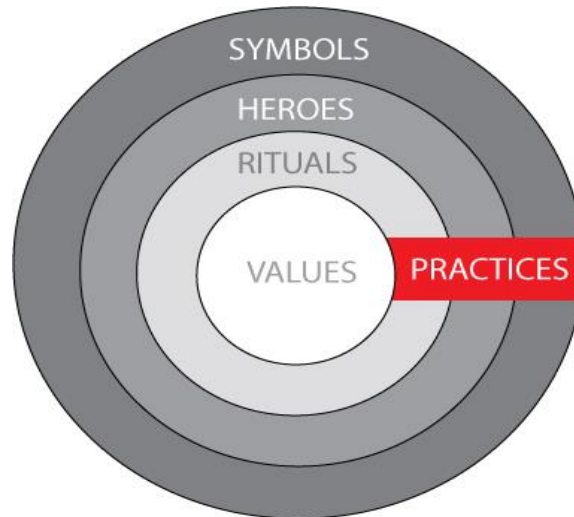
In Islamic and Arabic cultures Mohammed (peace be upon Him) is the best role model. His behaviour provides a model for Muslims to emulate.

3. Rituals, the third layer, are essential social activities, such as ways of greeting and paying respect to others. Saudi Arabia's most powerful cultural symbols are those linked to Islam. The ritual celebrations that have the strongest hold on people's imaginations are the holy month of Ramadan, the holy pilgrimage (haj) to Makkah, and the Muslim feasts of Eid al-Fitr and Eid al-Adha, which occur after the end of Ramadan and in conjunction with the pilgrimage, respectively. Rituals manifest themselves in many other ways in the Saudi culture; for instance, the tradition of having one's children kiss their father's forehead and both palms as a sign of respect.

Although the three previous layers are visible to outsiders, their cultural meaning is invisible to them, only to be understood by the insiders themselves.

4. Values, the core of culture, are important and enduring beliefs or ideals shared by the members of a culture about what is good or desirable and what is not. They are at the very core of a society's cultural existence. In Saudi/Islamic culture, for example, it is normal to recognise kindness and generosity among people as given in Islamic teachings.

Figure (3.2): the ‘Onion’: Manifestations of Culture at Different Levels of Depth



Source: Hofstede et al, 2010

Hofstede (1991) and Hofstede et al (2010) suggested that culture could be divided into several different levels. These are:

1. A national level: national culture.
2. A regional/ethnic/religious level.
3. A gender level: being a man or a woman.
4. A generational level: the separation between grandparents, parents and children.
5. A social-class level: associated with education, wealth, and environmental opportunities.
6. An organisational level: associated with the social aspects of the organisations which employ us.

According to Reichers and Schneider (1990) we experience culture at different levels in our lives, though the respective levels are inter-dependent. That is, every group or category of people carries a set of common thoughts, feelings, and potentials for action

which constitutes its culture. Furthermore, every member of these groups or categories might carry several levels of culture (Ellis & Dick, 2003).

3.3 Definitions of Organisational Culture

One of the most challenging aspects of research involving culture is to define what culture is from among the myriad definitions of the word and means used to measure the concept (Straub et al. 2002).

Writers on the subject have variously described organisations as ‘little societies’ or ‘social systems’ equipped with appropriate processes and structures. References to the culture of organisations appeared as early as the 1960s in literature on the subject. However, the concept of organizational culture was not formally introduced until the early 1980s when it was described in four seminal books. These were:

1. Ouchi W (1981). *Theory Z: How American Business Can Meet the Japanese Challenge*. Simon and Schuster, New York.
2. Deal TE, and Kennedy AA (1982). *Corporate Cultures: The Rites and Rituals of Corporate Life*. Perseus Books, Harper Collins, New York.
3. Peters TJ, and Waterman RH (1982). *In Search of Excellence: Lessons from America's Best Run Companies*. Harper Collins, New York.
4. Pascale RT, and Athos AG (1982). *The Art of Japanese Management*. Simon and Schuster, New York.

One commentator claimed that the first two books contributed to the success of Japanese business, whereas all four books showed that organisational culture was the main factor influencing organisational outcomes.

As noted by others, organisations can be characterised as possessing a personality (Selznick, 1957; Rhenman 1973; Harrison, 1972) and culture; culture, therefore, might be considered as the ‘personality’ of an organisation. Every organisation has a culture (Deal & Kennedy, 1982) which might be difficult for the outsider to interpret. It deals with ‘how we do things in this organisation’ on a daily basis. It also affects every aspect of an organisation: organisational performance, relationships among employees, relationships with managers, with customers, and so on. Organisational culture is a complex phenomenon, Schein (1992) viewing it as an effective and valid response to the problems arising within an organisation. As such, it could be learned and handed-on as the recognised correct way to respond.

According to Reichers and Schneider (1990), prior to the coining of the term ‘organisational culture’, the dominant concept was that of organisational climate. Tagiuri and Litwin (1968: 25) defined climate as "the relatively enduring quality of the total organizational environment that (1) is experienced by occupants, (2) influences their behaviour, and (3) can be described in terms of the values of a particular set of characteristics (or attributes) of the environment". It must be noted that they emphasise the way in which the social environment is experienced by those in it. Other studies have used climate as the equivalent of culture, or used climate and culture as interchangeable concepts, but Schein disagreed with this interpretation, proposing that the climate is better thought of as a manifestation of culture. Schein’s viewpoint was supported by Robbins and Judge (2011) who suggested that “culture creates climate” in an organisation, but this notion was refuted by Hofstede et al (2010: 344) who claimed that “organizational culture is a synonym for organizational climate”. This disagreement among scholars highlights the lack of consensus about the two concepts, for while there are close similarities there are also distinct differences (Reichers & Schneider, 1990; Pettigrew, 1990). According to Denison, (1996), who explored the differences and similarities between the two

concepts, organizational culture is a matter for epistemology and is concerned with the evolution of social systems over time. Organizational climate, on the other hand, examines the impact of organizational systems on groups and individuals. Denison claimed that the distinction between culture and climate was quite clear during the early evolution of the understanding of organisational culture. He argued that studying culture requires qualitative research methods whereas studying organizational climate requires quantitative methods, yet he provided no clarification or reasons why researchers or writers should choose one or other of these approaches. Another departure from Denison's assertions is that organisational climate is temporal and subjective. That is, it is often subject to direct manipulation by people with power and influence. Organisational culture, by way of contrast, is rooted in history and held collectively, which means that it is hard to change. Schein's definition of organisational culture (forthcoming) and Tagiuri and Litwin's (1968) account of organisational climate (discussed above) are similar in as much as both authors consider the holistic nature of social contexts in organisations, the durability of these organizational contexts, and the roots of these contexts in the organization's system of beliefs, values, and assumptions (Denison, 1996). It was finally overtaken by organisational culture in the early 1980s when organisational climate became one category of the wider construct of organisational culture (Schein, 1992). In the early 1980s Schein, Peters and Waterman, Hofstede, and Deal and Kennedy were the most prolific exponents of organizational structure.

Cunliffe (2008) emphasised the significance of organisational culture for companies and how it impacts on their future. Cunliffe (2008) states four reasons for the importance of organisational culture:

1. It shapes the image that the public has of an organisation;
2. It influences organisational performance;

3. It provides direction to the company;
4. It motivates staff.

Buchanan and Huczynski (2010) then added further reasons which reflect the importance of organisational culture, including:

1. Increasing globalization, which has brought organisational culture into sharp focus alongside national culture;
2. The enduring assumption that organisational culture performance depends on employee values being aligned with company strategy; and
3. The contentious view that leadership can consciously manipulate culture to achieve changes in organisational objectives. Indeed, culture can affect all aspects of an organisation's activities.

In 1999, Campbell et al declared that culture could influence employee motivation, employee morale, 'good will', productivity and efficiency, the quality of work, innovation and creativity, and the attitude of employees in the workplace.

Smircich (1983) treated culture as an independent variable imported into the organisation through membership and exhibiting the patterns of attitudes and actions of its members. On the other hand, culture could be treated as an internal variable, a culture-producing instrument. While organisations produce goods and services, they also produce distinctive cultural artefacts such as rituals, legends and ceremonies. In other words, multi-cultural organisations have their own culture, and in time their culture can be communicated to the outside world.

Different writers have defined 'organisational culture' in different ways, but the lack of consensus is rooted in the different definitions of culture itself. In selecting or

composing a definition for organisational culture, writers often arrived at a new or slightly amended version of an existing one that suited their purpose and reflected different understandings of culture. This shows a lack of consensus among writers in producing a universally accepted definition. However, the main focus in defining organisational culture (cf. Sackmann, 1992) has been on cognitive components such as assumptions, beliefs and values.

Culture has been variously described in terms of the behavioural norms and values to be found in any organisation. It is these norms and values which give an organisation its distinctive character and its unique identity (Parry, 2000). Hofstede (1997: 180; Hofstede et al 2010: 345) thought of organisational culture as a sort of collective programming which distinguishes the members of one organization from others and described it in terms of values, rituals, heroes, symbols, and practices inherent in a specific organisation.

Kotter and Heskett (1992) argued that culture has different definitions at different levels. They claimed that 'organisational culture' has two levels which differ in their visibility to outsiders and their resistance to change. At the less visible level, they define it as 'values' that are shared by employees, whereas at the more visible level it is the behaviour that members adopt (Kotter & Heskett, 1992). Kotter and Heskett's way of defining organisational culture was supported by Stacey (1996) who defined the concept in different ways according to its degree of visibility. Stacey (1996:41) defined it at the less visible level as "a set of beliefs, customs, practices, and a way of thinking that the members of an organisation have come to share with each other through being and working together". It is a set of assumptions people simply accept without question as they interact with each other. By way of contrast, he defines it, at the visible level, as taking the form of 'ritual behaviour, symbols, myths, stories, sounds and artefacts'.

House et al (2002; p. 5) defined it as "shared motives, values, beliefs, identities and interpretations or meanings of significant events; common behaviours, institutional practices, proscriptions and prescriptions that result from common experiences of members of collectives, which are transmitted across generations". Another perspective was provided by Williams et al (1993, p. 11) who described it as "...relatively stable beliefs, attitudes, and values that are held in common among organisational members", and as "shared normative beliefs and shared behavioural expectations". Yet another view was given by Brown (1998, p. 9) who described organisational culture as "the pattern of beliefs, values and learned ways of coping with experience that have developed during the course of an organisation's history and which tend to be manifested in its material arrangements and in the behaviours of its members". Each of these definitions gives some details of the concept and each includes some aspects of behaviour such as beliefs and shared values; however, some other definitions are limited by reference only to patterns of behaviour that are passed on to new members.

Deal and Kennedy (1982, p. 4) suggested two different definitions. The first and more comprehensive of these was: "The integrated pattern of human behaviour that includes thought speech, action, and artefacts and depends on man's capacity for learning and transmitting knowledge to succeeding generations". This includes most aspects of behaviour, such as shared values, beliefs, ways of doing things, and of the concept of learning and transmitting knowledge. Such a definition can be applied on any cultural level (e.g. national culture, regional culture, etc.) and is not organisation-specific. The second definition was, the way we do things round here. This is ambiguous, as no one can give evidence that this definition is related to culture per se, or to organisational culture. Even leadership could be defined as the way we do things round here.

Mintzberg (1979 p. 109) defined organisational culture as “A way of learning and knowing or collective cognition”, but this is inadequate insofar as it restricted organisational culture to the gaining of knowledge, and it neglected any deep understanding of the concept. None of the definitions of organisational culture have received universal acceptance, however, each adds value and strength to the concept.

Schein (1985: 19; 1992: 12; 2010:18) defined organisational culture as “a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems”. This definition includes internal and external effects, all aspects of behaviour, the concept of learning and adaptation, and the transmission of behaviour to new members. Furthermore, according to Denison (1996), this definition means that the social environment can be created and generated by those within it. According to Calori and Sarnin (1991; cited by Judson, 2009), this definition is the most cited in academic literature in this field, with Sathe and Davidson (2000) claiming that it is the most commonly-accepted definition of organisational culture.

Based on the literature of organisational culture we can identify the following main traits:

1. Founders and leaders are those who create cultures within organisations.
2. Each organisation has a unique culture built-up and changed over time.
3. The physical environment, emotional displays, beliefs, shared values, and basic assumptions are important components of organisational culture and can be treated separately as three different levels as follows:
 - A pattern of shared assumptions is the essence of organisational culture.

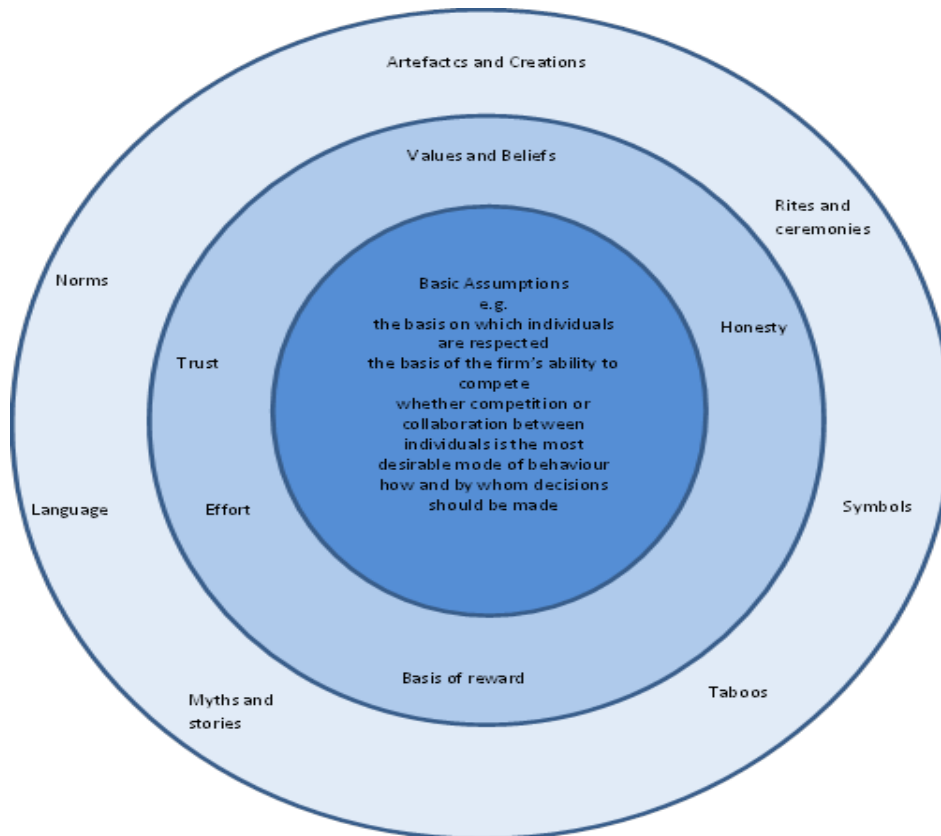
- Culture can be recognized by observing artefacts and shared espoused values, behavioural norms, and rules.
- Shared values (invisible) are harder to change than behavioural patterns or styles (visible).

In summary, culture can be considered as “a striving towards patterning and integration” (Schein, 2010: 18). It is something tangible, which can be felt whenever it is encountered (Campbell et al, 2011:70). It is something shared and stable. Organisational culture develops over time until it becomes an unconscious part of the functioning of the group. Therefore, organisations with long-term employment (members and leaders) will create a strong culture which has, according to Deal and Kennedy (1982), a positive effect on organisational performance. In contrast, organisations with a high turnover of members or leaders will lose their cultural identity, or fail to develop a meaningful culture.

3.4 Levels of Organisational Culture

Schein (2004; 2007; 2010) has conducted several comprehensive studies of organisations, analysing them at a number of different levels, an outcome being a widely-accepted model of culture. He considers organisational culture as consisting of three different levels (Figure 3.3), each distinguished by its visibility to the observer. These levels range from tangible, visible manifestations to beliefs which are deeply embedded at an unconscious level.

Figure (3.3): three levels of organisational culture (Schein, 1992)



Adapted From Rollinson (2008)

The first level of culture is the surface manifestation which comprises the visible products of the group. It includes all physical environments (language, technology and products, clothing and manners of address) and also emotional displays (myths and stories, rituals and ceremonies) that can be seen, heard, and felt. Although these products are easy to observe it is very difficult for an outsider to understand them. Schein's second level of culture concerns organisational beliefs and values. These beliefs initially represent leaders' beliefs before they are transformed into shared values or beliefs. They represent accumulated beliefs of what is right or wrong and what will work or not work. Often they remain unspoken but act nonetheless to guide employees' behaviour (Schein, 2010). According to Buchanan and Huczynski (2010) they can be summarised in the form of aphorisms such as: take risks, be honest, work hard, be creative, be cautious, respect authority, maintain high standards, and coordinate with others. Such tried and tested assumptions come to be treated as an axiomatic reality even though they are invisible and

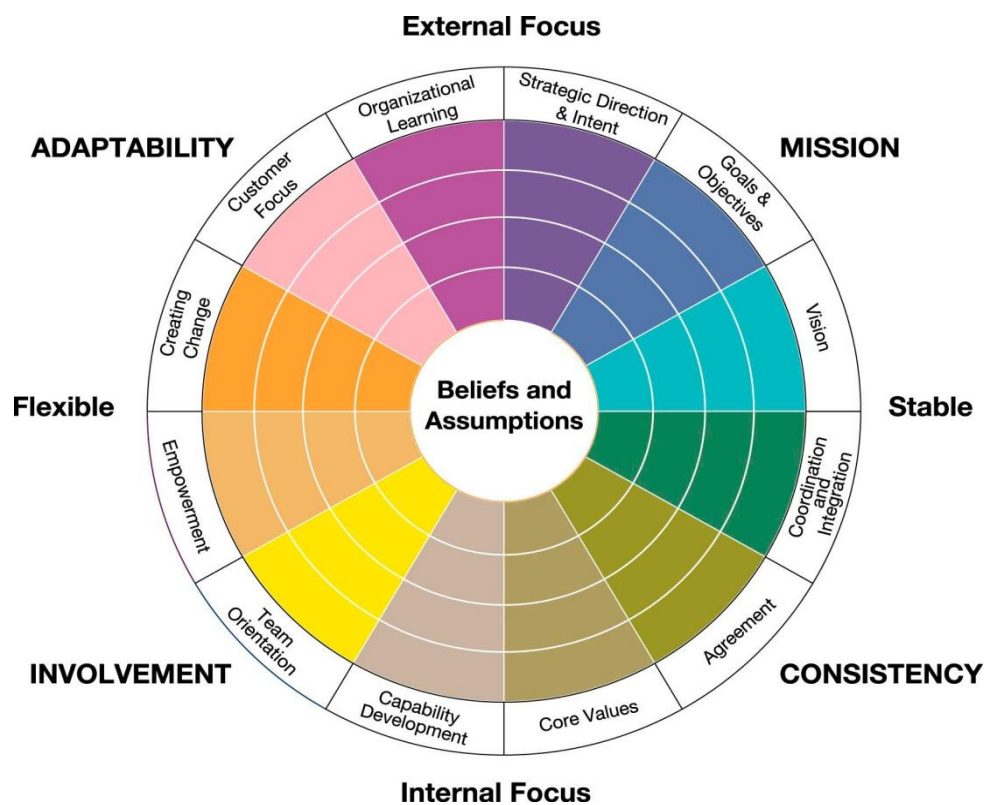
‘taken-for-granted’. Implicit assumptions guide members’ behaviour and tell them how to perceive, think, and feel about things (Argyris & Schon, 1974, cf. Schein, 2010). Indeed, these three levels integrate to form the whole organisational culture, and members will not know how to interpret the other two levels if they do not first decipher the pattern of basic assumptions that may be operating (Schein, 2010: 32). What is more, assumptions and values are usually generated by founders or leaders, they are cultivated by stories and myths, enacted and shaped by the members, and taught to newcomers.

Therefore, in adopting new tools in information technology, such as e-Government, leaders can work to align the culture of an organisation with the organisation’s strategies. Thus, leaders need to create a new understanding and help individuals to adopt new behaviours and beliefs which eventually produce and build the desired culture.

3.5 Dimensions of Organisational Culture

In the later part of the last century writers identified many cultural dimensions (e.g. O’Reilly, 1989; Dension, 1990; Hofstede, 1990; Rousseau, 1990; Zammuto & Krakower, 1991; Denison & Mishra, 1995; Chatman & Jelin, 1994; House et al, 2002). These writers can be categorised into two groups, managerial theorists and cultural researchers. Managerial theorists have focused on those dimensions of organisational culture that related to the organisations’ performance whereas cultural researchers focused on those dimensions that concerned employee behaviour. Interestingly, between these two categories there are some repetitive dimensions. Managerial theorists such as Denison and Mishra (1995) identified a four-cultural-dimensions (traits) model positively related to organizational performance. At the centre of their model lies an organisation’s basic beliefs and assumptions (Fig. 3.4); the four organisational cultural dimensions are subsequently subdivided into three sub-dimensions as defined below:

Figure (3.4): The Four-Dimensional Organisational-Culture Model (Denison, 1995)



Source: Mobley et al, (2005)

Adaptability refers to the degree to which the organisation can adapt to a turbulent environment. It should be capable of altering its behaviour, structure, and system in order to survive in changed circumstances. An adaptable organization has a value that focuses on external situations and demands (Nurdin, 2010). Such an organization creates norms and beliefs that support any responses to change. Adaptable organizations are characterized as risk-taking; they learn from their mistakes, have the ability to create change, and are driven by their customers (Denison, 2000). Thus, a culture of adaptability facilitates the transition of external demands and customer expectations into internal changes of the organization. Furthermore, this trait is considered to be a defensive capacity for responding to unexpected environmental threats (Yilmaz & Ergun, 2008).

Many studies have confirmed that there is a positive relationship between the adaptability trait and a wide range of organisational successes. In their study, Denison

and Mishra (1995) found links between adaptability, growth, and profitability. Similarly, Yilmaz and Ergun (2008) found that adaptability was a prime driver for effective Russian firms. Kotter and Heskett (1992), too, found that firms that emphasised and cultivated adaptability among employees performed well over time. Moreover, those employees who espouse the trait of adaptability have the ability to express themselves in wide-ranging behaviours (Chatman et al, 2012), which in turn helps them to explore divergent solutions to a problem.

Consistency refers to the extent to which beliefs, values, and expectations are held consistently by an organisation's members. It is related to the existence of organisational systems and processes that boost real alignment and efficiency over time. This organisational trait reflects the strong internal culture that such an organisation would have; it would be highly consistent, well integrated, and coordinated (Fey & Denison, 2000). The consistency trait is based more on the beliefs and values that organisations' members hold than on management principles. Denison (1990, p 9) argued that "the fundamental concept is that implicit control systems, based on internalized values, are a more effective means of achieving coordination than external control systems that rely on explicit rules and regulations".

Organisations that cultivate this trait among their members tend to be more effective (Fey & Denison, 2000). It is an indicator of integration, direction, and vision, and shows that the ability to predict profitability will be superior (Denison & Mishra, 1995). Moreover, consistency is more likely to enhance the organisation's capacity to be stable and predictable over time (Denison & Mishra, 1995). Consistency is also positively and strongly associated with performance-management practices (Ehtesham, 2011) and is a key characteristic of high-performing cultures (Smith, 2001).

Involvement refers to the degree to which an organisation builds employee capability, responsibility, and participation in decision-making. It includes empowerment, team-orientation, and capability-development, and cultivates a sense of ownership among employees (Denison, 1989). Moreover, members of such an organisation feel that they 'own' a piece of the organisation (Fey & Denison, 2000). Employees who feel that they are responsible for the success or failure of the organisation demonstrate higher performance levels, and when employees are involved in decision-making they then become connected to the goals of the organisation. Thus, high-involvement organizations rely on informal, voluntary, and implicit control systems (Krafft & Roth, 2006).

Employees with high involvement will be more productive than those with low involvement because they are more committed to the organisation's goals and objectives (Denison & Mishra, 1995). Involvement is therefore a strong predictor of growth (Smith, 2001). Zwaan (2006) argued that there is a positive relationship between organisational effectiveness and the level of involvement and participation of its members. Furthermore, in a study of the impact of organisational culture on Performance Management Practices (PMP) in Pakistan, Ahmed (2012) reported that member-involvement has a positive impact on PMP.

Mission refers to the employees' beliefs about the organisation's purpose. It reflects the ability that the organisation has to define a meaningful long-term direction. Mission gives direction and identifies goals to members by defining an appropriate course of action. Thus, this trait emphasizes stability and direction (Denison, 2000) which facilitate the relationship between the organisation and the external world. Fey and Denison (2000) argued that successful organisations should have a clear sense of purpose and direction that help employees to define goals and objectives. Moreover, it enables members to

imagine how their organisation will look in the future. Importantly, a sense of mission allows an organisation to shape behaviour by envisioning a desired future state (Zwaan, 2006: p. 36).

Most researchers claim that there is a positive relationship between mission culture and an organisation's success (Denison, 1989; Denison, 2000; Fey & Denison, 2000). Mission culture is a predictor of profitability as well as a predictor of other effectiveness issues, such as quality of work, employee satisfaction (Smith, 2001), and organizational performance (Kotrba & Gillespie, 2011).

Hofstede et al. (1990) studied 1,250 middle managers of 20 firms in two countries (Denmark and The Netherlands) and introduced six dimensions of culture. Chatman and Jehn (1994) studied 1,121 middle managers of 22 firms in the service industry and found seven cultural dimensions. Table 3.1 shows a brief summary of such authors' cultural dimensions.

Table (3.1): Dimensions of culture

Author (s)	Culture dimensions
Hofstede et al (1990)	<ul style="list-style-type: none"> • Open system vs. closed system, • Normative vs. pragmatic, • Loose control vs. tight control • Parochial vs. professional • Process-oriented vs. result-oriented, and • Employee-oriented vs. job-oriented
Gordon & DiTomaso (1991)	<ul style="list-style-type: none"> • Stability, adaptability, and strength
Hofstede et al (1991)	<ul style="list-style-type: none"> • Power distance • Individualism vs. collectivism • Masculinity vs. femininity and • Uncertainty avoidance
Trompenaars (1993)	<ul style="list-style-type: none"> • Individualism/communitarianism • Universalism - particularism • Neutral vs. emotional relationship orientations • Specific vs. diffuse orientations and • Achievement vs. ascription
Van Muijen et al. (1994, 1998, & 1999)	<ul style="list-style-type: none"> • Goal • Support • Rules and • Innovation
Chatman & Jehn (1994)	<ul style="list-style-type: none"> • Stability, • Detail orientation, • Innovation,

Author (s)	Culture dimensions
	<ul style="list-style-type: none"> • Team orientation, • Outcome orientation, • Respect for people, and • Aggression.
Hampden-Turner & Trompenaars, 1994	<ul style="list-style-type: none"> • Equality – hierarchy • Universalism - particularism • Analysing vs. integrating • Inner-directed vs. outer-directed • Achieved status vs. ascribed status and • Time as sequence vs. time as synchronization.
Denison & Mishra (1995)	<ul style="list-style-type: none"> • Adaptability, • Mission, • Involvement, and • Consistency.
Cunha & Cooper (2002)	<ul style="list-style-type: none"> • Organisational orientation, • Performance orientation, • People orientation, and • Market orientation.
Berg & Wilderom (2004)	<ul style="list-style-type: none"> • Autonomy • External orientation • Interdepartmental coordination • Human resources orientation and • Improvement orientation.
Glisson (2007)	<ul style="list-style-type: none"> • Rigidity • Proficiency and • Resistance
MacIntosh & Doherty (2009)	<ul style="list-style-type: none"> • Organisational presence • Member success • Connectedness • Formalization • Creativity • Sales • Organisational integrity • Health and fitness • Service • Work ethic • Atmosphere
Shim (2010)	<ul style="list-style-type: none"> • (AIC) Achievement, Innovation and Competence • CSR: Cooperation, Supportiveness and Responsiveness • ER: Emphasis on Rewards
Khan et al (2010)	<ul style="list-style-type: none"> • Support, • Rules, • Innovation and • Coordination orientation
Wallach (1983)	<ul style="list-style-type: none"> • Supportiveness • Innovation • Bureaucracy

House et al (2004) conducted work into Global Leadership and Organisational Behaviour and Effectiveness (GLOBE) which is considered to be the latest and most comprehensive work in the field. The research team investigated 17,000 middle managers in 951 firms in the food-processing, finance, and telecommunications industries in 61

countries, four of which were Arabic (Egypt, Qatar, Kuwait, and Morocco). Among the findings of GLOBE, House and his colleagues identified nine organisational cultural dimensions. Seven of these were common among previous studies (e.g. Hofstede et al, 1990; Hofstede, 1980, 1983, 1991); Chatman & Jehn, 1994; Kluckhohn & Strodtbeck's, 1996; McClelland, 1985), but two dimensions (assertiveness and gender equality) were new. These dimensions are listed below in Table 3.2: (House et al, 2002, p. 5; Ellis & Dick, 2003; House et al, 2004; Chhokar et al, 2008; Hofstede et al. 2010; Liu & Lee, 2012):

Table (3.2): the nine cultural dimensions studied in GLOBE (House et al. 2004)

No	Dimension	Definition	Status
1	Uncertainty Avoidance	This is the extent to which members of a culture feel threatened by an uncertain or unknown future	Hofstede (1980,1983, 1991) and Hofstede et al. (2010)
2	Power Distance	The extent to which the less powerful members of an organisation or society accept and agree that power is distributed unequally	Hofstede (1980, 1983, 1991)) and Hofstede et al. (2010)
3	Group Collectivism	The extent to which the individuals in the organisation express pride, loyalty, and cohesion	Hofstede (1980, 1983, 1991) and Hofstede et al. (2010)
4	Institutional (societal) Collectivism	The extent to which the organisational and societal institutional practices encourage and reward the collective resources, distribution, and action.	Hofstede (1980,1983, 1991) and Hofstede et al. (2010)
5	Gender Egalitarianism	The minimisation of gender role differences and gender discrimination within the organisation or society	Developed by House et al. (2004)
6	Assertiveness	The extent to which individuals in organisations or society are allowed to be dominant, aggressive, and assertive in social relationships	Developed by House et al. (2004)
7	Performance orientation	When organisations or society encourages and rewards members for performance improvement	McClelland (1985) 'The Need for Achievement'.
8	Future Orientation	The extent to which future-oriented behaviours are encouraged and rewarded	Derived from Kluckhohn & Strodtbeck's (1996) work (past, present, future orientation dimension)
9	Humane Orientation	The extent to which individuals in organisations or societies encourage and reward individuals for being fair, altruistic, friendly, generous, and caring to others	Derived from McClelland (1985)

Some of these dimensions have been criticised (Delobbe & Haccoun, 2002; Keshavarzi, 2007; Khan, 2010) for having studied middle managers (Hofstede et al, 1990; Chatman & Jehn, 1994; House et al, 2004), because middle managers do not fully

represent all the members of the organisation. Rather, it is a comparative study which limits the applicability of its findings to specific contexts (Glisson, 2007 (mental health clinics); MacIntosh & Doherty, 2009 (fitness organisations); Shim, 2010 (social welfare)). Furthermore, the variable techniques used by some of the researchers for gathering data have made the outcomes confusing (Keshavarzi, 2007). For example, Denison and Mishra's (1995) findings regarding the correlation between cultural dimensions and the previous performance of an organisation could lead to the conclusion that culture is predicted by performance. Keshavarzi (2007) also criticised Gordon and Di Tomaso's (1991) work because the latter correlated cultural dimensions with the firm's performance by measuring its performance in the five years after culture was measured. Keshavarzi (2007) claimed that their findings were ambiguous and not consistent because culture might change over time.

The variety of organisational cultural models described above illustrates the dilemma of finding a suitable model that measures different types of organisations in different countries. Gordon and Di Tomaso (1992) claimed that there was no consensus on an organisational dimensional model that would be able to describe organisational culture in all types of organisation. Their claim was supported by Chatman and Jehn (1994, p.525) who emphasised the need "to establish a robust set of cultural dimensions that can characterize organizational cultures".

Generally speaking, it can be said that theorists (managerial or cultural) have used cultural dimensions as parameters for distinguishing groups from each other (House et al. 2004). Furthermore, the cultural attributes that they measure reflect group values and behaviours which are considered to be the main factors that shape organisational behaviour.

Among organisational culture studies (see Table 3.1 and 3.2) there are common dimensions. Delobbe and Haccoun (2002) reviewed twenty organisational culture surveys, finding four common dimensions:

1. A 'people orientation' dimension which values supportiveness, fairness, individual rights, cooperation, mutual respect, and consideration (Khan et al, 2010). Some questionnaires relate 'people orientation' to 'task orientation' whereas other questionnaires consider them to be separate dimensions.

2. An 'innovation dimension' which reflects a general openness to change, tendency to experiment and take risks and to accept new ideas. Organisations possessing such traits are flexible and adaptable with new technology (for example e-Government). In some questionnaires this dimension is the opposite of one which places an emphasis on safety and stability (Delobbe and Haccoun, 2002).

3. A 'control' dimension which reflects an organisation's perceptions in dealing with issues. Such organisations have many documented procedures (e.g. system operating procedure), processes, and rules which must be followed. In some studies this dimension is similar to a 'bureaucratic' or 'attention to details' approach and is the opposite of 'flexibility' (Cameron & Quinn, 1999).

4. A 'results/outcome orientation' dimension which reflects the level of performance, productivity, and effectiveness of the organisation. Such an organisation encourages and rewards its members for high performance.

Although Delobbe and Haccoun (2002) identified that the above four conceptual dimensions are common to most cultural surveys, they noted critically that no survey questionnaires cover them completely, and those instruments measure several other dimensions whose relevance across organisational contexts is questionable.

Delobbe and Haccoun (2002) therefore presented their own model which combines five organisational dimensions: (a) recognition-support, (b) commitment-solidarity, (c)

innovation-productivity, (d) control, and (e) continuous learning. This model comprises three categories: performance orientation (innovation-productivity), people orientation (recognition-support, commitment-solidarity and continuous learning), and managerial orientation (control). The model was tested in different organisations to check its validity, the results confirming its convergent-discriminant and consensual validity.

Indeed, it is quite difficult to introduce one organisational cultural dimensions model that measures all types of organisation, as each organisation has its own characteristics and purpose (e.g. commercial or non-commercial, private or public, utilities or services). Therefore, searching for one organisational dimensional model to measure all types of organisations is fruitless.

3.6 The Kingdom of Saudi Arabia

The Kingdom of Saudi Arabia, the fatherland of the Islamic religion and the seat of Islam's two Holy cities, Makkah and Madinah, occupies the better part of the Arabian Peninsula. Historically, Saudi Arabia has been divided into three reigns, each one being called a State. The first reign started with the historic homage between Sheikh Mohammed bin Abdul Wahab and Prince Mohamed bin Saud in 1745. The second began in 1824 and ended with Imam Abdul Rahman bin Faisal leaving Riyadh. During this period chaos and conflicts between tribes prevailed until the banner of unification was held by King Abdul Aziz bin Abdul Rahman Al-Faisal and thus began the unification and foundation process of the Kingdom of Saudi Arabia. The third and final stage was the foundation reign. It began in 1902 when King Abdul Aziz entered Riyadh and the Al-Saud rule returned after the Kingdom was officially unified under the name of the Kingdom of Saudi Arabia (KSA). A Royal Order giving the Kingdom this name was issued in September 1932. The Royal Order came into effect on the 22nd of that month and the title of King Abdul Aziz became 'King of the Kingdom of Saudi Arabia'. The king's official title is the 'Custodian of the Two Holy Mosques'.

Geographically, Saudi Arabia is sited at the crossroads of Europe, Asia and Africa. It is situated in the Middle East and extends from the Red Sea and the Gulf of Aqaba in the west to the Arabian Gulf in the east. To the north it borders Jordan, Iraq and Kuwait, to the south it borders Yemen and Oman and to the east lie the Arabian Gulf, the United Arab Emirates, Qatar and Bahrain. According to Al-Farsy (2003), the KSA's location is critical, for it serves as a bridge connecting the Western world, Africa, and Asia. It is also adjacent to the strategically important Indian Ocean area (see Figure 3.5).

Saudi Arabia occupies 868,730 square miles (2,250,000 square kilometres), making the country the world's twelfth largest nation. According to the Central Department of Statistics & Information in the KSA, the population was 27,136,977 in 2010, however, 31 percent of the population (8,429,401) are expatriates who have come to work or live in the country. At the time of writing, the annual economic growth rate is about 2.2 percent.

Figure 3.5 Saudi Arabia



Source: Ezilon Map (<http://www.ezilon.com/maps/>)

There is a marked gender imbalance as 70 percent of non-Saudis living in the Kingdom are male because of the greater demand for male labour, or might be the Saudi culture is firmly masculine. Of the total population in 2009, 57 percent were male and 43 percent female. The age profile is relatively youthful and prior to the latest census (2010), 57 percent were under 25 and 36 percent under 15 (QNB capital 2012). Consequently, this high proportion of young people who are technology-oriented will prove highly advantageous to the country's bid to adopt technological solutions, given that young people tend to accept new technologies more readily. Table (3.3) provides some facts about KSA's profile.

Table 3.3: Profile of the Kingdom of Saudi Arabia (QNB capital 2012; UNICEF, 2012; Central Department of Statistics & Information in the KSA, 2012)

Demographic	<ul style="list-style-type: none"> • Population: 27,1 Million 0-15 years: 36% (2011 est.) 16-64 years: 61 % (2011 est.) 65 years and over: 3% (2011 est.) •Population growth rate: Population annual growth rate (%), 1970-1990 - 5.1 Population annual growth rate (%), 1990-2010 - 2.7 Population annual growth rate (%), 2010-2030 - 1.7
Area	<ul style="list-style-type: none"> • 2,250,000 square kilometres
Economy	<ul style="list-style-type: none"> • Natural resources: petroleum, natural gas, iron ore, gold and copper • GDP (Gross Domestic Product) US \$435 bn • GDP Per capita GDP at current prices in 2011 (SAR) 76,229 • Export growth in 2011 (35.73%) • Import growth in 2011 (1.45%) • The contribution of exports to GDP at current prices in 2011 (61.6%) • General index for the cost of living 2011 (135) • Change in the index of cost of living (inflation) in 2011 (4.7%) • Unemployment Rate (2009) (5.4%) • The proportion of the population in paid employment in 2009 (32.1%)
Companies operating in the state	<ul style="list-style-type: none"> • 22,000 Saudi companies (2008) with a capital of SR 640 billion compared with just 11,000 companies in 2002 (Ramady, 2010).
Education	<ul style="list-style-type: none"> • 5,441,480 students in the general education • Net enrolment rate in primary education (2010) 96.6% • The number of students studying abroad was 150,000 in 2014. • The majority of international scholarships are in business, management, economics, and computer and information technology

3.7 Saudi National Culture

Saudi Arabia is the birthplace of Islam and part of an ancient civilization. It has an ancient culture with a history extending several thousand years. Therefore, the Islamic and Arabic traditions are revered and nurtured by Saudi citizens with great pride and satisfaction. The Islamic roots from which the Saudi culture stems, along with its time-honoured role as a centre of commerce and its Bedouin traditions, have moulded the very core of its heritage. Islam is pivotal in shaping the nation's culture and serves to regulate social standards, protocols, principles, and credos which have been inculcated by relatives and educational institutions. Saudis believe that Islam is not just a channel for worshipping God; they believe that it is a comprehensive system which regulates their behaviour and embraces detailed prescriptions for the whole of life. Saudi society is tribal whereby the family and tribe are the basis of the social structure and are the most significant entities in society. Kinship and affiliation play an important role in all social relations, and tribes are very relevant to individual lives. Firm tribal loyalties exist within certain zones, and tribal traditions and influences can have a heavy bearing on an individual's liberty when the tribe's reputation is at stake.

Indeed, Saudi Arabia's culture preaches a strong sense of loyalty to family and tribe, yet provides broad scope for individual tastes. Fostering durable, trust-based personal relationships is of the utmost priority to most Saudis; these characteristics are inherited from Islamic teachings.

Twenty-First Century developments have been welcomed by Saudis, with new technologies, a market economy, a modern educational system, modern highways, ports, airports, etc., Saudis remain proud of their Islamic and Bedouin culture. Preservation of the nation's heritage is promoted by means of the maintenance and restoration of components from their cultural history which epitomise age-old traditions. This is

exemplified by the efforts to conserve vintage dwellings and mosques, by employing customary motifs within modern architecture, by keeping time-honoured traditions (such as camel racing) and by the inclusion of tents containing the traditional apparatus of Bedouin tented dwellings in hotels, museums, and other such institutions.

If we explore the culture of Saudi Arabia through the Geert Hofstede Model (1981), we see that it has five dimensions. This model provides an overview of the deep drivers of Saudi culture relative to other cultures. The first feature in the model is that of power-distance. This refers to the extent to which the less powerful members of institutions and organisations within a country expect and accept that power is distributed unequally. The second feature is individualism: that is, the degree of interdependence a society maintains among its members. Third is masculinity/femininity: this refers to the degree to which persons see themselves as masculine or feminine (given what it means to be a man or woman in a society) and the roles assigned to men and to women. Fourth, uncertainty avoidance: this refers to the extent to which the members of a culture feel threatened by unknown situations and have created beliefs that try to avoid these. Fifth, long-term orientation: that is, the extent to which a society shows a pragmatic future-oriented perspective rather than a historical short-term view.

The Geert Hofstede analysis of national cultural dimensions for Saudi Arabia is almost identical to other Arab countries. Saudi Arabia scores high on some categories; for example, power-distance (95), which deals with levels of inequality in society. It is believed that power-distance is inculcated in families from an early age; a country with a high score of power-distance (such as Saudi Arabia) therefore places emphasis on obedience and deference to parents and those of a higher status, given that this is a requisite on the part of the younger Saudi generation.

Power-distance further appertains to the degree to which power, renown, and financial affluence are apportioned within a culture. Consequently, a culture with high power-distance has power and influence in the hands of a few people who control the country rather than distributed throughout the population. Such a culture is perhaps characterised as authoritarian, where people are treated unequally in Saudi society, which of course contradicts the comments that Saudi society has been shaped by its Islamic heritage. But this inequality could be due to Bedouin traditions as well as to Islamic precepts.

The Hofstede Dimension of Individualism is lowest for KSA, which has a ranking of 25; this compares poorly with the average international ranking of 64. It indicates that the country's society is collectivist rather than individualist and reflects a lasting commitment to the group, the family, and the tribe. Loyalty in a collectivist culture is paramount, and overrides most other societal rules. For example, a student from Saudi Arabia may study in Cambridge University and get a PhD and then join a distinguished university in Saudi Arabia and publish tens of papers, yet when introduced to a group of Saudis their primary interest would be his/her tribe. Tribal background distinguishes him or her in society to a much larger degree than his or her achievements.

Uncertainty avoidance among people in KSA is the second highest Hofstede Dimension, measuring 80, which implies that Saudis are anxious about their future. Consequently they prefer to avoid uncertainty which may express itself, according to Hofstede (1997), as overwrought anxiety, an agitated repulsion of unpredictability, and a personal dependence upon rules. Cultures scoring high in this dimension are active, aggressive, emotional, and security-seeking. The innovation and creativity of these cultures may be restricted, which may in turn affect the attitudes of employees in the workplace. Such cultures reflect the lack of willingness to invite change, the absence of

a drive to experiment, to take gambles, or to embrace new concepts. Therefore adoption of a new technology, such as e-Government, is threatened by a high score of uncertainty avoidance for Saudi culture.

Amongst Saudis, masculinity ranked 52 on the Hofstede Dimension, placing Saudis above the international average. The cultural hierarchy of the country owes no religious apology however, because the restrictions on the rights of the nation's women are as likely to stem from a cultural paradigm as from the Muslim religion itself. According to Hofstede (1980) a society characterised as having a masculine culture assigns considerable worth to masculine traits such as determination, competitiveness, and material gain. This indicates that achievement, performance, and success are very important and dominant in Saudi culture. In fact, Saudi perceptions of masculinity are not necessarily like Hofstede's Western notion that being masculine means being determined, forceful, and aspiration-driven. Saudi culture is nonetheless masculine in character by reason of the fact that it carries both an Islamic and a Bedouin tradition that women's social role is wholly different than men's. In Saudi Arabia wives are required to dedicate themselves fully to nurturing the family environment whereas husbands are expected to devote their energies to furnishing the resources for their families' survival.

To sum up, despite the fact that the Twenty-First Century way of life has been welcomed by Saudi culture, that the technological revolution has been fully embraced, and despite one-third of the population now being comprised of foreigners, Saudis remain proud of their Islamic and Bedouin culture. It is still characterized as being a masculine, uncertainty-avoiding, power-distance culture, yet many issues might reshape Saudi culture in the next few years. Sending tens of thousands of students to study abroad (more than 150,000 students at the end of 2014) is bound to bring back to KSA values from the countries where the students have studied. As noted, the populace is youthful, 64 percent

being below the age of 30 and 12 percent aged between 13 and 17. This high proportion of young people is being shaped more by the media than by their parents; it is ranked first among Arab youth for following and using Twitter and Facebook daily on the Internet (Murphy, 2013). Moreover, these new windows to the world (Twitter, Facebook, YouTube, etc.) give them new social, cultural, and political perspectives so that they are more inclined than their parents to accept or reject what they are being taught. Consequently, no one can accurately determine what the Saudi culture will be like ten years from now, but dramatic change is inevitable. This high percentage of under-18s is technology-oriented and will thus prove highly advantageous to the country's bid to adopt technological solutions more easily, given that this generation would tend to accept new technologies more readily.

In summary, the researcher reviewed many cultural characteristics such as definitions, the levels and dimensions of organizational culture, organizational culture typologies and Saudi national culture. This study will adopt Schein's (1985: 19; 1992: 12; 2010:18) definition of organizational culture as it includes internal and external effects, all aspects of behaviour, the concepts of learning and adaptation, and the transmission of behaviour to new members. Moreover, many cultural dimensions have been reviewed and the most accepted dimensions that have been used in different environments were generally found to be task-orientation, innovation, and bureaucracy. In an information technology environment, the most commonly used dimensions were involvement, mission, and innovation. Consequently, as this study is concerned with the implementation of e-Government, with reference to supporting literature the researcher finds the main dimensions relevant to this issue are involvement, mission, innovation, task-orientation, innovation, and bureaucracy.

CHAPTER FOUR

E-GOVERNMENT

4.1 Introduction

The advances in digital connectivity and the significant improvements in information and communications technology are revolutionising the ways in which services are delivered and business is conducted, making them convenient tools in the public domain. These rapid advances have motivated governments around the globe to explore, understand, adopt, and employ electronic interactive services with their customers (Chalhoub, 2010). Furthermore, these developments have increased pressure on governments to improve the quality and expand the scope of internet-accessed government services. Researchers have examined various areas of electronic government, but the special areas of interest in this study are: the definition of electronic government, its characteristics, how it evolves over its life-cycle, the ways in which it is adopted, the reasons for its adoption, and the information and communication technology initiatives with regard to e-Government in Saudi Arabia.

4.2 E-Government Initiatives

Electronic government refers to the use of information and communications technology, and specifically the internet, as a tool to achieve better government. Although public sectors everywhere have been using ICTs since the 1950s, the advent of the internet has given the initiative a higher profile and accelerated its diffusion worldwide (Heeks, 2005). In addition to a broad range of new public management practices, such as decentralisation, privatisation, and performance-management, e-Government has rapidly spread as an important managerial reform (Chung et al, 2011) in an attempt to achieve greater operational efficiencies and effectiveness.

E-government initiatives worldwide have brought about fundamental changes in the structure, values, culture, and ways of conducting business across the public sector and have redefined the relationships between government agencies, and between government agencies and citizens.

Globalisation and the emergence of ICT have encouraged the idea of public-sector reform. The facilities offered by technological advances exert pressure on organisations to examine their operations with regard to improving competitiveness, reducing costs, elevating quality, enhancing technology, and improving products and processes (National Institute for Smart Government 2007; AL-Shehry, 2008; World Bank, 2009). Furthermore, globalisation and the advancement of information technology have encouraged corporations between organisations to enhance their productivity and expand their corporations to reach new markets, and in so doing to transcend geographical and political barriers (Kendall, 2008; Koslowski, 2010). Thus, globalization and technology are defying the handicaps of distance and time. Some scholars have claimed that globalization tends to bring about a convergence of governmental systems worldwide which thus creates a common pattern (Eom, 2010). As the world have become a small village, countries deal together in making agreements and complete business deals. Thus, e-government is used to achieve globalization demands.

Advances in information and technology and the rise of the Internet has contributed to the rapid globalization during the last two decades (Mohanty, 2005). The “World Wide Web” is becoming a model of the global society where the “Internet” has emerged as a symbol of globalization (Grossick, 2005). Consequently e-services increased the globalization of production, education and integrate financial and trade markets.

Many developed and developing countries are experiencing the transformative power of e-Government in revitalizing public administration, overhauling public

management, fostering inclusive leadership, and moving civil services to higher efficiency, transparency, and accountability (UN E-Government Survey, 2010).

Liberalisation of economies and advances in ICTs have enabled many firms to use the internet and web-based technologies to conduct transactions. This new type of business exchange is often referred to as 'e-Commerce'. Electronic commerce, or 'e-Commerce', is a term for any type of business or commercial transaction online. E-Commerce is usually associated with buying and selling over the internet or conducting any transaction electronically with no barriers of time or distance. Behi (2009, p.273) defined e-Commerce as "the use of electronic communications and digital information processing technology in business transactions to create, transform and redefine relationships for value creation between or among organisations, and between organisations and customers".

Indeed, the massive success of private-sector through e-Commerce, the advancement of digital connectivity, and the significant improvements in ICT over the last two decades have put enormous pressure on governments in developed and developing countries. They feel driven by the facilities offered to adopt, implement, and improve their strategies to transform government services using ICTs as a strategic option focused on greater operational efficiency, service quality, accountability, and cost reduction in order to orientate government towards a new way of public administration that works better and costs less. Furthermore, as citizens have become more adept at using the internet and have interfaced with well-designed electronic services from the private sector, they have begun to expect the same high standards from government agencies (Weerakkody et al., 2010).

Indeed, a new age of well-being has emerged with the ICT revolution. E-Government is one of the most visible examples of the way in which ICTs can contribute to bringing this about.

4.3 Definition of E-Government

In recent decades, IT literature has sought to explain and define the many concepts and practices associated with on-line services. Some writers define e-Government in terms of specific actions such as payment of taxes or accessing of information, or in terms of its outcomes. Other writers generalise the definition to mean the automation of government services, but no single definition has gained broad acceptance.

To decipher the definition of ‘electronic government’ it is necessary to understand, firstly, what ‘government’ means. According to Pardo (2000: p.2) government is “a dynamic mixture of goals, structures and functions” which has essential objectives such as maintaining collective security, administering justice, building the institutional infrastructure of the economy, and improving the society’s health and education (Gupta, 2009). It is a complex concept, which includes political institutions, laws, human welfare, economic stability, security, and customs. Therefore, when a government is able to utilise the rapid advances of hardware and software technologies to achieve its primary role as a service provider, the transformation to electronic government can occur (Dawes et al, 1999; Pardo, 2000; Moon & Norris, 2005). However, this transformation should be driven more by the need for improved governance than the desire merely to use technological innovations (Moon & Norris, 2005). That is, e-Government is based on using ICTs, mainly the internet, for conducting government business both internally and externally.

An analysis of the existing literature on e-Government shows that significant use of ICTs by the private sector has played an important role in influencing the public sector to adopt ICT applications in order to build an ‘information society’ (Kifle, 2008). Therefore, there is a semi-consensus among writers that the public sector tries to emulate the private sector, particularly in developing countries. However, public sector providers face challenges such as political issues (e-Democracy and e-Participation), cultural issues

(resistance to change), social issues (access to technology depending on income) and organisational inertia (rigid systems and resistance from senior levels). E-Government is not just a matter of providing computers and automating rigid government structures, for these in themselves would not create effective government; rather, it would make a bad situation worse.

A basic definition of e-Government is: the ability of a government to provide access to services and information 24/7; an initiative starting with 'e' and ending with high efficiency, quality of service and accountability. Such a definition does not give a particular meaning of the concept; rather it simply covers, a) the fact that it is a way of accessing the public services, and b) the results of using such technology.

According to the OECD (2004), e-Government is: the use of Information and Communication Technology (ICT), particularly the Internet, as a tool to achieve better government. This definition, however, is technologically oriented and does not show how such a government could be attained. It has also been defined as: 'the use of technology to enhance the access to and delivery of government services to citizens, business partners and employees' (Deloitte Research 2000, p. 4). Although this definition is broader than the previous one, it still looks at e-Government from the viewpoint of IT technologies rather than as a way of government innovation.

Although such definitions cover part of the concept of e-Government, they are generalised and lack elaboration. The World Bank's website (2009, 2010) defines e-Government as: "The use, by government agencies, of information technologies (such as wide-area networks, the internet, and mobile computing) that have the ability to transform relations with citizens, businesses and other arms of government, which can serve a variety of different ends: better delivery of management services to citizens, improved intersections with business and industry that can lead to less corruption, increased

transparency, greater convenience, revenue growth, and/or cost reductions”. This definition takes a bigger picture of the concept, embracing the use of technologies and the efforts to transform government, and it places an emphasis on efficiency and effectiveness.

Hence, establishing a consensus definition of e-Government for all countries seems to be unattainable because each country uses it in slightly different ways according the nation’s policies, financial situation, culture, and goals. In other words, there is a strong relationship between different governments’ strategies for implementing e-Government and the political status and culture within the country. Some countries will not embrace every e-Government parameter (such as, e-Democracy or e-Participation).

E-Government has been adopted widely for the mutual benefit of governments and citizens for a variety of reasons: to improve service quality, to bring about higher efficiency and transparency, to reduce costs and effort, to lessen (or perhaps end) corruption, and to increase accessibility. However, implicit in e-Government is the need to change the ways in which government agencies interact with customers. The definitions seen on Table 4.1 (below) consider e-Government, according to Aicholzer and Schmutzer (2000: p.379), as a comprehensive phenomenon that brings changes in governance in two ways: (1) the transformation of government business (improving service delivery, reducing costs, and renewing administrative processes); and (2) transformation of governance itself; that is, re-examining the functioning of democratic practices and processes (e.g. through citizen participation). Therefore, such transformations involve government services automation, after which the government can be ‘reinvented’ or the public sector can be reformed.

Misra (2006: p.2) viewed e-Government according to the perspective of employees: for instance, a level-one employee (i.e. moderately educated office worker) perceives it

as a ‘computer’; a level-two (office clerk) perceives it as ‘government services online’; a level-three views it as ‘improved government services online’, while a level-four (senior) sees it as ‘the use of IT to integrate government and its services for the benefit of citizens’.

Table (4.1): some e-Government definitions

Authors	E-Government definition	Definition orientation
World Bank (2010)	The use by government agencies of information technology (such as wide-area networks, the internet, and mobile computing) that has the ability to transform relations with citizens, businesses, and other arms of government which can serve a variety of different ends: better delivery of management services to citizens, improved intersections with business and industry that can lead to less corruption, increased transparency, greater convenience, revenue growth and/or cost reductions	Technology, relations with partners, economics, finance, and management
West (2004)	Provide information and public services through the internet or any other digital means.	Technology
Fang (2002)	A way for governments to use the most innovative information and communication technologies, particularly web-based internet applications, to provide citizens and businesses with more convenient access to government information and services, to improve the quality of the services and to provide greater opportunities to participate in democratic institutions and processes	Technology, relations with partners, management, and politics
European Commission (2007)	Using a combination of information technology, organisational changes, and new skills in public administration	Technology and change-management
National Institute for Smart Government (2007)	The use of ICTs by government agencies for any or all of the following reasons: exchange of information, faster and more efficient services, improving internal efficiency, reducing costs, increasing revenue and restructuring of administrative processes.	Technology, relations with partners, management, economics.
Greenberg (2006)	The use of IT to integrate government and its services for citizens, business, government and other institutional uses	Technology and relations with partners
APCICT (2010)	Government activities taking place through electronic communications among all levels of government, citizens, and the business community	Technology and relations with partners
Heeks (2003)	The use of ICTs to improve the activities of public sector organisations	Technology
OECD (2004)	The use of ICTs, and particularly the internet, as tools to achieve better government	Technology

Authors	E-Government definition	Definition orientation
Bertelsmann Foundation(2001)	Electronic information-based services for citizens (e-Administration) with the reinforcement of participatory elements (e-Democracy) to achieve the objective of balanced e-Government	Technology, management, and politics
Bhatnagar (2002)	A process of reform in the way government works, shares information and delivers services to external and internal clients	Management, relation with partners
Nordfors et al (2006)	Contacts between citizens and government officials through the medium of Information and Communications Technology (ICT) in relation to the provision of government services to the public and the possibility of citizens to conduct a dialogue with government authorities or agencies	Relation with partners, technology,

In summary, as this study concerns the implementation of e-Government at an organisational level, particularly evaluating e-Services in the selected organisations, the researcher adopted the World Bank’s definition because it is the most comprehensive. This definition places emphasis on the delivery of services to citizens because such delivery is at the heart of any e-Government project. Moreover, it focuses on the technology, relationships with citizens and other partners, economics, and aspects of management.

4.4 E-Government Classification

E-Government can be subdivided into many categories. Researchers have mostly focused on the relationships between government and other key stakeholders (Hiller & Bélanger, 2001; Fang, 2002; Bélanger & Hiller, 2005; Ornager & Verma, 2008; Gant, 2008; Lee, 2010). While e-Government is primarily represented by four types of interaction, Fang (2002) suggested eight different classifications: Government-to-Citizen (G2C); Citizen-to-Government (C2G); Government-to-Business (G2B); Business-to-Government (B2G); Government-to-Government (G2G); Government-to-Non-profit (G2N); Non-profit-to-Government (N2G); and Government-to-Employee (G2E). Hiller and Bélanger (2001) and Bélanger and Hiller (2005, cited by Carter & Bélanger, 2005),

categorize e-Government into six types: Government to Individuals (as Delivering Services) (G2IS), Government to Individuals (as a Part of the Political Process) (G2IP), Government to Business (as a Citizen) (G2BC), Government to Business in the Marketplace (G2BMKT), Government to Employees (G2E), and Government to Government (G2G).

However, the most common method of categorising e-Government is the ‘four types model’, which includes Government to Government (G2G), Government to Citizen (G2C), Government to Business (G2B), and Government to Employee (G2E) (Ornager & Verma, 2008; Gant, 2008);

1. Government to Government (G2G): this model focuses on providing services to government agencies through intergovernmental relations. Data-sharing and exchange of information electronically (Gant, 2008) are the most important functions of this approach. This exchange of information could be within or outside governmental agencies.
2. Government to Citizen (G2C): this model focuses on the dissemination of information and services to citizens online. In this citizen-centric model governments provide necessary services online for their citizens such as renewing licenses, obtaining certificates, payment of taxes and utility bills, and applying for government schemes (Gant, 2008).
3. Government to Business (G2B): the interaction in this model with the private sector serves to procure goods and services and to coordinate transactions between government agencies and private enterprises. This category consists of one-stop services for businesses on matters of law, corporate administration, and the provision of industrial administration to electronic transfer services (Lee, 2010).

4. Government to Employee (G2E): the interactions are between government agencies and employees on a range of employment issues, work guidelines, rules and regulations, employee benefits, housing, payment of salaries, and employee welfare (Gant, 2008; Ornager & Verma, 2008).

4.5 Characteristics of E-Government

E-Government generally comprises two basic elements (Molnár, 2007; APCICT, 2010): back-office, and front-office. Front-office interfaces with the wider community by providing online services to citizens and businesses (Di Maio, 2009; APCICT, 2010). Front-office is the actual interface where customers are able to exchange information (Molnár, 2007). In contrast, back-office is considered as the backbone of e-Government (Homburg & Bekkers, 2002). It refers to processes that are required to make service delivery happen (Di Maio, 2009). It is invisible to the public and mainly serves the front-office. Furthermore, it concerns itself with receiving and processing documents from the customers (Molnár, 2007). Additionally, in the back-office integrated administration and processing (e.g. workflow, integrated databases, electronic signature, and data protection) are carried out, and then the result(s) return to the front-office. Therefore, the efficient delivery of public services depends above all on the effectiveness of back-office functions (OECD, 2008).

The relationship between back-office and front-office has created four different models. These, according to the Top of the Web Survey, (2003), are:

1. The ‘moving online model’: this is characterised by low process integration and a single website service delivery. The availability of online services is the main objective, and the customer benefits from service flexibility and time-saving.

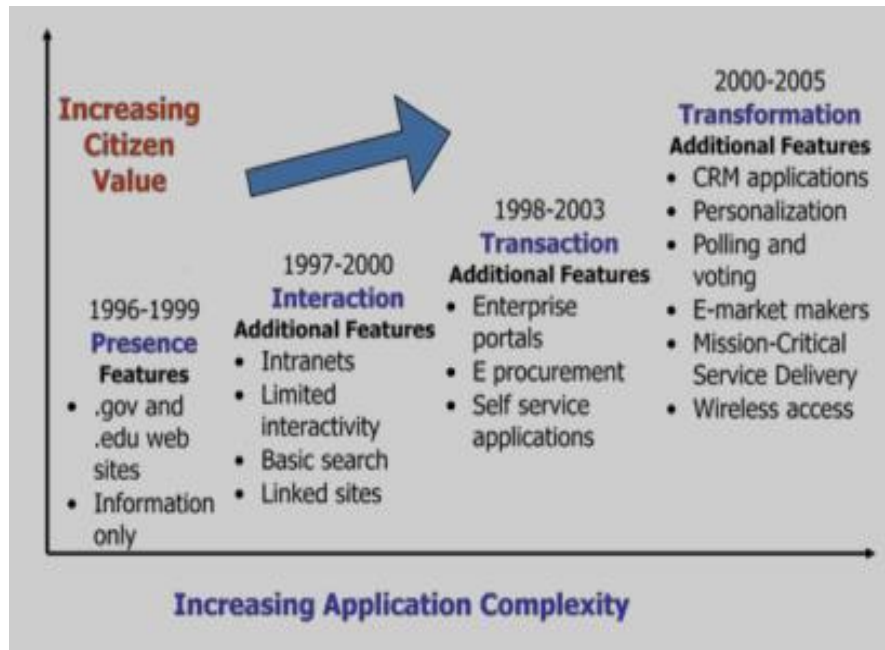
2. The 'channel integration model': this is characterised by low process integration but customer-experience, and by multi-channel service delivery. The emphasis is on the customers' awareness by attracting their attention and increasing the effects (e.g. links, pop-up windows). Customers can access services through several channels (off-line and on-line), which include the internet, agencies, and hotlines.
3. The 'process-integration model': in this model the process integration is higher than in the first two models. Furthermore, this model is limited to a single service-delivery website. The simplification of processes, the abolition of parallel systems, and the creation of automation are emphasised in this model. Therefore, government services are more efficient, faster, and more transparent.
4. The 'service integration model': this includes all of the benefits of the previous models. It entails the fewest interactions between government institutions and citizens. Furthermore, government agencies are able to exchange information and data so that customers and companies need to visit only one website to complete all their interactions with government agencies.

4.6 E-Government Life-Cycle and Models

The literature on e-Government offers a number of models for how it can be implemented. These models, however, mainly describe the levels of technological development of a government's website and its functions (e.g. Gronlund, 2005; Kunstelj 2004; Al-Dosary & King, 2004; Gartner 2002; Layne, 2001; Ronaghan 2002; Moon, 2002). Although there is general agreement between scholars and practitioners that the evolution of e-Government should include specific stages such as publishing, interacting, and transacting, the best and the most prevalent development model is that proposed by the Gartner Group (Fig 4.1), entitled 'Four Phases of e-Government' (Nordfors et al, 2006). Gartner Group's model describes e-Government development in four phases: (1)

publishing (web presence); (2) interacting; (3) transacting; (4) transforming. This model is technologically oriented and focuses on the levels of information technology used by the government to communicate information online (Greenberg, 2006).

Fig (4.1) Gartner's Four Phases of e-Government development



Source: World Bank (2009)

Phase I: Publishing (web presence)

Web presence characterises the first phase of the e-Government development and consists of the publication of information on a website for individuals and businesses. Although the communication is one-way, nevertheless this phase requires the use of ICT to promulgate government information. It may include advanced systems that enable users to receive information via e-mail and SMS (World Bank, 2009). The objective of this stage is to provide general information (e.g. laws, regulations, policies, budgets, reports, forms, and official publications) and show a presence on the internet in order to have public acceptance of this way of communicating (Nordfors et al., 2006).

According to the United Nations E-Government Survey 2012, the member states of the UN have demonstrated a steady improvement in their online presence. In 2003, 18 countries were not online whereas in 2012 only three countries (Central African Republic, Guinea, and Libya) did not have a web presence (Nordfors et al., 2006). This shows the worldwide movement to adopt and implement ECT as a means of refining government performance.

The quality of a government's website, according to the World Bank (2009), depends on a number of factors: range of content, the usefulness of the content, and the frequency with which the site is updated. Other factors include ease of navigation, ease of use (searchability), accessibility, and download time. According to the United Nations e-Government Survey (2008) (which measures the online presence of national websites of each member state¹ as well as ministries of education, welfare, labour, finance, and health of each member state) developed countries comprised the top 35 countries, particularly in Europe. A number of developing countries (the United Arab Emirates UAE) and Malaysia) have invested heavily in order to compete with other countries' ministerial and national portals; they have, as a result, jumped into the ranks of the top 20 countries (see Table 4.2). This improvement in ranking was due mainly to online improvements in three ministerial domains: social welfare, labour, and finance (United Nations e-Government Survey, 2008).

With particular reference to this study, Saudi Arabia was ranked 60 (see Table 4.3). This low ranking of the Saudi national website in 2008 comes as no surprise because in 2011, according to Al Nuaim (2011) (who evaluated the websites of 22 Saudi ministries), nine ministries (41 percent) did not implement the full features of e-Government

¹ The web measurement assessment looks at how governments are providing e-Government policies, applications and tools to meet the growing needs of their citizens for more e-Information, e-Services and e-Tools (United Nations e-Government Survey, 2008))

websites; 10 (45.4 percent) were still in the first stage; three (13.6 percent) were in the second stage; and one ministry had no site at all. Therefore, it could be said that Saudi ministry websites are still in the early stages of e-Government.

Table 4.2: Web Assessments 2008

	Country	Index	Rank
12	United Arab Emirates	0.7157	12
13	Estonia	0.7124	13
14	Mexico	0.7057	14
15	Spain	0.6990	15
16	United Kingdom	0.6923	16
17	Ireland	0.6756	17
18	Malaysia	0.6756	17

Source United Nations e-Government Survey (2008)

Table 4.3: Web Assessments 2008

	Country	Index	Rank
36	Argentina	0.5585	36
37	Switzerland	0.5585	36
38	Colombia	0.5552	38
39	South Africa	0.5518	39
40	Poland	0.5385	40
41	Belgium	0.5385	40
42	Ukraine	0.5351	42
43	Bolivia	0.5217	43
44	Bahrain	0.5201	44
45	Philippines	0.5117	45
46	Italy	0.5117	45
47	Dominican Republic	0.5084	47
48	Uruguay	0.5084	47
49	China	0.5084	47
50	Thailand	0.5050	50
51	Slovenia	0.5017	51
52	Oman	0.4849	52
53	Bulgaria	0.4849	52
54	India	0.4783	54
55	Cyprus	0.4783	54
56	Guatemala	0.4749	56
57	Slovakia	0.4749	56
58	Mauritius	0.4716	58
59	Venezuela	0.4682	59
60	Saudi Arabia	0.4649	60

Source United Nations e-Government Survey (2008)

Phase II: Interaction

Using ICT to communicate government services, this phase is characterised by interaction with individuals/citizens. Websites can contain specific and current information and so can be particularly useful to both end-users and government representatives. In this phase, the website can be used to search for information and permit downloading of the forms needed. Furthermore, at this phase, there are links to other organisations and authorities. Queries can be submitted using email or specially-designed forms, allowing people to express their opinions and participate in formulating the state's policies on important issues by means of opinion polls and user forums, thereby furnishing a whole range of online services to the populace (UNESCO, 2005). Having, in the first phase, introduced e-Government initiatives and gained public acceptance, this secondary stage serves mainly to help citizens avoid both personal visits to agencies and the making of phone calls, doing this by making commonly-requested information and forms available online around the clock (Olatokun et al., 2012). This progression in the implementation of e-Government not only saves time by providing services on a 24/7 basis but also raises the level of trust of citizens in their government. Further, this strategy of implementing e-Government in phases ensures, to some extent, its success. When citizens accept and adjust to the first stage, the second is introduced, and so on.

Phase III: Transaction

Completing entire tasks online characterizes this phase in the development of e-Government. In this stage, websites are supported by relevant applications that allow individuals to conduct online transactions such as making payments, filling-out and submitting applications, or renewing licenses (Gant, 2008). This phase is more complex than merely providing information. Money and information can be exchanged between individuals and government agencies, these processes operating on a self-service basis

and conducted in a series of steps (World Bank, 2009, p., 14). Many developing countries have initiated national e-Government strategies to add more self-service applications online. Advanced technologies such as digital certificates and payment gateways are brought into play with the aim of cutting costs and increasing efficiency (UNESCO, 2005, p.14).

In the transactional phase, a wide range of services can be provided to citizens through citizen kiosks and web-enabled applications. Typical examples would be online booking and payment of travel tickets, payment of taxes and utility bills, applying for ID cards, birth certificates, passports and license renewals (Nordfors et al. 2006; Gant, 2008; World Bank, 2009; Olatokun et al. 2012). That is, individuals are able to make use of a full range of services online. Consequently, this phase may require significant investments in two e-Government components; back-office and front-office (particularly the back-office component), while ensuring compatibility between the technologies used and the types of information collected. Furthermore, government workforce-training is critical for this phase (World Bank, 2009).

Phase IV: Transformation

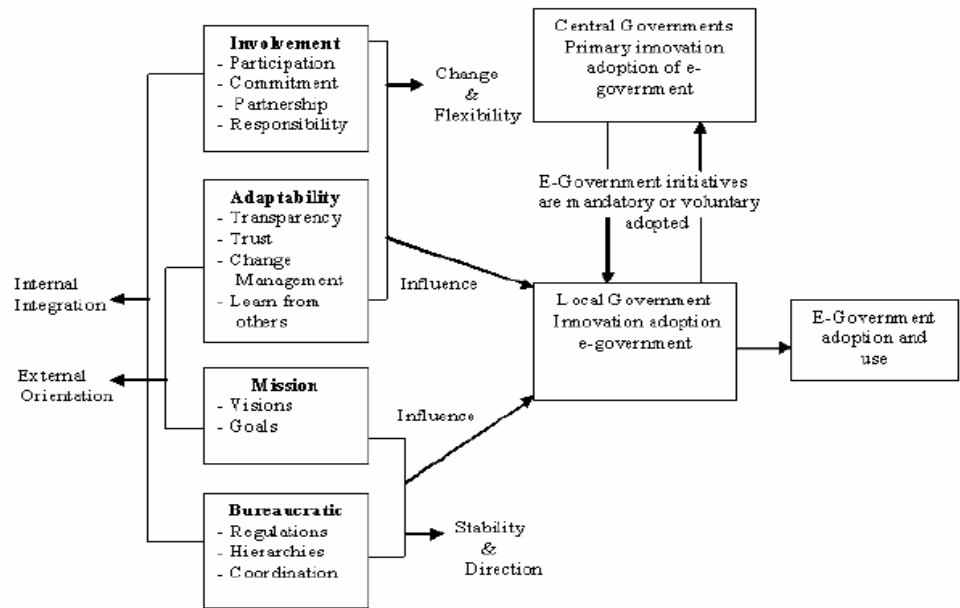
The final phase in the Gartner model is transformation. This is characterised by redefining the delivery of government services and the relationships between government agencies and end-users so that the online service benefits all concerned (Nordfors et al. 2006; World Bank, 2009). At this level, governments utilize the full capabilities of the technology to transform how government services are conceived, organised, and conducted (Olatokun et al. 2012). It is as if governments are providing a single, uninterrupted counter service around the clock (UNESCO, 2005). That is, end-users are able instantly to access any service in a 'unified package'. Data can be shared horizontally across sectors, vertically between different levels of government, or between external

constituents. This integration of information, processes, and channels enables individuals to complete tasks easily and securely. Also, the boundaries between ministries, departments, and agencies fall away and services are grouped around common needs (UNESCO, 2005). Consequently, this transformation necessitates far-reaching changes in organization which result in a unified system, bringing together organizational set-up, the new capacities available as a result of e-technology, and back-end operations and infrastructure. When this is achieved, the government attains the distinctive level of being justly defined as a 'digital state' (UNESCO, 2005).

These phases, however, have increasing requirements of cost, time, and complexity as they progress from phase to phase. Furthermore, successfully deploying each phase requires government agencies to address and resolve a number of organisational and technological issues.

Nurdin et al., (2010) examined the role of culture on the adoption and use of e-Services (Figure 4.2), their model illustrating the roles of four cultural characteristics and the details of some cultural issues in the adoption of e-Government at local levels. Two cultural characteristics have external orientations (adaptability and mission) as they are driven by outsiders such as citizens, while the other two cultural characteristics relate to internal integration (involvement and bureaucratic factors) as government organizations need to maintain their stability and direction.

Figure (4.2): The roles of the culture of local government in the adoption and use of e-Government services



Source: Nurdin et al., (2010)

In summary, numerous models of e-Government have been proposed over the last two decades. The Technology Acceptance Model, the Diffusion of Innovation Model, and the Perceived Characteristics of Innovating Model are among the earliest models to examine the adoption of this technology. However, these models have focused on citizens' attitudes to the use of government systems because there are some factors which influence both community attitudes and community use of the new systems: these include perceived usefulness, ease of use, trustworthiness, social influence, and facilitating conditions. Other models, by contrast, have focused on the role of organisational culture and its positive or negative effects on the universal adoption of e-Government. In this study, however, the researcher sought to create a new model designed to help the implementation of e-Government, as affected by leadership style and organisational culture.

4.7 Information and Communication Technology in Saudi Arabia

Information and communication technology are now playing important roles in our daily lives. People in both developed and developing countries now consider access to ICT as commonplace and as vital as obtaining water and electricity. This rapid change has emerged within a very short time; it has revolutionised the way we communicate, the way we purchase goods and services, the way we learn, the way we spend our leisure time, and so forth. ICTs have effectively transformed our world into a ‘small village’, and such changes have been powerful enough to re-shape economies.

In many countries the ICT sector has become the main contributor to economic growth and employment (Al-Daweesh, 2011), and it is transforming economies indirectly by influencing other sectors (industry, commerce, education, healthcare, etc.) that have adopted ICT solutions for the purpose of enhancing productivity and performance (AL-Shehry, 2008). Therefore, the government of the KSA has accorded ICT top priority and has emphasized that ICT development should be treated as the centrepiece of their national policy. Consequently, the government established The King Abdul Aziz City for Science and Technology (KACST) in 1977 and promulgated a comprehensive national plan focusing on, and prioritising, ICT development.

Many researchers have highlighted the radical changes that Saudi Arabia has experienced in recent decades in the field of IT applications. These applications have spread dramatically, covering private and public sectors alike. Al-Turki and Tang (1998) noted that IT systems in Saudi Arabia have focused on three aspects: 1) computerization of private and public organisations, 2) building the required infrastructure that supports IT, and 3) preparing human resources that operate and maintain IT systems by establishing education and training institutions and programs. The priority given to ICT has encouraged the adoption of advanced IT systems in both private and public sectors.

But despite the government's recognition of the importance of ICT, a number of technical, institutional, cultural, educational, economic, political, human resource, and infrastructural barriers have presented themselves (Al-Sudairy, 2000; Shalaby, 2002; Alshehri et al., 2012), thus hindering the private and public sectors from wholly embracing ICT in Saudi Arabia.

4.8 Telecommunication infrastructure and its components in Saudi Arabia

The Saudi government did not officially make the internet available until April 1997. Nevertheless, the campus of King Fahd University of Petroleum and Minerals (KFUPM) in Dhahran had first used it in 1993 in the College of Computer Sciences and Engineering (Al-Turki & Tang, 1998; Al-Tawil, 2000). Other organisations such as King Faisal Specialist Hospital (KFSH), the largest oil company in the world (ARAMCO), and King Abdulaziz City for Science and Technology had access to the internet through various channels. The Baltimore Johns Hopkins Hospital for Tele-medicine and Health Education and the Portal Company of the U.S (Al-Tawil, 2000) were also examples of this.

Even though the government made the internet available to the public in 1997 it was not provided to the public until February 1999 (internet.gov.sa) because of the complicating issues experienced by the Saudi government.

According to Trends in Telecommunication Reform (issue 2010-2011), the internet can be viewed as either 'good or bad'. On the positive side, it brings a number of benefits relating to citizenship, consumer empowerment, communitarian involvement, and personal welfare; on the other hand, some users could receive inappropriate and offensive content online, fraud could be committed, and invasions of privacy could occur. It was in May 1994 that the Saudi government appointed KACST to organize internet services within the country (Al-Tawil, 2000) and a government interagency commission was appointed to study the advantages and disadvantages of access to the internet for the

public. The aim of the commission was to evaluate the benefits and disadvantages - a project that embraced both national security and social considerations. The commission eventually announced that, “public access should be granted by means of proxy servers, which were to be maintained by KACST so as to reduce the possibility of Saudi residents accessing ‘inappropriate information’” (Al-Tawil, 2000, p.3). This restriction had the effect of slowing down the adoption of the internet in Saudi Arabia for several years. According to certain studies, internet users in Saudi Arabia numbered 200,000 in December 2000, representing 0.9 percent of the Saudi population (<http://www.internetworldstats.com/middle.htm#sa>). However, this number increased more than 12 times to reach 2.54 million in just five years (see Table 4.4& Figure 4.3). Furthermore, domestic broadband penetration in Saudi Arabia has increased from zero in 2005 to more than 44 percent today.

Table 4.4: Saudi users of the Internet

Year	Users	Population	% Pop.
2000	200,000	21,624,422	0.9 %
2003	1,500,000	21,771,609	6.9 %
2005	2,540,000	23,595,634	10.8 %
2007	4,700,000	24,069,943	19.5 %
2009	7,761,800	28,686,633	27.1 %
2010	9,800,000	25,731,776	38.1 %

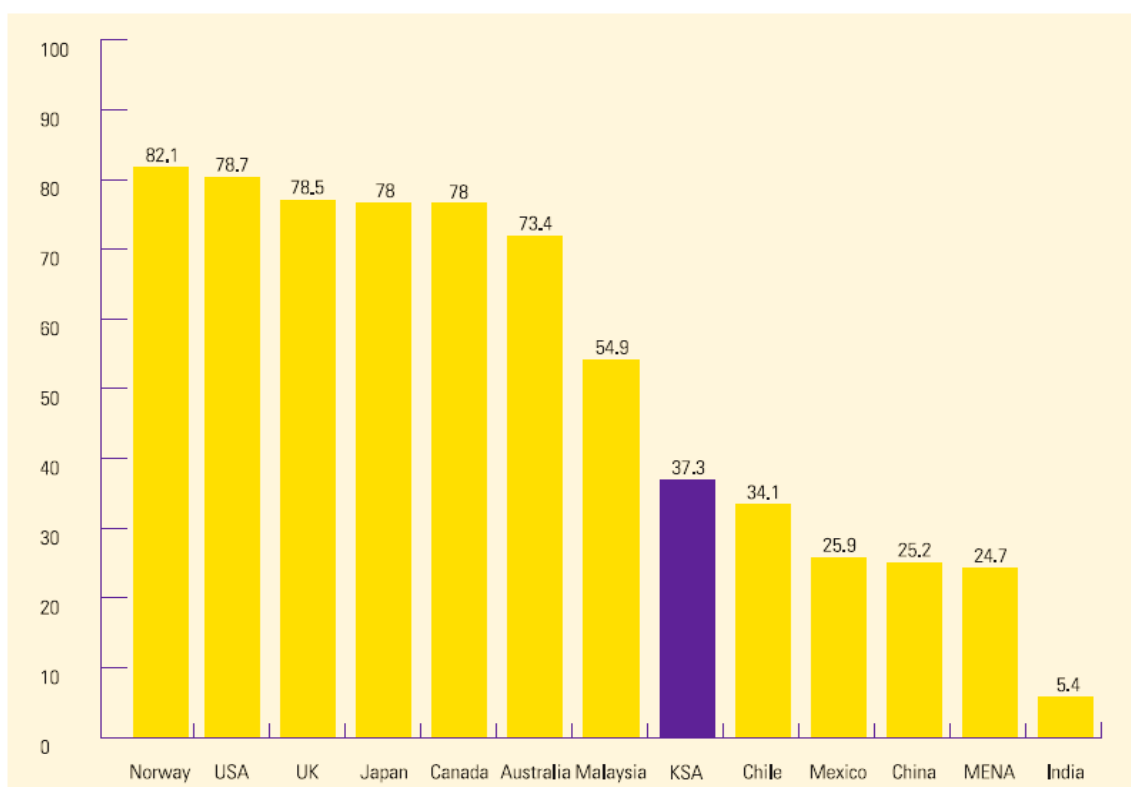
Source : <http://www.internetworldstats.com/middle.htm#sa>

A study by Sait et al. (2003) into the effects of the internet in the Kingdom stated that the internet has affected the Saudi society economically, educationally, and socially and has created a massive potential for advancement in terms of national business development and capital growth. Recently, the Saudi Telecom Company (STC) conducted a comprehensive assessment of ICT’s socio-economic impact, concluding that, overall, the internet had a positive effect on businesses. According to that study, the

internet saved time at work, increased revenue, improved customer services, gave access to more customers and markets, improved efficiency, and provided better access to business information (Trend in Telecommunication Reform, issue 2010-2011).

As far as ‘social life’ was concerned, a high proportion of the survey respondents asserted that the internet saved them money and time, allowed them to make more friends, and permitted them to find out about world events and issues. On the other hand, the cost was seen as a problem, 36 percent of those surveyed reporting that access to the internet was too costly. Furthermore, 36 percent stated that the internet was “wasting (people’s) time”, women and older people being more likely to express concern about such time-related issues.

Figure (4.3): Internet users per 100 individuals from selected countries (2010)



Source: ICT’s socio-economic impact on Saudi Arabia (2011)

Overall, the country has benefitted greatly from the internet - economically, educationally and socially. Furthermore, as can be seen from Figure 4.1 above, that

internet users in Saudi Arabia have increased by around five percent annually over the last ten years. According to Sait et al. (2003, it is projected that more than 80 percent of the population will be regularly using the internet by the year 2020.

According to the Arab Advisors Group (2012), two corporations serve the fixed-telephone market in Saudi Arabia: the Saudi Telecom Company (STC) and Etihad Atheeb Telecom (GO). These provided 4.166 million fixed-telephones for customers in 2010 and by early 2011 this number had increased rapidly by 7.8 percent to reach 4.49 million.

Three operators (STC, Mobily, and Zain) serve the mobile-cellular market in Saudi Arabia and in 2010 they provided 51.6 million subscriptions to customers (Group, 2012). By the first half of 2011 this number had increased by 6.7 percent to reach 55.008 million. These operators also serve the broadband market in the country, providing both fixed and mobile broadband internet. The fixed broadband subscriptions reached about 1.5 million by the end of 2010. (See Table 4.5)

Table 4.5: fixed-telephone, mobile-cellular, and broadband internet subscriptions in Saudi Arabia

	Quarter four (2010)	Quarter two (2011)
Fixed-telephone subscription (000s)	4'166	4'490
Growth		7.8%
Fixed-telephone penetration rate	15.2%	16.2%
Mobile-cellular subscription (000s)	51'564	55'008
Growth		6.7%
Mobile-cellular penetration rate	187.9%	198.1%
Fixed (wired)-broadband internet subscription (000s)	1'497	1'700
Growth		13.6%
Fixed (wired)-broadband internet penetration rates	5.5%	6.1%
Active mobile-broadband internet subscription (000s)	15'855	N/A
Active mobile-broadband penetration rates	57.8%	
Internet users (000s)	11'264	N/A

Source: ITU, Arab Advisors Group (2012)

The fixed-line penetration has grown from two fixed lines per 100 inhabitants in the early 1970s to 16 fixed lines per 100 in the early 2000s (ICT's Socio-economic Impact on Saudi Arabia, 2011). In 2010 and 2011 the fixed-telephone penetration rate in the Kingdom was 15.2 percent and 16.2 percent respectively, which is very low in comparison with other countries. However, this low rate of penetration is not true of Saudi Arabia, but rather it represents all of the members of the Gulf Countries Council (GCC). For example, in 2011 the fixed-line penetration rate was 18.1 percent in Bahrain, 20.7 percent in Kuwait, and 17 percent in Qatar (Arab Advisors Group, 2012). These figures do not reflect the reality of the actual fixed-telephone use as they have been calculated according to the respective populations. In Saudi Arabia the average household comprise six to seven people, each house using one fixed-telephone line. Therefore, when we calculate the overall penetration rate we get incorrect figures. Supporting this is the fact that, according to CITC (2010), two-thirds of households already have fixed-line services. Furthermore, the mobile-cellular penetration rates were 187.9 percent and 198.1 percent in 2010 & 2011 respectively; this gives us another reason for the incorrect measurements of the fixed penetration rate.

The high level of investment in infrastructure in general (and in telecommunications in particular) over the last few years has placed the country in the number 60 ranking in the international Telecommunication Infrastructure Index (TII) and its components (internet, fixed phone lines, fixed internet, and fixed broadband), according to the United Nations E-Government Survey 2012. Interestingly, Saudi Arabia was ranked 44 in the TII and its components in 2010. Its fall in rank by 16 places in 2012 may have been due to the fact that some components were modified in the 2012 survey²; it might also have

² The Telecommunication Infrastructure Index components were: internet, fixed phone lines, personal computers and fixed broadband in 2010, while in 2012 the components were: Internet, fixed phone lines, fixed Internet, and fixed broadband.

been due to higher rates of development in other countries in the previous two years. Nevertheless, the main index value of the telecommunication infrastructure for Saudi Arabia increased from 0.4031 in 2010 to 0.4323 in 2012, which reflects the far-reaching improvements and special attention that have been paid to expanding and consolidating the telecommunication sector within recent years. (See Table 4.6 and 4.7)

Table 4.6: Telecommunication Infrastructure Index and its components in 2012

Rank	Country	Index value	Estimated internet users per 100 inhabs	Main fixed phone lines per 100 inhabs	Mobile subscriptions per 100 inhabs	Fixed internet subscriptions per 100 inhabs	Fixed broadband per 100 inhabs
7	Republic of Korea	0.8356	83.70	59.24	105.36	34.08	36.63
10	United Kingdom	0.8135	85.00	53.71	130.25	31.14	31.38
23	Singapore	0.6923	70.00	39.00	143.66	25.22	24.72
24	United State	0.6820	79.00	48.70	89.86	26.63	26.34
41	United Arab Emirates	0.5568	78.00	19.70	145.45	20.24	10.47
55	Qatar	0.4513	69.00	16.95	132.43	9.13	9.17
56	Malaysia	0.4510	22.30	16.10	121.32	20.01	7.32
59	Argentina	0.4352	36.00	24.74	141.79	11.72	9.56
60	Saudi Arabia	0.4323	41.00	15.18	187.66	7.02	5.45
62	Bahrain	0.4183	55.00	18.07	124.18	6.79	12.21
63	Kuwait	0.4179	38.00	20.69	160.78	12.51	1.68

Source: United Nations E-Government Survey 2012

Table 4.7. Telecommunication Infrastructure Index and its components in 2010

Rank	Country	Index value	Estimated internet users per 100 inhabs	Main fixed phone lines per 100 inhabs	Mobile subscriptions per 100 inhabs	Fixed internet subscriptions per 100 inhabs	Fixed broadband per 100 inhabs
44	Saudi Arabia	0.4031	33.55	16.27	142.85	68.25	4.16

Source: United Nations E-Government Survey 2010

4.9 E-Government Initiatives in Saudi Arabia

Within its national IT programs, the government of Saudi Arabia reveals a strong desire to transform from traditional to e-Government within a certain time period (AL-Shehry, 2008). This transformation, however, requires a concerted effort on the part of the government.

To accomplish this, many decisions have been made as part of the master plan for the country's information technology development (Communication and Information Technology Commission in KSA, 2003). In 2001, the Saudi Communications and Information Technology Commission was established. Subsequently, the Ministry of Communications and Information Technology was created in 2003 and, in the same year, the telecommunications sector was privatised. In other words, the state started implementing its earlier reform strategies, including the adoption of e-Government, by reforming the telecom sector. These reforms, according to (CITC, 2005), were to be implemented in four phases:

1. Phase one. Corporatization: the transfer of responsibility for the telecom services from the Ministry of Post, Telegraph and Telephone (PTT) to the Saudi Telecom Company (STC)³.
2. Phase two. Policy and Regulatory Reform: the government enacted the Telecommunications Act in 2001. This included a legal framework for the development of the telecommunications sector.
3. Phase three. Partial privatisation of STC.
4. Phase four. Telecom Sector Liberalisation: in 2002 the government announced a timetable for the liberalisation of the telecom sector. This included a second mobile operator (2004), fixed telephony services (2006), and the issuance of a number of licences to ISPs (Internet Service Providers).

Consequently, according to the Saudi Computer Society (2004) the e-Government initiatives in Saudi Arabia were launched as part of the country's technology plans in 2001. Abanumy and Mayhew (2005) and Al-Nuaim (2011) noted that it was necessary to

³ Saudi Telecom Company (STC) is a state-owned company established in 1989. The company became partially privatized in early 2003 by divesting a 30 percent stake in the company to the public (CITC, 2005)

establish standards and rules for an e-Government initiative in the state through the development of the e-Government program ‘Yesser’ in 2003.

4.9.1 The e-Government Program ‘Yesser’

Launched in 2005, ‘Yesser’ is the name of the Saudi e-Government program, the Arabic word meaning “to make something easy”. This was a good start for a government seeking to simplify its e-Government project, Saudis then identifying it as something simple. Al-Sabti (2007) emphasised that the transformation of the public sector into an information society would not be achieved without adopting the e-Government initiative. The Yesser project was thus the enabler/facilitator of the implementation of e-Government in the public sector (CITC, 2005) by supporting governmental organisations in terms of methodologies, data, standards, and knowledge (Al-Sabti, 2005). However, government agencies manage and execute their own websites.

The e-Government project in Saudi Arabia is a user-centric vision, focusing on the provision of better services to citizens. The original vision of the ‘Yesser’ programme was that:

“By the end of 2010, everyone in the Kingdom will be able to enjoy world class government services offered in a seamless, user friendly and secure way by utilising a variety of electronic means”. (Yesser, 2006).

Therefore, in addition to reforming the public sector and raising its efficiency and effectiveness, Yesser aims to provide better and faster services for citizens. Yesser’s vision was accompanied by ten objectives that were to be achieved by the end of the year 2010 (Yesser, 2006). These objectives were, to provide good services, raise efficiency and effectiveness, and contribute to the prosperity of the Kingdom. The first category is associated mainly with the project’s vision of providing good government services to all parties, and it had the following objectives:

1. Provide world-class levels of service electronically.⁴
2. The e-Services should be provided in an easy way, with the very highest standards of security.
3. Everyone should be able to access the services 24/7 regardless of where he/she is inside or outside the country.
4. By 2010, 75 percent of the population should be able to use e-Services.
5. By 2010 the minimum satisfaction rating by users of e-Services should be 80 percent.

The second category is associated mainly with the project's vision of providing high quality services, the idea being that once these objectives were accomplished government efficiency and effectiveness would be improved:

6. Official communications between public agencies will be delivered electronically.
7. There must be easy access to all the necessary information across government agencies, with effortless storage of information, and minimal redundancy.
8. Goods and services above a reasonable value threshold may be purchased with ease through e-Procurement.

The final category focused on how e-Government would contribute to the national prosperity:

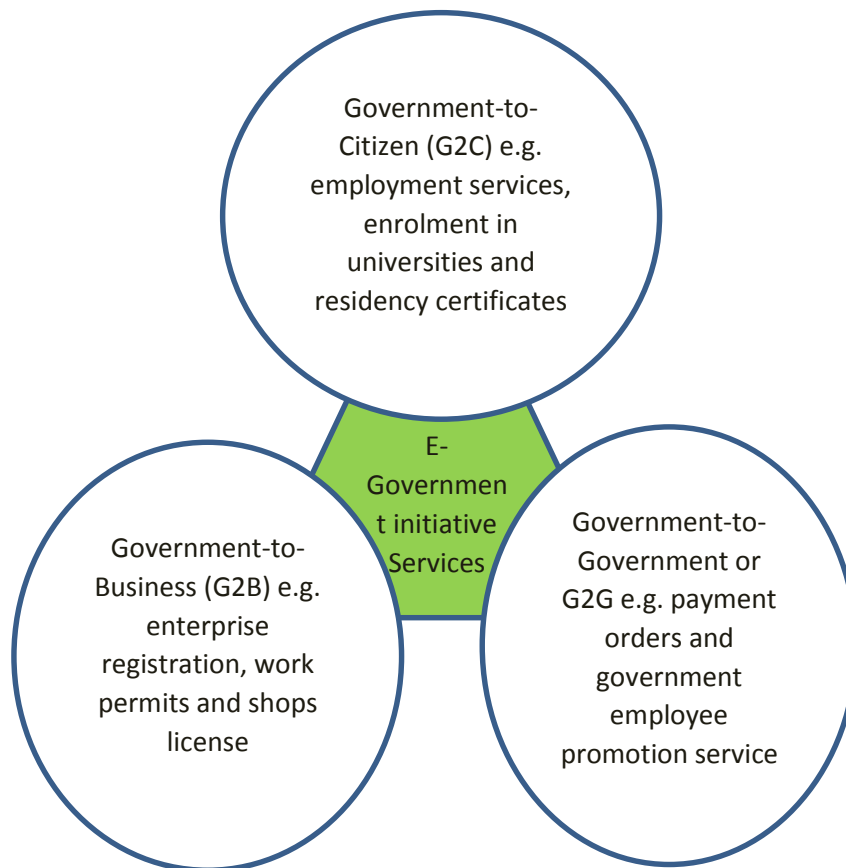
9. There must be widespread diffusion of information, knowledge, and use of e-Services among the society, and this will help to establish a well-informed populace.
10. Productivity must increase in the private and public sectors; this will help to improve the use of the country's assets and resources.

The e-Government initiative in Saudi Arabia aims to provide a wide range of services to different parties. Such services can be divided into three groups according to the end-

⁴ As a first stage the programme would provide the top priority services (150).

user: Government-to-Citizen (G2C) services, Government-to-Business (G2B) services, and Government-to-Government (G2G) services (Figure 4.4).

Figure (4.4): E-Government domains in the Saudi project



There are other government agencies, too, that contribute to the e-Government initiative in addition to Yesser. These agencies (the Ministry of Labour, the Ministry of Finance, and the Ministry of Commerce and Industry, for example) are responsible for the success or failure of this national endeavour (CITC, 2005). According to (CITC, 2005: pp. 5; Al-Sabti, 2005: pp. 23-28), many e-Government projects in Saudi Arabia have been implemented by different organisations, as shown in Table 4.8.

Table 4.8 National projects implemented by public organisations in Saudi Arabia

Project	Description
E-Payment Gateway “Sadad”	Building the e-Payment gateway to facilitate the three groups of Saudi e-Government initiatives G2B, B2B, and G2C electronic payments.
Smart Cards	Issuing the national ID cards using smart card technology. <ul style="list-style-type: none">• Has computer chip for storing personal identification information, thumbprints, as well as medical and driving records.• May also hold digital certificates.
E-Umrah	Facilitating the Umrah season by: <ul style="list-style-type: none">• Issuing Umrah Visas around the clock.• Integrating many ministries such as the Hajj, Foreign Affairs, and Interior ministries.• Conducting operations worldwide (via Umrah agents)
The Madinah e-Government Project	This project focuses on two e-Government categories of service: <ul style="list-style-type: none">• G2B• G2C
MOI (Ministry of Interior) Portal	This is a citizen portal: <ul style="list-style-type: none">• Provides 20+ services electronically. These services include passports, birth certificates, drivers’ licenses, etc.• Manages more than 100 kiosks.
E-MOF (Ministry of Finance)	Building the electronic ministry by: <ul style="list-style-type: none">• Providing the MOF services electronically.• Automating the MOF processes in an integrated manner.• Connecting all branches of MOF.
E-Tax	Introducing a system that enables: <ul style="list-style-type: none">• E-Filing• E-Payment• Accessing the records’ databases

It is evident, therefore, that there is a positive national trend across government agencies in support of the implementation of the e-Government initiative. Furthermore, these projects, with Yesser as the core element of e-Government, have helped to implement e-Government in the KSA.

The United Nations E-Government Survey (2012) produced a list of 25 emerging leaders in e-Government. Of these countries, three were in the Americas, six in Asia, and the other 16 in Europe. Saudi Arabia ranked 21 among this list, but considered worldwide the UN ranked Saudi Arabia 70th in 2008, 58th in 2010 and 41st in 2012. In another report,

the Saudi e-Government ranked 72nd in 2005, 98th in 2006, and 89th in 2007 (Brown University Global e-Government Report, cited in Al Nuaim, 2011).

Despite major advances in other countries Saudi Arabia had progressed 29 positions in the ranking in just four years, and if the country maintains this level of expansion it will become an international leader in a few years. On the other hand, the country is already considered as one of the richest countries in the Middle East and is a member of G20, positioned just behind Bahrain, the UAE, Kuwait, and Jordan. In general, wealthier countries provide better e-Government than poorer ones, but although Saudi Arabia is wealthier than such countries as Chile, Mexico, Malaysia, Bahrain, and Jordan, its ranking for ICT is lower. This leads to the conclusion that there is great room for improvement in e-Government services in the KSA.

As has been mentioned, Saudi Arabia's e-Government project was citizen-centric and its aim was to provide a world-class service by the end of 2010. This vision, however, failed to be realised by its projected deadline. According to Al Nuaim (2011), who evaluated 22 Saudi ministry websites, nine ministries (41 percent) did not implement the features expected of e-Government websites; 10 (45.4 percent) were still in the first stage; three (13.6 percent) were in the second stage, and one ministry had no site at all. In other words, about 60 percent of the websites were either in the first stage (publishing) or had no actual presence at all on the internet. Furthermore, according to Al Nuaim (2011), of the 22 ministries none could be classified as having reached stage 3 (two-way interaction), stage 4 (transaction), or stage 5 (integration). According to Yesser (2012), almost half of the list of 150 resources specified in the first action plan (2006) have not yet been implemented online. Consequently, it appears that the Saudi government was overly optimistic in its bid to accomplish its vision within its designated four-year time period, or the government believes that the vision statement applies only to them and to

the other members of their project, not to its citizens. Whatever the case may be, to have placed a four-year target on achieving world-class e-Government status, regardless of the many problems that could hinder the initiative, it is apparent that the Yesser management team was unrealistic and overly-optimistic.

Dada (2006) defined e-Government failure as “the inability of the initiative to accomplish predefined goals and objectives”. Therefore, based on the discussion above, it is concluded that the e-Government program was a partial failure as it achieved just half of the 150 objectives listed in the first action plan. It could also be described as a failed programme insofar as it was not realised by its projected deadline.

There are many factors that might be helpful in implementing e-Government in KSA including: 1) the willingness and support at the most senior levels of government to undertake new e-Government initiatives, 2) Saudi Arabia is one of the richest countries in the Middle East and a member of the G20 and it is the most abundant supplier of petroleum in the world and has spent vast sums on the development of the communications sector as part of the Ninth Development Plan (SR 111.1 billion), 3) Fifty-seven percent of the population is under 25 and 36 percent are under 15. This high proportion young people (who are very technology-orientated) will prove highly advantageous to the country’s effort to adopt technological solutions, given that this generation would tend to accept new technologies more readily, 4) The large size of the country means that people can receive far-reaching benefits from e-Services as a result of the time-saving, cost-reducing effects of online facilities, 5) The large number of students studying abroad (150,000 in 2014), the majority of whom have international scholarships in Business, Management, Economics, and IT, would have already experienced a world class e-Government in the US and Europe and would therefore heavily support the Saudi e-Government initiative, especially as its services would be

accessible to them no matter where they were and 6) The success of private sector e-Commerce over the last two decades has put additional pressure on the government to implement the e-Government initiative. In the other hand there are factors that might hinder the implementation of e-Government including: 1) Saudi cultural beliefs strongly resist IT adoption, 2) there are considerable infrastructure weaknesses in the Saudi public sector, 2) there is widespread lack of knowledge about computers and technology, and about e-Government services, 3) there is a lack of trust and confidence by computer-users in e-Government services, 4) there are accessibility issues; the reliability of internet connections may be poor, given that some areas of the country are as yet unable to easily access the internet.

To sum up, this chapter reviewed e-government initiative worldwide. However, the focus has been on the definition of electronic government, its characteristics, how it evolves over its life-cycle, the ways in which it is adopted, the reasons for its adoption, and the information and communication technology initiatives with regard to e-Government in Saudi Arabia. Furthermore, based on a review of the literature about Saudi Arabia, it can be said that economically, culturally, socially, and technologically (i.e. the ICT infrastructure) the Saudi e-Government initiative faces many obstacles and challenges on the one hand and many advantages on the other – advantages that may well greatly simplify the implementation the e-Government.

CHAPTER FIVE

The Effects of Leadership Style & Organisational Culture on the Implementation of E-Government

5.1 Introduction

As seen in the literature review, recent reports on the development of e-Government show that different approaches have been taken to implementation (Ebbbers & Van Dijk 2007; Rose 2005).

The new millennium has witnessed a radical shift towards the establishment of e-Government. In developed countries, according to the United Nations E-Government Surveys (2010; 2012), "the citizens are benefiting from more advanced e-Services delivery, better access to information, more efficient government management and enhanced interactions with governments, primarily as a result of an increasing use by the public sector of information and communications technology." Most countries have established a series of websites which publish a wealth of information online, and these often provide national portals that connect users with different agencies.

In contrast, according to the United Nations E-Government Survey 2012, the United Arab Emirates, Qatar, and Bahrain were the only Arab countries that have come close to creating a one-stop-shop that provided all services to their citizens. Moreover, the United Arab Emirates now ranks 5th in Asia and advanced 21 positions to the ranking of 28th globally (ibid). Saudi Arabia was ranked 41st in the same survey,

5.2 Factors Contributing to the Implementation of e-Government

Over the last few years considerable research has been carried out on the implementation and diffusion of e-Government in developed and developing countries. A major part of this research has focused on connectivity and technology infrastructure,

business environments, social and cultural environments, legal environments, and governmental policies and vision rather than factors such as leadership and organisational culture and their effects on e-Government implementation. This study therefore focused on the relationships between leadership styles, organisational culture, and e-Government implementation.

5.3 Leadership Style

Leadership does not have a standardised, universally-accepted definition. Several theorists (Bennis & Nanus, 1985; Yukl, 1999; Bass 1985, 1998; Tichy & Devanna 1986, 1990; Saskin 1988; Northouse, 2007) have proposed different leadership styles (see Chapter Two), however the researcher identified three styles of leadership - transformational, transactional and servant - appropriate to this study.

5.4 The relationship between leadership style and the implementation of e-Government

In the last two decades there has been extensive research and writing on leadership styles, particularly the ‘transformational’ and ‘transactional’ styles. Most research has focused on leader behaviour (Yammarino & Dansereau, 2009; Yukl, 2010; Avolio, 2011) and how it affects follower commitment, motivation, satisfaction, innovation, creativity and performance (Howell & Avolio, 1993; Zagoršek et al, 2009; Emery & Barker, 2007; Riaz & Haider, 2010; Yukl, 2010).

Many comparative meta-analyses have been conducted on the issue of transactional and transformational methods. For example, Lowe et al. (1996) examined the results of a meta-analysis of the general relationship of the two styles to measure leadership effectiveness and leaders’ behaviour; (for example, ‘What do leaders do?’ and ‘How do leadership styles relate to performance?’) They concluded that there was a stronger

relationship between transformational scales and effectiveness than between transactional scales and effectiveness.

According to (Lowe et al, 1996), the idealised influence/charisma scale was most strongly correlated with leader effectiveness, followed by 'individualized consideration'. Contrary to the assumption that intellectual stimulation of followers is more important at the higher organizational levels, this was found to be of equal importance for effectiveness in all of the different organisational levels. With regard to transactional leadership, across the studies the results were inconsistent in terms of effectiveness. Contingent reward, however, correlated positively with effectiveness in some individual studies, but not with others (Yukl, 2010; Avolio, 2011).

Judge and Piccolo (2004) tested the relative validity of the two styles, considering the association between transformational and transactional leadership and, for example, follower job-satisfaction, follower-leader satisfaction, motivation, leader job-performance, group or organization performance, and rated-leader effectiveness. These meta-analyses found that all transformational leadership dimensions and one transactional leadership dimension (contingent reward) had the highest overall validity.

Many studies show that transformational and, in some cases, transactional, leadership, increases commitment (Pitman, 1993), motivation (Masi, 1994) loyalty of followers (Kelloway & Barling, 1993), project quality and innovation (Keller, 1992), sales performance (Garcia, 1995), organizational commitment and job satisfaction (Walumbwa et al, 2004), effectiveness (Lowe et al, 1996), job success and career satisfaction (Riaz & Haider, 2010). The transformational style was also positively related to innovative behaviour (Pieterse & Knippenberg, 2010).

A review of the literature on the relationship between the different leadership styles and the e-Government environment revealed that there have been few empirical studies

that have investigated the effect of leadership styles in an e-Government environment. Various studies have examined leadership and its effects, roles and/or contributions during e-Government adoption. Moon and Norris (2005) claimed that leadership innovation is one of the most compelling determinants in e-Government adoption. Schildt et al. (2006) found that success in the implementation of e-Government required high levels of support by senior leadership, and in a similar vein Kifle (2008) reported that the greatest barrier to implementing e-Government in Brunei was poor leadership. Furthermore, Greenberg et al. (2006), and Bjørn and Fathul (2008) identified several critical factors that influence the success of e-Government programs; in particular, strong leadership with long-term commitment and vision being significant. Kim and Kim (2003) concluded that leaders who develop strategic plans and who recognise connections between e-Government values, evaluation criteria, and effectiveness would successfully lead an e-Government.

Ke and Wei (2004) explored the success of e-Government in Singapore and claimed that the main factor in overcoming the obstacles in its implementation and development was strong leadership, a sound strategic plan, strong support, a centralized approach to funding and infrastructure, and efforts to bridge the digital divide. InfoDev/World Bank (2009) asserted that a successful e-Government project needed effective and sustained leadership and drive, careful planning, effective implementation, and performance reporting.

Schepers and Wetzels (2005) studied the effects of transactional and transformational leadership styles on technology-acceptance in a high-technology company in Denmark. They concluded that the transformational style's sub-dimension 'intellectual stimulation' positively influences perceived usefulness of the technology, which in turn influences the technology's adoption. However, transactional leadership did not yield any significant

effects. These findings, however, were based on one company only, which limits the generalizability of the results.

Ke and Wei (2007) investigated how leaders manipulate organisational cultures to adopt Enterprise Resource Planning (ERP) systems, their focus being on transformation leadership behaviour. They claimed that transformational leaders could model the proper behaviour that formed the desired culture which facilitated ERP implementation. The main criticism to their theoretical work, however, is that they have tended to mix-up transformational and transactional leadership dimensions. They used contingent reward behaviour as a dimension in their transformational construct, yet this dimension, according to Avolio (2011), Yukl (2010), Bass (2008) and Bass and Avolio (1990a), is transactional behaviour. Furthermore, they ignored the direct effect that leadership could have on ERP implementation, and their framework has not yet been empirically tested.

Kittipong (2005) studied the relationship between leadership styles and e-Commerce adoption in Thailand. He tested three leadership styles: task orientation, people orientation and a combination of both (shared leadership). He found that shared leadership was more effective than a single style in the adoption of e-Commerce. Leaders who had high shared leadership tended to have higher levels of e-Commerce adoption. Therefore, leaders who were high in both task and people would be early e-Commerce adopters in Thailand, and leaders with a different type of leadership style tend to adopt e-Commerce differently.

In summary, during the past decade major investments in e-Government implementation and the significant differences in the methods and outcomes of adoption have prompted many researchers to search for the critical success factors in this field. However, the fundamental process of how these factors, particularly leadership styles, affect e-Government implementation results remains a largely unexamined area of

research. Therefore, this study investigated the relationships between combinations of different leadership styles and organisational cultures, and the levels of e-Government implementation.

5.5 Organisational Culture

Culture is often partially blamed when organisations experience failure (Leidner & Kayworth, 2006). Organisational culture is deemed central to organizational success because it affects every aspect of an organisation: for instance, organisational performance, relationships of employees with one another, with their managers and with customers.

In the implementation and use of information technologies, culture at all levels (national, organisational, etc.) is one of the most important, if not the most important, factor influencing the outcomes. Recently, there have been a myriad of theoretical researches on culture and technology, but there is a tendency to consider culture and technology as separate entities. Yet culture has a major effect on the way that we perceive, think, feel, and act in our social lives and in our occupations. It strongly influences and shapes our behaviour and should therefore be considered integral to all aspects of our life and all that we do. Technology is likewise a vital part of our everyday lives; the ever-flowing waves of advancing technologies are shaping our lifestyles and have become amalgamated into our education, our homes, our workplaces, our explorations of outer space, and so on.

Most researchers study culture and IT as separate variables. Although some studies examine the impact of information technology, many studies have focused primarily on the one-way impact that culture has had on information technology adoption.

As this study concerns itself with the impact of leadership style and organisational culture on the adoption of e-Government, the researcher has focused on the one-way impact that culture has had on e-Government adoption.

5.6 The relationship between organisational culture and the implementation of e-Government

The economic problems and the decline in productivity in North America in the 1970s and 1980s have been blamed on organisational culture, considered in some cases as the main factor influencing the performance of an organisation (Ouchi, 1991; Brooks, 2009; Schein, 2010). Furthermore, it was the perceived importance of organisational culture which encouraged and motivated scholars and writers in the 1970s to investigate those Japanese companies which were enjoying economic prosperity.

Peters and Waterman (1982), for example, studied 43 high-performing US corporations. They found that ‘excellent companies’ behaved very much like the celebrated Japanese firms. Moreover, they found that all those companies possessed specific cultural qualities that ensured their success (Parker, 2000). The two researchers, however, studied these companies from a cultural point of view whilst ignoring a whole range of other factors such as leadership, financial issues, and business environment. In addition, in 1999 Campbell et al. proposed that culture could influence employee motivation, employee morale and ‘good will’, productivity and efficiency, the quality of work, innovation and creativity, and the attitude of employees in the workplace.

Success in business, as measured in terms of finance, relies not only on cultural influences but also on a multitude of elements (leadership, financial management, and competitive environment, to name a few). Such elements vary in all companies, including those that have a weak culture (Buchanan & Huczynski (2010). Consequently, financial success may, in turn, affect the strength of a company’s culture. Peters and Waterman

(1982) noted that ‘excellent companies’ possessed specific cultural qualities that ensured their success, though they also reported that many with strong cultures subsequently failed (Buchanan & Huczynski, 2010). Denison (1990) claimed that strength of culture is predictive of short-term performance, a result supported by Gordon and Di Tomaso (1992:783) who found that there were “associations between a strong culture and a better performance for two to three subsequent years”. When there is intensity and consensus among an organisation’s members then the culture is slow to develop and difficult to change, and adapting to a changing environment is difficult for such a culture. Consequently, resistance from members to the adoption of new technologies, such as e-Government, may hinder its integration.

According to Al-Hujran et al., (2011) one of the most challenging issues in IT/IS research is understanding why people accept or reject new information technology, so understanding the motivations and perceptions of individuals is critical in determining the success or failure of the technology. Furthermore, according to (Bagchi et al. 2004), cultural issues at the individual level are considered to be a key in adopting the technology because they play a significant role in the success or failure of the adoption process.

Straub (1994) conducted one of the earliest studies on the effect of culture on IT diffusion (e-mail and FAX). He examined the cultural impacts in Japan and the US and found Japanese culture, which is characterised by uncertainty avoidance, to generally be against using e-mail and in favour of FAX. In 1997 Straub and others examined e-mail technology acceptance in three countries: the United States, Switzerland, and Japan (Straub et al, 1997). They found that the technology had been accepted in the U.S. and Switzerland but not in Japan; one important explanation was that the U.S. and Switzerland were characterized as scoring low in uncertainty avoidance and power distance dimensions, while Japan scored high in both dimensions. Thatcher et al (2003) supported

Straub et al. (1997) after examining the use of technology among university students. They concluded that students from countries characterised as high in uncertainty-avoidance were less willing to use new technologies. DeVreede et al. (1998) studied the acceptance of Group Support Systems (GSS) in Africa, and reported a positive relationship between the cultural dimension power distance and the acceptance of GSS. This relationship, however, is a direct relationship (i.e. when power distance increases the rate of GSS acceptance increases).

Heeks (2004) studied the reasons behind instances of e-Government failure, concluding that, together with many other factors, organisational culture is a key influence. Moon and Norris (2005) examined the factors affecting e-Government adoption at the municipal level; they confirmed that the managerial culture at that level was related to receptivity to e-Government innovation. Altameem et al. (2006) supported the above studies after examining the organisational factors behind successful e-Government implementation, and they, too, concluded that organisational culture is crucial for success.

Warkentin et al. (2002, cited in Kumar et al., 2007) proposed a model of e-Government adoption which takes user trust as the essential factor for adoption. To enhance user trust in e-Services, Warkentin et al. (2002) examined online tax services and proposed a number of ways of helping governments to increase citizen trust. They used power-distance and uncertainty-avoidance as cultural variables; other variables included perceived risk, perceived behavioural control, perceived usefulness, and perceived ease of use. An essential factor in building trust in e-Government is the perception by the user that the institutions involved are trustworthy and will not result in surreptitious collection of information or the misuse by government of any data collected online. Furthermore, a lifelong disposition to adopt the system among new users of online

government services plays a major role in creating this trust. On the other hand, as far as experienced users are concerned, previous experiences with e-Services is a major factor in promoting trust. In their study, Warkentin et al. (2002) defined 'perceived risk' as a fear of being spied on via the internet and the fear of losing personal information. 'Perceived usefulness' is defined as the utility of the system to the user. While 'perceived ease of use' is defined as how low the computer skills of individuals seeking to use the system need to be to use it. The variable 'power distance' is defined as the less powerful people of a society or organisation accept and agree that power is distributed unequally. Citizens in higher power-distance countries such as Saudi Arabia are more likely to carry out the tasks specified by the higher levels of society. Consequently, Saudi society is more likely, according to this study, to adopt e-Government. The other cultural variable is 'uncertainty avoidance', which is defined as the extent to which the members of a culture feel threatened by unknown situations and have created beliefs that try to avoid these.

Peppas et al. (2012) studied the impact of Greek culture on e-Government implementation, reporting a significant relationship between two cultural dimensions (uncertainty avoidance and power distance) and the Greek intention to use e-Government.

Al-Gahtani et al. (2006) investigated the acceptance and use of IT in Saudi Arabia. They found there to be a strong relationship between facilitating conditions and IT use, and from this they concluded that increasing levels of facilitating conditions would help to reduce the ambiguity of the technologies, which in turn would contribute to the use of these technologies. Furthermore, they found a positive association between the subjective norm and the intention to use IT.

Al-Hujran et al. (2011) also examined the impact of national culture on the adoption of e-Services. They found that the two cultural dimensions of power-distance and

uncertainty-avoidance had significant impacts on the intention of using e-Government in Jordan. From this it might be concluded that the Saudi environment, where uncertainty avoidance and power distance are high in the Hofstede Dimension, would have a similar relationship.

Consequently, it is evident that uncertainty-avoidance plays a critical role in the acceptance or rejection of new information and in communication technologies, the reason being that information technology entails risks and so those cultures which avoid uncertainty are expected to adopt new technologies to a lesser degree – or to adopt it slowly and cautiously (Leidner & Kayworth, 2006). Conversely, in a culture characterised by power-distance (where people are not likely to question the decisions of their superiors), it is more likely that new technologies will be adopted.

At an organisational level, researchers have used 26 dimensions to examine the effects of organisational culture on IT adoption. As noted by Nurdin et al. (2010), the key dimensions in major e-Government research (Heeks, 2005; Dada, 2006; Ferguson, 2004; Pan et al, 2006) are the models used by Denison and Mishra (1995) and Wallach (1983). For example, Gateo and Wausi (2008) have used Denison and Mishra's (1995) model to understand and adapt IT at universities in Kenya. Dasgupta and Gupta (2005) used the framework, together with the technology-acceptance model of Davis (1989), to examine the role of organizational culture in internet adoption in India, resulting in the discovery that all four dimensions had a significant impact on perceived ease of use, and all dimensions (except adaptability) impacted on perceived usefulness. Schaper and Pervan (2006) studied some aspects of the model (adaptability and mission) in the context of e-Government in Australia, noting a positive relationship between the selected cultural dimensions and the acceptance of new technologies.

Kanungo et al. (2001) used Wallach's (1983) model of culture to study the relationship between organisational cultural dimensions and IT strategy in public sector units. They found a positive correlation between the dimensions of 'innovative' and 'supportive' and IT strategies; they also discovered that the bureaucratic dimension had a more negative impact. Therefore, according to this study, bureaucratic cultures, which describe the typical public organisation, might be considered as a barrier to the adoption of e-Government.

Similarly, Rokhman (2011) found that the bureaucratic culture in Indonesian public agencies remained an obstacle to the implementation of e-Government services. More significantly, Ogbonna and Harris (2000) studied the effect of organisational culture on performance of UK companies and identified negative links between bureaucratic culture and performance. These negative links confirm that "bureaucratic culture reduces short-term profitability, delays long-term growth and may even affect the survival of the organisation" (Ogbonna & Harris, 2000: p. 782).

Al-Azri et al. (2010) studied the successful implementation of e-Government in Qatar, noting that 75 percent of survey participants believed that 'supportive culture' was the key factor for the successful implementation of e-Government. Kifle (2008) surveyed e-Government in Brunei and found that the 'risk-averse culture' among CIOs was one of the central factors hindering e-Government implementation in the country. He also discovered that the CIOs who had no experience of managing the IT program had a very low willingness to take risks by implementing e-Government.

5.7 Moderating Effects of National Culture on Leadership Style and Organisational Culture

The literature review revealed that national culture has a major impact on leaders' behaviour and organisational culture in different environments. Many researchers (Gulev,

2009; Koen, 2005; Lok & Crawford 2003; Dušan, 2004; Hofstede, 2001) have claimed that, in one form or another, organisations must correspond to their environment. Hofstede (2001) claimed that organisational value systems showed a congruency with the nationality of the organisation's founders. He asserted that there was a relationship between certain national dimensions and organisational values. For example, there was a strong connection between a power distance culture and a hierarchical structure's value, as well as between uncertainty avoidance and decision-making patterns. Furthermore, power distance was found to be a critical dimension both nationally and culturally, influencing both leadership and culture in organisations (Dušan, 2004). Consequently, it is logical to assume that organisations reflect their national cultural environments (Gulev, 2009) since individuals bring their personal values, attitudes, and beliefs to the workplace (Lok & Crawford 2003). Furthermore, many studies have investigated the personal styles and attributes of leaders and how culture can influence styles of leadership (House et al., 2004; Judge & Piccolo, 2004; Jogulu, 2010). Some studies claimed that the nature of the interdependent relationship between leadership styles and culture are recognised and confirmed. Moreover, these studies have suggested that different leader behaviours and actions are interpreted according to their cultural environment and are due to variations in people's ideas of the ideal leader. However, these variations exist because the understanding of the concept of leadership appears to vary across cultures (Jogulu, 2010). According to Dušan (2010) who studied the impact of national culture on leadership styles in Serbia, leaders behave according to their national culture. Kim and Hancer, (2010), and Lord et al, (1986) claimed that leadership styles are consistent within a culture, though they vary considerably across cultures, therefore leaders commonly have different approaches for communicating with their followers. While cultural differences play a part, leadership style also depends on personality, and context.

In summary, over the past decade e-government initiatives have prompted many researchers to search for the critical success factors for its implementation. However, the fundamental process of how these factors, particularly leadership styles, affect e-Government implementation results remains a largely unexamined area of research. Furthermore, the literature on national and organisational cultures, shows that these two levels of culture were overlapped. Moreover, some cultural dimensions at these two levels (i.e. national and organisational levels) are identified as being key dimensions in an IT environment and are therefore relevant to this study. These include Hofstede's (2001) two national dimensions (power distance and uncertainty avoidance), which are used as moderator dimensions. The other dimensions are at organisational levels and encompass involvement and mission (Denison & Mishra, 1995), bureaucracy and innovation (Wallach, 1983), task orientation (Harrison, 1972; Handy, 1979) and future orientation (House et al. 2004).

CHAPTER SIX

DEVELOPMENT OF THE HYPOTHESES

6.1 Introduction

In the previous chapters the researcher has reviewed the literature supporting this thesis. The main aims of this chapter are to justify the research into the relationship between leadership styles and organisational culture and to develop the hypotheses that will be tested in this study.

6.2 The need for further e-Services implementation research

With the giant strides currently being made in the field of computerized technology, governments everywhere are seeking to provide their citizens with the best possible computer-based services. The KSA government is one such nation; it is working diligently to catch up with those countries already providing high quality services via the latest internet facilities. Therefore, many initiatives have been launched in Saudi Arabia over the last decade. It commenced in 2001, when e-Government initiatives were launched as part of the country's information technology plans (Abanumy et al., 2005) (see Chapter Four). Many studies (Al-Nuaim, 2011; Alshehri & Drew, 2010; Al-Shehry, 2008; Abanumy et al. 2005) show that the e-Government initiative in Saudi Arabia faces many challenges and problems in its bid to achieve full implementation, including issues connected with infrastructure readiness, knowledge about the e-Government program, trust, culture, and management support of the project. Consequently, there is now a need to re-evaluate the Saudi e-Government program more than 10 years since its first implementation, particularly by focusing on e-Services at an organisational level. Moreover, this study is concerned with examining factors that have not yet been

investigated fully in the literature, including leadership styles and organisational culture and how these two factors have affected e-Services implementation in Saudi Arabia.

6.3 Research objectives

This research aimed to achieve the following objectives:

1. Identify leadership styles that might positively contribute to the implementation of e-Services.
2. Identify dimensions of organisational culture that might affect the implementation of e- Services.
3. Identify dimensions of national culture that might affect the implementation of e-Services.
4. Identify leadership styles that create (or manipulate) the desired organisational culture which accept and support the implementation of e-Services.
5. Identify measures in the implementation of e-Services.
6. Create a new model which might be helpful in achieving the implementation of e-Services, taking into account the influence of leadership styles and organisational culture.
7. Evaluate this model using some public and private agencies in the KSA as a case study.

6.4 Study hypotheses

The following sections describe the hypotheses. They are divided into three groups. Section 6.5 focuses on the hypotheses relating to the first objective – i.e. the leadership style that affects e-Services implementation and creates (or manipulates) organisational cultures to implement e-Services. The second group relates to the second objective - dimensions of organisational culture that might affect e-Services implementation – and will be described in Section 6.6. Finally, the group relating to dimensions of national

culture that might affect e- Services implementation (the third objective) will be introduced in section 6.7.

Bass and Avolio (1993) have argued that leadership and organisational culture are interconnected concepts. Furthermore, they found that organisational culture arises from its leaders and, in turn, culture affects the leadership styles adopted within an organisation. Schein (2010) supported Bass and Avolio (1993), claiming that organisational culture and leadership are interconnected. This overlap can be illustrated by observing the relationship between the two concepts during an organizational life cycle. Therefore, during the organisational-formation phase, founders create assumptions and values which are then cultivated by stories and myths, enacted and shaped by the members of the organisation, and taught to newcomers. On the other hand, the culture that has been created exerts an influence on the leader's behaviour as the organisation develops over time. Thus, in this sense, culture shapes leaders' actions and styles and it can thereby be concluded that the leader forms the organisational culture and in turn can be affected by that culture.

To discover the association between organisational culture and leadership we need to investigate how culture has been theorised in organisational theory. There are two ways to study organisational culture in organisations. The first is to treat culture as an independent variable, imported into the organisation through membership and exhibiting the patterns of attitudes and actions of its members (Smircich, 1983). With this approach, the culture can be manipulated based on leaders' skills and abilities. Most literature on leadership (particularly transformational leadership) reveals widespread support for this view (Ogbonna & Harris, 2000). On the other hand, culture can be treated as a fundamental part of the organisation. Therefore, a leader's thoughts, feelings and actions

are shaped by the culture (Schein, 1992). In short, culture can manipulate a leader's behaviour.

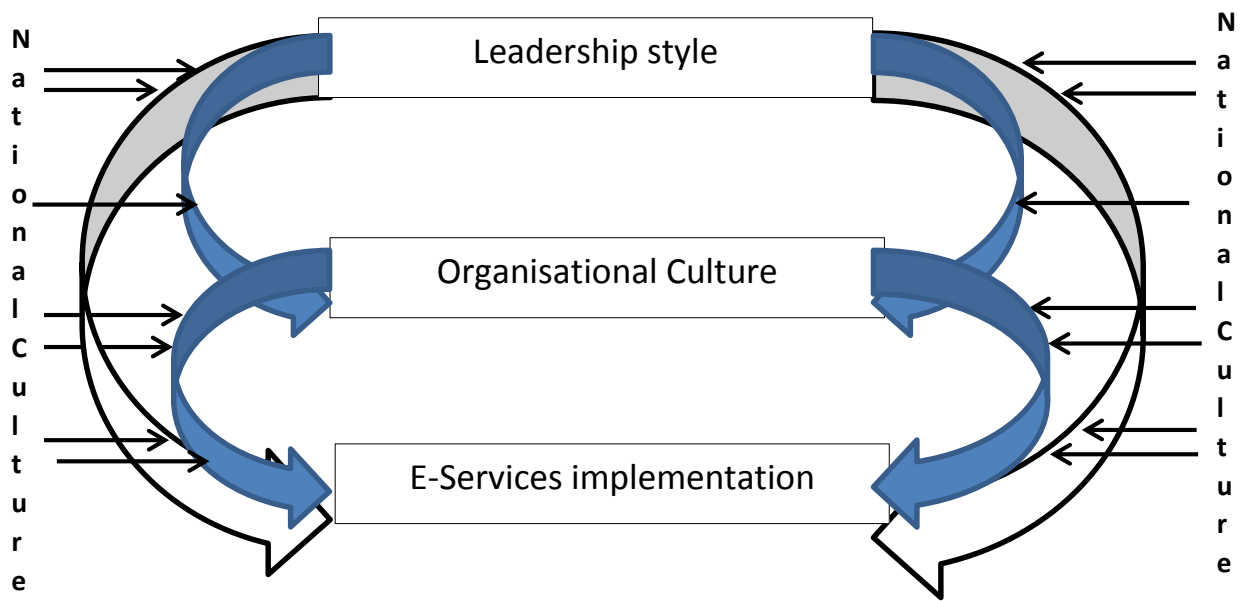
The earlier section of the literature review considered the association between leadership and e-Government adoption and between organisational culture and e-Government adoption (Chapter Five), and it found that many commentators had noted that e-Government adoption is dependent on the conscious association of the personal values of the organisation's members with the values that are adopted by the organisation as a whole. This gives us a clear indication that organisational culture and leadership are associated.

Organisational culture, and how employees react to change and innovation, are also moulded significantly by leaders' behaviours (Fishman & Kavanaugh, 1989). That is, leadership is important in work interactions and in shaping organisational culture to support change and innovation. Hence, leaders are considered to be the main source of influence on organizational culture (Schein, 1992). Leaders can manipulate employees' attitudes and motivations by shaping the nature of the work environment and organisational culture (Amabile, 1998). Hennessy (1998) studied organisational change in the Civil Service in the United States, concluding that leadership was a critical factor in creating the proper organisational culture, one that helps to enhance the execution of any government reforms. Furthermore, Hennessy (1998: 523) claims that "the most effective leaders foster, support and sustain organizational cultures that facilitate the type of management reform envisioned by "reinventing government" and the attendant increases in effectiveness and efficiency".

Bass (2008) examined the impact of the transactional and transformational styles on organisational culture. He argued that transactional leaders accept and work within the existing culture. By contrast, transformational leaders tend to change the organisational

culture to align it with their own vision. Indeed, while the literature contains many claims that leadership and organisational culture are related (Schein, 2010; Bass, 2008; Bass & Avolio, 1993), there have been no empirical examinations, to this writer's knowledge, of the nature and performance effects of such links within the adoption of e-Government. In fact, the nature and form of the interactions between leadership, organisational culture, and the adoption of e-Government are not entirely understood. Therefore, further research is needed to explore and identify the relationships between leadership style and organisational culture and their effects on the adoption of e-Government. Although the links between culture and e-Government environments are supported by empirical studies (Al-Hujran et al., 2011; Rokhman, 2011; Al-Azri et al., 2010; Heeks, 2004; Moon & Norris, 2005; Thatcher et al., 2003; Altameem et al., 2006; Schaper & Pervan, 2006; Kanungo et al., 2001; Straub et al., 1997; Straub, 1994), and a few studies have examined the relationship between leadership and e-Government adoption (Ke & Wei, 2007; Schepers & Wetzels, 2005; Kittipong, 2005; Ke & Wei, 2004; Kim & Kim, 2003), most of these studies focus on leadership as whole and fail to examine which leadership style is appropriate for e-Government adoption. Consequently, the model which is based on the studies that state that leadership style creates the desired organisational culture will be used in this study, the model linking leadership style with e-Government adoption; 'organisational culture' is the mediator and the 'national culture' the moderator (Fig 6.1).

Figure (6.1): The links between leadership style, organizational culture, national culture and e-Services implementation.



Based on the literature review, the following leadership styles have been identified as influencing the implementation of e-services:

1. Transformational leadership
2. Transactional leadership
3. Servant leadership.

The dimensions of organisational culture are:

1. Involvement
2. Mission
3. Innovation
4. Task orientation
5. Bureaucracy
6. Future orientation.

The two dimensions of national culture are:

1. Uncertainty avoidance and
2. Power distance.

6.5 Hypotheses relating to leadership styles that manipulate organisational cultures to implement e- Services

In the following sections information derived from the literature review is used in order to develop hypotheses relating to each of the above leadership styles. The findings of the statistical tests relating to these hypotheses will be presented in Chapter 8.

According to the literature that has been reviewed leaders can manipulate employees' attitudes and motivation by promoting an appropriate organisational culture (Amabile, 1998). This means that leaders can enhance the chances of successful implementation of e- Services by fostering a suitable organisational culture. Furthermore, national culture can also have an impact on both leaders and organisational culture. Therefore, this research addresses the following hypotheses:

Hypothesis 1 (H1): There is a positive relationship between leadership and organisational culture.

Hypothesis 2 (H2): There is a positive relationship between organisational culture and electronic services implementation

Hypothesis 3 (H3): There is a positive relationship between leadership and e-services implementation.

Hypothesis 4 (H4): there is a positive relationship between transformational leadership and organisational culture.

Hypothesis 5 (H5): there is a positive relationship between transactional leadership and organisational culture.

Hypothesis 6 (H6): there is a positive relationship between servant leadership and organisational culture.

Hypothesis 7 (H7): National culture has an effect on the relationship between leadership and organisational culture.

Hypothesis 8 (H8): National culture has an effect on the relationship between organisational culture and the use of electronic services.

6.5.1 Transformational leadership

Transformational leadership (Chapter Two) refers to a style by which a leader is able to move individuals and groups beyond immediate self-interests through three different behavioural dimensions:

1. Charisma (or idealized influence)
2. Intellectual stimulation (promoting creativity and innovation)
3. Individualized consideration (coaching and mentoring).

6.5.1.1 Charismatic leadership (idealised influence)

Leaders who have an idealised influence behave as role models for their followers and colleagues (Bass & Avolio, 1994; Yukl, 2010; Avolio, 2011). They are admired, respected, and trusted and have high moral and ethical values. They are able to provide their followers with a sense of vision and mission and are willing to share risks with them. Yukl (2010) summarises the traits and behaviours of this type of leader, asserting that charismatic leaders are those who present a vision that transcends the status quo; they act and behave in unusual ways to achieve their vision; they make self-sacrifices and take personal risks; they are highly confident about the success of their mission; they foster emotion in their followers; they see opportunities that others fail to recognise. These leaders, he says, are very determined and persistent, and always emphasise achievement in their mission. They are therefore able to communicate an inclusive vision to their

followers, create a great commitment in pursuing their objectives (Bass, 1999) and are skilled in clarifying the purpose of their activities.

A 'mission' trait defines the organisation's goals and gives a shared sense of purpose, meaning, direction, and strategy to an organisation's members. The mission trait is based on the leadership ethos and ideology of the organisation and thus it has a major effect on the organisation's development (Fairhurst et al, 1997). Hence, this particular trait emphasises stability and direction within the organisation. Organizations with a well-defined, well-understood, clear mission will stimulate their members to understand why their organisations exist, what their role is, and the benefits of being a member.

Mission culture draws the future of the organisation and contains a clear direction to the employees along which the organisation may progress. It defines long-term direction to the successful organisations, leading to consensus development on how to achieve organisational goals. Maintaining a clear vision of the organisation's future if its mission is accomplished promotes high expectation and motivation to achieve that mission. According to Denison and Mishra (1995), mission culture has sub-dimensions of vision, clear strategic direction, and defined goals and objectives. These cultural traits are based on its external focus and its emphasis on stability. During the implementation of e-Services, the existence of a clear vision, strategic direction, and goals and objectives are fundamental factors in maintaining an organisation's future directions. These elements can, however, be exhibited by idealised leaders who inspire their followers to understand and agree with the importance of achieving economic and social transformation by way of e-Services.

There is strong evidence in the literature that through the adoption of e-Government by public organisations a clear vision can contribute to solving organisational cultural inertia. In Singapore the clear articulation of the leaders' visions has inspired mind-set

changes and enhanced citizens' trust in e-Government services (Ke & Wei, 2004). Furthermore, such vision has enabled government agencies to understand the move towards transforming the state by e-Government. Similarly, in the local government of Sragen in Indonesia the clear vision of political leaders was essential in securing successful implementation of e-Government (Bjørn & Fathul, 2008). In the UK, the clear vision and objectives of local governments to modernize government services through telephone or internet facilities 24/7 over a five-year period was a critical factor in e-Government implementation (Nurdin et al. 2010). A further example is in South Korea (currently considered to be one of the global leaders in terms of e-Government), where the clear vision and strategic direction of political leaders is based on notions of 'world's best' and 'open e-Government'. Since organisations need a clear vision to establish e-Services projects, idealised leaders who present a vision that transcends the status quo need to communicate this vision to employees and create a sense of ownership and responsibility. Therefore, this investigation addresses the following hypotheses:

Hypothesis H9a: there is a positive relationship between charisma (idealized influence) and mission culture.

Hypothesis H9b: there is a positive relationship between mission culture and e-Services implementation.

Hypothesis H9c: there is a positive effect of idealised influence and e- Services implementation through the mediation of mission culture.

6.5.1.2 Intellectual stimulation

According to Avolio and Bass (2002, p.2), intellectual leaders stimulate and encourage their followers "to be innovative and creative by questioning assumptions, reframing problems and approaching old situations in new ways. They push their

followers to develop innovative strategies”. Such leaders encourage the introduction of beneficial new products, processes, and systems into the organisation. The provision of intellectual stimulation and continuous challenge for followers encourages individual innovation (Jung et al. 2003), which is itself critical in the stimulation of wholesale organisational innovation (Elkin & Keller, 2003) and motivates and guides employees in the Strategic Business Unit (SBU) to implement internal process innovation (Chen, 2012).

A culture of innovation is “a style of organisational behaviour that is in agreement with new ideas, change, risk and failure” (O’Reilly, 1997, p. 60). The view here is that new ideas and change might positively benefit the organisation and its members (West & Farr, 1990; McKeown, 2008) and determine the organisation’s direction. According to Klenke (1994), information and communication technology, and leaders’ behaviour, can create new organizational forms. Therefore, an organisation’s leaders regard innovation as a major foundation for competitive advantage. A number of research projects have examined the relationship between leadership styles and/or organisational culture, creativity, and innovation within organisations. Kanungo and Jain (2011) found that a culture of innovation is positively related to e-Government implementation in India. In Saudi Arabia, according to the head of the Yesser project “to implement e-Government successfully the state needs to promote an innovation culture” (Arabnews, 2012). Organisations with innovative leadership and a sustained culture of innovation perform well in innovative activities (Lehenkari, 2011). This means that cultural factors may facilitate or hinder the creation of new ideas and their effective embodiment in new initiatives such as an e- Services project. Furthermore, negative attitudes to risk-taking, and fear of failure, impede people from accepting new innovations. Therefore, transformational leaders have to implement a communication-driven culture of innovation in their organisations. Crawford et al. (2003) argued that intellectual leaders

are commonly associated with personal innovation, and the role expectations of leaders were also found to have positive influence on employees' innovative behaviour (Scott & Bruce, 1994). In addition, if an organisation is characterised as having an innovative culture, a high level of creativity and innovation cannot be accomplished if followers lack motivation. An intellectual leader is able to mobilise his/her followers to build innovative environments (Avolio & Bass, 1988; Bass, 1985). Therefore, this project also addresses the following hypotheses:

Hypothesis 10a: there is a positive relationship between intellectual stimulation and a culture of innovation.

Hypothesis H10b: there is a positive relationship between a culture of innovation and e-Services implementation.

Hypothesis H10c: there is a positive effect on intellectual stimulation and e- Services implementation through the mediation of a culture of innovation.

6.5.1.3 Individualised consideration

Leaders who exhibit 'individualised consideration' are aware of followers' concerns and developmental needs, as well as their intellectual germination through teaching, coaching, and the generation of new learning opportunities (Groves & LaRocca, 2011; Ismail, 2010). 'Individualised' leaders closely monitor followers' perspectives and goals, and address followers' needs (Emery & Barker, 2007). Furthermore, individualised leaders assist followers' development by promoting growth opportunities and by providing encouragement and support. The considerate leader improves followers by assigning them tasks and indirectly observing their progress, providing additional support or direction as needed.

The ‘involvement’ trait has been defined as “a subjective psychological state reflecting the importance and personal relevance of a system to the employees” (Barki & Hartwick, 1989: p.53). This cultural trait builds employees’ capability and enhances their sense of ownership and responsibility, given that employees are closely involved in their organisation’s activities. Denison and Mishra (1995) claimed that when employees have high involvement the organisation is more effective because the elevated levels of interaction of employees raises a strong sense of commitment to the organisation and its goals. In contrast, when people have low involvement, the organisation faces difficulties in responding to environmental changes.

A high score in the cultural trait reflects an organisation’s concern for developing, informing and involving employees, and getting them engaged. As noted by Fey and Denison (2003), effective organisations empower their members, develop human capability at all levels, and emphasise teamwork (Lawler, 1996; Deal & Kennedy, 1982; Peters & Waterman, 1982). According to Fey and Denison (2003), in Russia involvement has a significant relationship to market share, sales growth, employee satisfaction, and quality. Linares et al. (2012) studied the organisational culture and performance of businesses engaged in strategic alliances in Spain and Morocco, finding a positive relationship between staff involvement and satisfaction. Therefore, involvement helps in creating employee satisfaction and can be considered as a central issue in employee participation in achieving the organisation’s vision. Such involvement results in a strong identification with the organisation and encourages employees to go beyond their original job descriptions so as to achieve more effective contributions to the organisational goals (Kwantes & Boglarsky, 2007).

In regard to the adoption and use of e- Services, high involvement of employees can enhance the introduction of a new system. According to Altameem et al. (2007) e-

Government implementation requires employee involvement by inspiring them to higher levels of contribution and broader rates of production. Wood-Harper et al., (2004) emphasise the importance of employee involvement in the successful introduction of e-Government, and a lack of employee involvement has been found to be one of the main reasons for e-Government failure in India (NISG and PMI, 2011). Subasinghe (2010) claimed that involvement was a strong predictor of innovation in Sri Lanka. That is, as leaders shape appropriate organisational cultures they need to pay marked attention to those cultural traits that promote employee responsibility and commitment to contribute to the success of e-Services initiatives. Therefore, the following hypotheses are proposed:

Hypothesis H11a: there is a positive relationship between transformational leadership (individualised consideration) and involvement culture.

Hypothesis H11b: there is a positive relationship between involvement culture and e-Services implementation.

Hypothesis H11c: there is a positive effect on individualised consideration and Services implementation through the mediation of involvement culture.

6.5.2. Transactional leadership

Transactional leadership entails a leader moving individuals and groups through two different behavioural patterns. These fall along two dimensions:

- Contingent reward
- Management-by-exception.

6.5.2.1 Contingent reward

The trait of contingent rewards by leadership places emphasis on an exchange of resources amongst followers. Leaders set up constructive transactions or changes with followers, clarifying the roles, task requirements, and expectations, and establishing the

rewards for their efforts and performance in response to the meeting of those expectations. Examples of contingent-reward behaviour includes recognition from the leader for work accomplished, job promotions, bonuses and monetary incentives, as well as commendations for their excellent effort.

‘Task-oriented culture’ refers to a focus on the work and the achievement of the goals and objectives of the organisation. This type of culture entails employees focusing on the achievement of the best possible results, even if this demands the sacrifice of personal relationships. The main goal of such a culture is the accomplishment of its mission. Therefore, employees have to be well-trained and fully qualified for their position.

In an e-Government environment it is assumed that senior managers establish goals and objectives, employee tasks are defined, and action is taken to ensure that e-Government implementation is successful. Furthermore, establishing a reward system is critical in the implementation phase. This refers to the offering of various rewards and benefits above and beyond wages and salaries, given that “reward systems stimulate employees to look inward and to focus on their organization’s goals” (McDaniel & Carr, 2005, p: 4). This approach can at times create a magical effect on an employee’s performance. The implementation of an e- Services project must therefore be accompanied by a reward system in order to overcome any resistance to change on the part of employees. This, in turn, will increase employees’ commitment to e- Services activities (AL-Shehry, 2008) and will encourage employees to adopt e-Government initiatives. Hence we have the following propositions:

Hypothesis H12a: there is a positive relationship between contingent reward and task-oriented culture.

Hypothesis H12b: there is a positive relationship between task-oriented culture and e-Services implementation.

Hypothesis H12c: there is a positive effect on contingent reward and e- Services implementation through the mediation of task-oriented culture.

6.5.2.2 Management-by-exception

In the case of management-by-exception, leaders establish visible mechanisms that are designed to encourage employees to accomplish the tasks they have been set. They focus on criteria and problem-solving, perfect performance, caring about rules and regulations, the use of authority as well as the immediate achievement of progress. Such leaders monitor employees closely so as to allow them to stay abreast of mistakes and errors; if any deviate from the standards mapped out by the leader, corrective action is taken immediately.

A bureaucratic culture contains explicit rules, procedures, and regulations. These norms are to be written and understood by employees and prevail in most/all bureaucracies. Therefore, in this study this type of culture has been hypothesised to be a barrier to e-Services implementation. Many studies have claimed that bureaucratic cultures are barriers in ICT environments. Sahraoui et al. (2006) stated that one of the challenges facing the Saudi e-government is a deeply entrenched bureaucratic culture. AlAwadhi and Morris (2009) found that the majority of participants in their study (78 percent) regarded bureaucracy as an obstacle to achieving ICT projects and they were optimistic that e-Government, if implemented, would reduce the bureaucracy. Fountain (2001) explains the components of government bureaucracy, against which the application of ICT acts. Moreover, he argues that the tendency of public organizations to perpetuate their bureaucracies makes them lag behind in the adoption of technological changes. Yu (2011) claimed that the cultures of bureaucracies are incompatible with e-Government because bureaucracies fear that change will be a threat to their personal interests. Budiati (2005) suggested that bureaucratic cultures should be changed to be

more dynamic, transparent, and accountable before the introduction of e-Government. Consequently, it was argued that the cultures of many bureaucracies have a negative effect on e-Services implementation. This leads to the following hypotheses:

Hypothesis H13a: there is a relationship between management-by-exception and bureaucratic culture.

Hypothesis H13b: there is a negative relationship between bureaucratic culture and e-Services implementation.

Hypothesis H13c: there is a negative effect on management-by-exception and e-Services implementation through the mediation of bureaucratic culture.

6.5.3 Servant leadership

Servant leadership can achieve organisational goals and objectives on a long-term basis. Stone et al. (2004, p.355) summarised the reason for focusing on followers, stating that “organisational goals and objectives could be accomplished on a long-term basis by first facilitating the growth, development and the needs of the individuals who comprise the organisation”.

The Global Leadership and Organizational Behaviour Effectiveness (GLOBE) project by House et al. (2004) found that organisations with cultures which are highly orientated to the future tend to embrace specific leadership styles, such as participative, charismatic, humane-orientation, and team-orientation (Dorfman et al., 2004, cited in Sokoll, 2011). However, these styles include, in one form or another, some servant-leadership characteristics. Furthermore, GLOBE introduced ‘other oriented’ attributes which correspond to the servant leadership construct of Field and Winston (2010) (see Servant Leadership Theory in Chapter Two), and include distinctive attributes.

‘Future orientation’ includes a focus on plans, goals, aspirations, hopes, predictions, and expectations (Aspinwall, 2006). House et al. (1999, p.25) defined a ‘future orientation culture’ as “the degree to which individuals in organizations or societies engage in future-oriented behaviours such as planning, investing in the future and delaying gratification”. Sokoll (2011) noted that there are positive associations between future orientation and some leadership behaviours. Leadership behaviours (such as strategic planning, entrepreneurship, decision-making, visioning, performance, and development and support of subordinates) related positively to a high stratum of future organisational culture. Therefore, leaders who facilitate the growth, development, and needs of individuals and who have a long-term orientation would prove to be key sources of long-term goals such as an e-Government initiative.

To serve their followers’ needs, servant leaders need to take a futuristic approach. Greenleaf (1977) asserted that servant leaders strive to develop their followers’ future leadership capabilities and build strong long-term relationships with their followers (Liden et al. (2008). Several studies suggest that individuals in cultures that are characterised as high in the future-orientation dimension place a high value on long-term job and training programmes and on overall personal development (Zhao’s, 2006; Ofer, 2008).

Historically and traditionally, Saudi society is characterised as ‘hereafter’ in preference to the ‘here and now’ as it is rooted in Islamic cultural traditions; thus it can be said that Saudi society is generally future-oriented. According to Alrashed (2001), organisations in the Arab world are characterised as low in the dimension of future orientation, and Arab business organisations suffer from a lack of performance appraisal, job goals, career paths, and human resource management planning and policies. This, however, leads to the conclusion that to some extent there is a conflict between the nature

of Arab society and organisational structures. Therefore, leaders need to exploit this cultural feature in Islamic societies and to cultivate it in their organisational cultures.

In an e-Government context, leaders play a critical role in shaping the future of e-Government. For the successful implementation of this service governments need to formulate strategic plans that provide roadmaps which encourage organisations to advance to long-term futures (APCICT, 2010). Leaders need to cultivate among their followers the broad picture of a seamless e-Government, and e-Government-adopting organisations must establish strategies of intensive training and development if they are to bridge the gap between what employees have known and what the system requires them to know. Therefore, the following hypotheses are proposed:

Hypothesis H14a: there is a positive relationship between servant-leadership and future-culture.

Hypothesis H14b: there is a positive relationship between future-culture and e-Services implementation.

Hypothesis H14c: there is a positive effect of servant-leadership and e-Services implementation through the mediation of future-culture.

6.6 Summary

This chapter has provided a justification for further research relating to e-Services implementation. The objectives of this research project were summarized. The model adopted for this study was introduced, the model being based on the studies that advocate that leadership styles can foster the culture appropriate for the organisation. This model links the leadership style with e-Services adoption, organisational culture being the mediator and the national culture the moderator.

The next chapter presents the research methodology. It involves describing the research design, the methodology, and data-collection methods.

CHAPTER SEVEN

RESEARCH METHODOLOGY

7.1 Introduction

In academic research, the main methodological options for studying a phenomenon are the quantitative and the qualitative approaches (Bryman & Bell, 2011; Denzin & Lincoln, 2000). However, there is still much controversy as to which approach delivers the best results. There is an on-going debate as to whether qualitative methods are naturally superior to quantitative methods, or vice versa. Most researchers place emphasis on one form or another (or both), partly out of conviction and partly because of the nature of the problems that they are going to study.

In this chapter, the research design is described and justified; the methodology and data collection methods and the research design are also be explored. In addition, the instruments that have been used to assess the study's variables are reviewed. Construction of this study's questionnaire are explained and the content of the final version of the questionnaire is detailed.

7.2 Research design

Many researchers over the last two centuries have asserted that research design provides a framework for the collection and analysis of the data being studied (Churchill, 1979; Bryman & Bell, 2011). The importance of using a suitable research design stems from the critical relationship that exists between the theory and argument that informed the research and the empirical data collected (Nachmias & Nachmias 2008). The choice of the most appropriate research design “reflects decisions about the priority being given to a range of dimensions of the research process” (Bryman & Bell 2007, p. 40), which therefore have great influence on methodological procedures such as sampling and

statistical packages. Consequently, these procedures are considered to be a blueprint which enables investigators to find answers to the questions arising from the study of specific phenomena. Besides providing a clear research plan, it also imposes constraints and throws up ethical issues that must also be taken into account during a study (Saunders et al. 2007).

Researchers normally treat research tasks as a linear process covering and involving clearly defined steps, but in practice circumventing and skipping do occur. Some steps may be out of sequence and out of context, and even carried out simultaneously; there may be overlapping and omissions as well. Structural formats of research methodology are seldom rigorously followed. However, Saunders et al (2007) have used a 'research onion' to lay out the components required to establish a rigorous, structural form. By peeling through the layers of the 'onion', and studying them in sequence and in chronological order, the layers guide the researcher to an appropriate order.

The research 'onion' is a scientific mechanism which assists in the adoption of a methodology by providing a framework for using the most suitable methods and strategies to address typical research problems. Each instruction and guideline can readily lead to intricate issues, and can provide answers to the different stages of research problems. Hence, the research onion provides a layered format of scientific research tools.

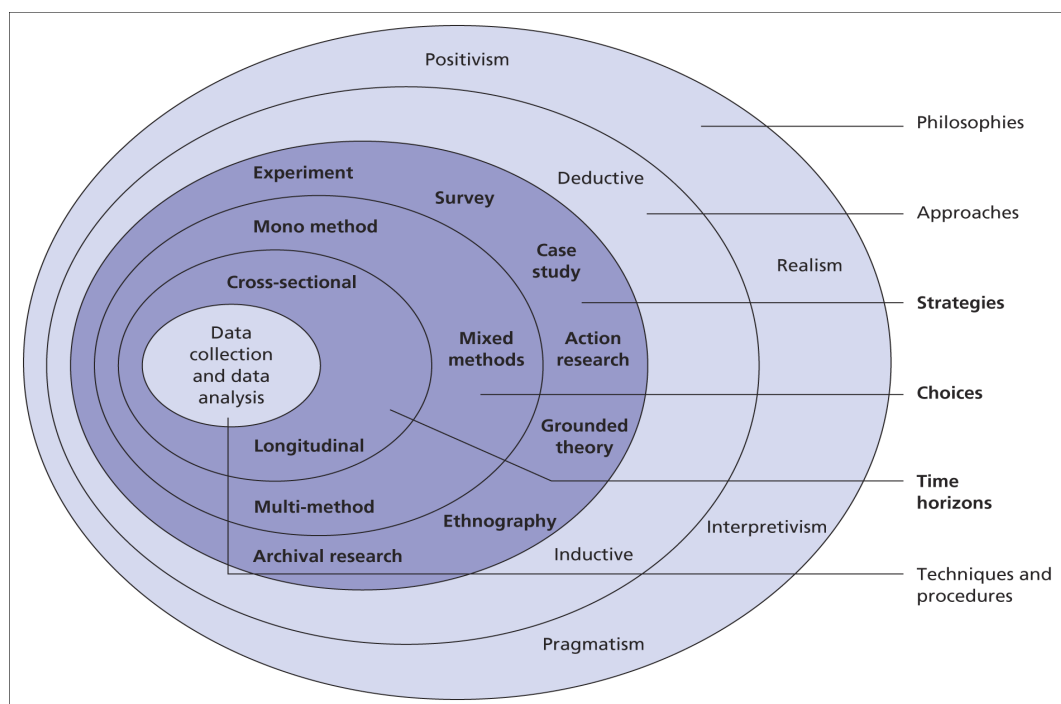
As a scientific statistical research tool, the onion takes a systematic approach which relies only on empirical evidence, exploiting the appropriate concepts and committing itself to objective consideration. It presupposes ethical neutrality; that is, its only aim is to establish sufficient and correct statements which can be made into probabilistic predictions. Critical scrutiny is central to the approach and conclusions can be verified through replication of the research project.

Figure 7.1 shows the different layers and methods that are presented and must be consistently adopted when conducting research. According to the research onion, a number of issues must be considered before determining data collection and analysis techniques. All layers and approaches are explained in the next sections.

7.2.1 Research philosophy

Research is rooted in assumptions about how we perceive and understand the world. These assumptions underpin each research strategy and the methods chosen as a part of that strategy. According to Saunders et al (2007, p 600), research philosophy is an “overarching term relating to the development of knowledge and the nature of that knowledge in relation to research”. Johnson and Clark (2006) similarly argue that the vital issue is not so much whether research should be informed by philosophy but how well we are able to reflect upon the philosophical choices we have made.

Figure 7.1: the Research Onion



The research ‘onion’ (source: Saunders *et al*, 2009)

The first layer of the research onion gives a clear idea of possible thought processes and philosophies for any given piece of research. It not only reflects the traditional views of research but offers new tools and a holistic approach to the research process, e.g. positivism and realism. Normally, when undertaking research it is important to consider and adopt different research paradigms such as those suggested by ontology and epistemology, which deal with our understanding of reality and the nature of knowledge.

7.2.1.1 Positivism

As Bryman (1998) and Bryman and Bell (2011) mentioned, there is a wide range of definitions for positivism, as acknowledged by educational researchers working within a positivistic framework. Sometimes the term is used pejoratively, especially by those who reject the paradigm in favour of alternatives. Positivism, according to Bryman and Bell (2011: p.15), “is an epistemological position that advocates the application of the methods of the natural sciences to the study of the social reality”. Positivists hold that reality and the individual beholding it are separate (Weber, 2004). That is, the subject and the object are considered to be two separate and independent things, so by implication, positivistic ontology is dualistic in nature.

Positivism entails a quantitative approach to the investigation of particular phenomena, even when they have a qualitative component. The qualitative approach, as a rational, linear procedure, has always stressed the importance of the scientific method. Bryman (1998) aims to establish the philosophical basis for research by setting out a theoretical explanation of positivism and post-positivist philosophies. In so doing, he provides a sound basis from which to approach the ‘quantitative-qualitative’ debate (as it impacts on research methods), he explores the need to study philosophical issues in general, and he delineates how they relate to the question of research methodology. Empirical evidence and verification of the facts are central to his approach.

7.2.1.2 Interpretivism

Interpretivism is another research philosophy. Interpretivists suggest that reality can be fully understood only through subjective explanation and intervention. In contrast to positivists, interpretivists believe there is an inseparable connection between reality and the individual who observes it. According to Bryman and Bell (2011: p.17) interpretivism represents an alternative to the positivist approach, which has dominated research for decades. Interpretivism advocates viewing the world in a different manner, involving a different response from researchers, and that:

“The subject matter of the social sciences - people and their institutions - is fundamentally different from that of the natural sciences. The study of the social world therefore requires a different logic of research procedure” (Bryman & Bell, 2007: p. 17).

The interpretivist philosophy proposes that phenomena should only be studied in the context of their natural environment. While reality is open to many interpretations, scientists maintain that these interpretations are part of the scientific knowledge they are looking for.

Interpretivism is essentially epistemological rather than mechanistic, stressing the differences in research carried out by different individuals or ‘social actors’. For McKenzie (1997: p.9), research has become a maelstrom of conflicting ideas, with old ideas being replaced by more modern convictions. Therefore, interpretivism lends itself to research into social issues, since the researcher is able to concentrate on the human aspects of organizations and the ensuing complexities.

7.2.1.3 Realism

Realism is yet another epistemological position which asserts that all we know comes from the experiences of our senses and that reality exists outside the human mind

(Saunders et al., 2009). To understand this philosophy two forms of realism are contrasted below:

1. Empirical realism states that our senses can be relied on to give us an accurate picture of reality.
2. Critical realism states that the image of the world we receive through our senses might not be accurate and that the true nature of reality may be different from what we experience. Reality is interpreted, for example, not only sensorially but also psychologically, so that observation may lead to false conclusions.

The latter form recognizes that social conditions can be physically observed but that the concepts which we form around these observations can be coloured by our mindset (Easterby-Smith et al. 2010). Because of this inherent difficulty with the realist approach, realists advocate the use of diverse research approaches when developing a research design. This technique is called triangulation.

Bryman and Bell (2011: p. 17) note that positivism and realism share two features. Both hold that the same approach should be adopted towards the collection and interpretation of data and that external reality exists and is accessible to scientific investigation.

7.2.1.4 Pragmatism

Pragmatism has its origin in Greek literature, and means *action* (James, 2000). The pragmatic approach is certainly not new to the social sciences. There are several valuable reviews of pragmatism, both as a general belief system for the social sciences (Maxcy, 2003) and as a specific justification for combining qualitative and quantitative methods (Johnson & Onwuegbuzie, 2006). Pragmatism is a philosophical tradition which links practice and theory. It describes a process where theory is extracted from practice, and

applied back to practice to form what is called *intelligent practice*. Important principles, characteristic of pragmatism, include: instrumentalism, radical empiricism, verificationism, conceptual relativity, and fallibilism.

7.2.2 Research Approaches

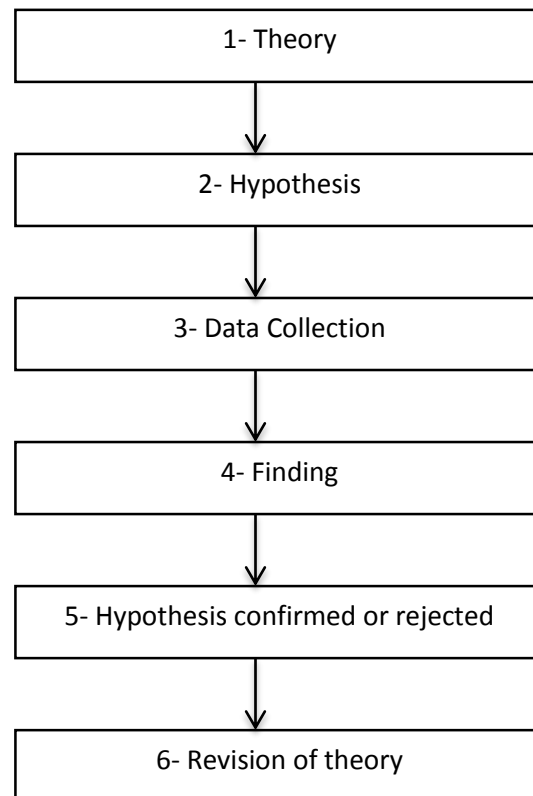
The second layer of the research onion contains two research approaches: deductive and inductive. They are used sequentially in research reasoning and have been described - somewhat cryptically - by John Dewey as the “double movement of reflective thoughts”. This needs some elucidation. An induction is a conclusion based upon circumstantial evidence; for instance, the argument for Intelligent Design. However, no matter how much evidence is amassed in support of such a theory, it will never be absolute proof. Empiricism is flawed because it demands an act of faith – a belief that experiments can be reliably replicated. Deductions, on the other hand, are necessarily true; for example, if $y = x/3$, then $x = 3y$, and admit no other interpretation. It is the difference between a reasonable hunch and absolute certainty. Either way, reasonable hunches and logical certainties both provide the basis for the hypotheses which inform a research project – this is the essential point which Dewey was making. The strength of any research hypothesis clearly depends upon the degree to which it leads to an adequate explanation of the matter under investigation. If we reason deductively, then our research hypotheses generate conclusions which can be logically verified. Inductive reasoning looks at an organisation, a business problem, an economic issue and gathers together circumstantial evidence which points to a general – and hopefully accurate - conclusion.

7.2.2.1 Deductive

Deduction, according to Bryman & Bell (2011), is conclusive and characterises research methods in quantitative research; that is, research based on the collection of measurements (Fig 7.2). Researchers usually start with the inherent hope that the data

collected will provide a logical proof of the original thesis. The Centre for Financial and Management Studies (2012) states that a hypothesis is no more than a tentative and speculative statement. It is about the ‘possible’ relationship between two or more variables. There is no promise, of course, that such a relationship actually exists.

Fig (7.2): The deductive process



Source: Bryman and Bell (2011)

For a deduction to be correct, it must be both true and valid. A deduction is valid if it is impossible for the conclusion to be false if the premises upon which it is based are true. Deductive reasoning involves taking a general, accepted principle against which to test a specific situation or individual. As Markovits and Barrouillet (2002) point out, the ability to make inferences is a typically human trait. Conditional IF ... THEN reasoning is an essential part of logical thinking and especially important within scientifically oriented societies (Hawkins, Pea, Glick, & Scribner, 1984). Logicians have established rules to test whether a deduction is valid or not. But a full discussion of these rules would

extend beyond the scope of this research. Suffice it to say, for the purposes of the present discussion, conclusions are not logically justified if one or more premises are false or the arguments are not well formed. Social scientists are of the view that even if a single premise is found to be incorrect, the whole process can be rejected outright as invalid. This study follows the deductive approach where data are collected and a theory is developed as a result of the data analysis.

7.2.2.2 Inductive

The other layer within the research onion is induction, which can be seen as diametrically opposed to the deductive approach. Induction is a scientific process whereby we generalize across a limited number of instances, examples, or observation so as to find a plausible explanation for the object of investigation (Bryman & Bell, 2011). In effect, in using the observations we make, we jump to conclusions (Holland et al., 1986). The inductive approach is just the reverse of the deductive approach and typically involves a degree of uncertainty. There is a reciprocal relationship between the conclusions and the evidence on which they are based: the conclusion explains the facts, and the facts support the conclusion. Unlike deductive reasoning, there is no absolute or necessary relationship between observation and conclusion.

7.2.3 Research Strategies: as illustrated in Figure, 7.3 there are seven of these.

7.2.3.1 Experiment

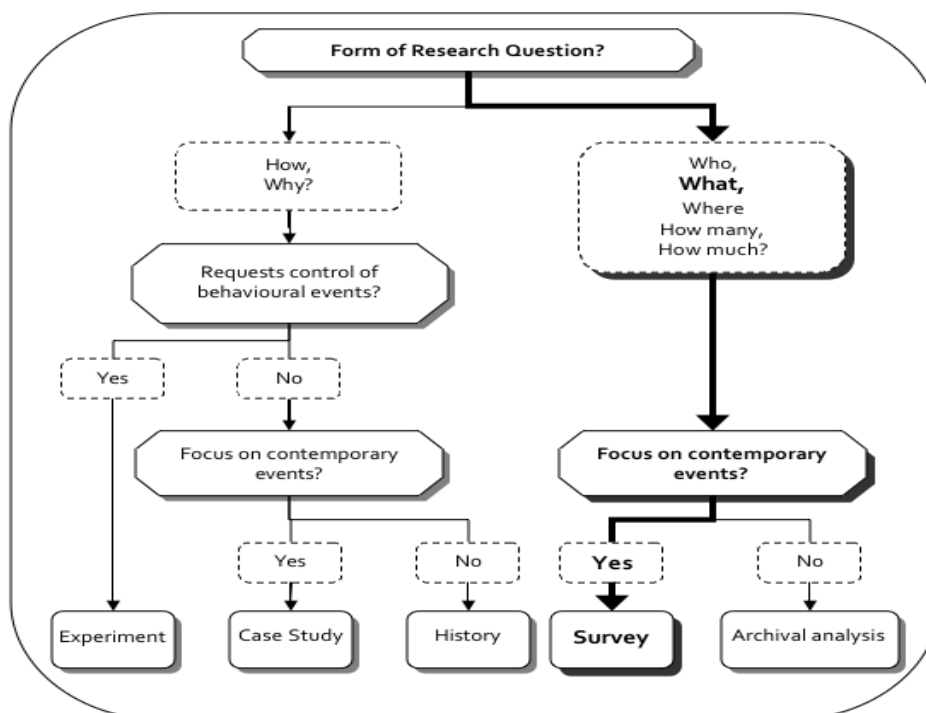
Also called the *empirical research method*, this approach is purported to give the most reliable proof of causation. Individuals are allocated at random to two or more groups. One group is subjected to an intervention, or experiment, while a control group is not. The outcome is obtained by comparing the results of the two groups (Degu & Yigzaw, 2006). This strategy is data-based, leading to conclusions backed up by

observation or experiment. This kind of research is suitable when proof is needed that particular variables are affected in some way by other variables.

7.2.3.2 Survey

The survey method is usually connected with the deductive approach. It is quantitative in nature and often used where large volumes of data are involved.

Fig (7.3): Research Strategies



Source: Yin, 2003, (cited in Piboonrungrroj, 2009)

This tool allows the researcher to obtain data about phenomena, practices, situations or views at a specific time by means of questionnaires or interviews. The underlying purpose of the survey is to make valid generalisations from a limited sample to a general population. Surveys further allow the researcher to consider more variables simultaneously than would be possible under laboratory circumstances and, at the same time, to collect data about real-world environments. Through the processes of social construction and co-variation (Byrne, 2002) it is then possible to draw inferences and

postulate causation. A weakness of this approach is that, though inherently quantitative in nature, it inevitably involves intuition and subjectivity. Bias may arise for several reasons; for example, preconceived ideas on the part of the researcher, choice of respondents, the point in time when a survey is conducted, and errors in research design.

7.2.3.3 Archival Research:

Historical documents are the main tool used for archival research (Jenkins, 1985). Researchers in the social sciences, almost universally, make an analysis of existing data in their research programs (Cherlin, 1991). Furthermore, researchers begin with an extensive review of the extant literature (Table 7.1).

Table (7.1): Summary of the advantages and disadvantages of using archival data (Shultz et al., 2001: p. 35).

Advantages	Disadvantages
<ul style="list-style-type: none"> • Resource savings • Circumvents data collection problems • A variety of research designs possible • Usually SPSS or SAS ready • Relative ease of data transfer and storage • Use as pilot data/exploratory study • Typically much larger, and often national samples, as a result, can perform newer and more powerful statistics • Availability of longitudinal data • Availability of international/ cross-cultural data • Organizations may be more open to using existing data versus collecting new data 	<ul style="list-style-type: none"> • Appropriateness of data • Completeness of documentation • Detecting errors/sources often difficult if not impossible • Overall quality of data • Stagnation of theory • Unique statistical skills required • Illusion of quick and easy research • Convincing editors or thesis/dissertation advisors you are not simply duplicating existing research • Failure of students to develop skills required in planning and conducting data collection

Source: Shultz et al. (2001)

7.2.3.4 The Case Study

Such a study examines how a particular phenomenon can exist within a real-world context. It therefore takes a unique example and examines it in detail in the hope of making a wider generalisation (CAPAM, 2010)⁵. This is considered to be a generally

⁵ Commonwealth Association for Public Administration and Management

acceptable method to understand specific (social) phenomena and involves such techniques as interviews and direct observation (ibid.) – hence the enormous popularity of ‘reality’ television TV in recent years. Some regard this approach as too anecdotal to yield any scientifically respectable results. Others (Dul & Hak, 2008) define it as the most frequently used measurement technique for social phenomena. Yin (2003, P. 13) defined the case study as “an empirical inquiry that investigates a contemporary phenomenon within its real-life context”. Dul and Hak (2008: p. 4), on the other hand, give a more comprehensive meaning to the case study. They define it as “a study in which (a) one case (single case study) or a small number of cases (comparative case study) in their real life context are selected, and (b) scores obtained from these cases are analyzed in a quantitative manner”. Note here the emphasis on quantification rather than qualification. Therefore writers on research methods have put emphasis on different features of case studies. For example Robert Stake (1998, p. 237) emphasized the importance of the object of the study, stating that, “As a form of research, case study is defined by interest in individual cases, not by the methods of inquiry used”. Others like Yin (1994) stress the approach itself and the techniques which form a case study.

7.2.3.5 Action research

Action research and its origins and how it is perceived and administrated are open to controversy. According to Elden and Chisholm (1993) action research “has been a unique form of inquiry since the middle of the last century”. It is based on the principle that research should be mutually beneficial, being of practical value to the people contributing to the research while allowing the researcher to deepen his/her theoretical understanding. It has been described as a broad term that includes many methods of action-oriented research, leading to both action and research consequences (Coughlan & Coughlan, 2002). Bukvova (2009) suggests that action research is not perceived as a different method, but

as a different perspective on the research process, and Bryman and Bell (2011) assert that qualitative researchers emphasize the relationship between the researcher and individuals who are the main subject of study. Several qualitative methods have been advanced, enabling research subjects to be a critical element in manipulating research and influencing the outcome (ibid). Therefore, in action research investigators intentionally influence the environment that they are studying (Bukvova, 2009). Furthermore, rather than separating themselves from the subjects of their study, researchers try to interact and collaborate with them.

Many authors have sought to define action research and the following definition provided by Rapoport (1970: p.499) has been used widely: “Action research aims to contribute both to the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable ethical framework”. This definition highlights the collaborative aspect of action research. Furthermore, it has a dual purpose of contributing to practice and research at the same time (Livari, 2009). According to this definition, while attempting to address the client’s concerns, action research is highly context-dependent. The only concern with this definition is that people are of different cultures and thus may not have the same values and goals, which may lead to conflicts if such a method is employed (Avison et al., 2007).

Action research plays an important role in bridging the gap between researchers and practitioners (Bryman & Bell, 2011). It is seen, therefore, as being particularly relevant when researching change and learning within organizations (ibid). This means that the research and its outcomes are directly associated with the specific problem and environmental settings. Furthermore, the research process is cyclic in nature, with actions and evaluations repeating until a satisfactory result is reached (Bukvova, 2009).

According to Susman and Evered (1978), action research is a cyclical process with five phases see Table (7.2).

Table (7.2): Action research cyclical process

No	Phases	Definition
1	Diagnosing	Identifying and defining the problem
2	Action-planning	Researcher can consider alternative actions that could solve the problem.
3	Action-taking	Researcher can select and perform one of the alternatives
4	Evaluating	The consequences of this action are studied and evaluated
5	Specifying learning	The implications and findings of the research process are specified

7.2.3.6 Grounded theory

Strauss and Corbin (1998: p 12) have provided the following definition of grounded theory: “a theory that is derived from data, systematically gathered and analysed through the research process”. Therefore, the researcher starts collecting his/her data without the formation of a primary theoretical framework and then - after a series of observations - develops a suitable theory. In this method, there is a strong relationship between the process of data collection, analysis, and formulation of a theory. Thus, there are two essential characteristics to this approach; the first is the advancement of theory out of collected data, and the second is the iterative interaction between data collection, which means that the two stages of data collection and analysis are conducted in tandem (Bryman & Bell, 2011; Kelly, 2008).

Some researchers (e.g. Cassell & Johnson, 2006) refer to grounded theory as an example of the inductive approach, given that the technique uses a logical set of inductive techniques to create a theory about a phenomenon. According to Wilson et al. (2012), a grounded theory is inductively derived from the process of study. Therefore a grounded-theory study does not start with a theory but ends with one. Consequently, in grounded theory, induction precedes deduction (Mangan, 2004). Moreover, the new theory is one that did not exist before and is very specific to the context of the study; it emerges from

that particular study as a result of the researcher's immersion in, and manipulation of, the data (Locke et al., 2010)

Grounded theory (Partington, 2002, p. 136) is fundamentally a qualitative research design where the inquirer generates a general explanation (a theory) of a process, action, or interaction shaped by the views of a large number of participants (Corbin & Strauss, 2008). Hence some degree of scientific respectability can be claimed for qualitative research.

7.2.3.7 Ethnography

Ethnography has been described as an approach which stems from anthropology and makes use of socially-acquired and shared knowledge to arrive at an understanding of observed patterns of human activity (Hussey & Hussey, 1997, p. 67). It is a style of research that adopts a variety of methods for collecting the data.

Brewer (2000: p. 10) defined ethnography as “the study of people in naturally occurring settings or ‘fields’ by means of methods which capture their social meanings and ordinary activities, involving the researcher participating directly in the setting, if not also the activities, in order to collect data in a systematic manner but without meaning being imposed on them externally”. By using this approach, observation of participants is the main method of collecting data. According to Brewer (2000), ethnography uses techniques such as in-depth interviews, discourse analysis, personal documents and vignettes, and participant observation. Moreover, visual methods such as video, photography, film, and the internet have been added more recently (ibid).

Some researchers (Hammersley & Atkinson, 2007: p.1) say that ethnography overlaps with other approaches in the social sciences, but Hussey and Hussey (1997, p. 68) find fault with this technique because they consider that the validity of arguing from

the specific to the general is in question. Ethnography places emphasis on description, and descriptions cannot be theories (Thomas & James, 2006). According to Hammersley (1992: p.12-13), “Descriptions are about particulars ... whereas theories are about universals”.

7.2.4 Research Choices

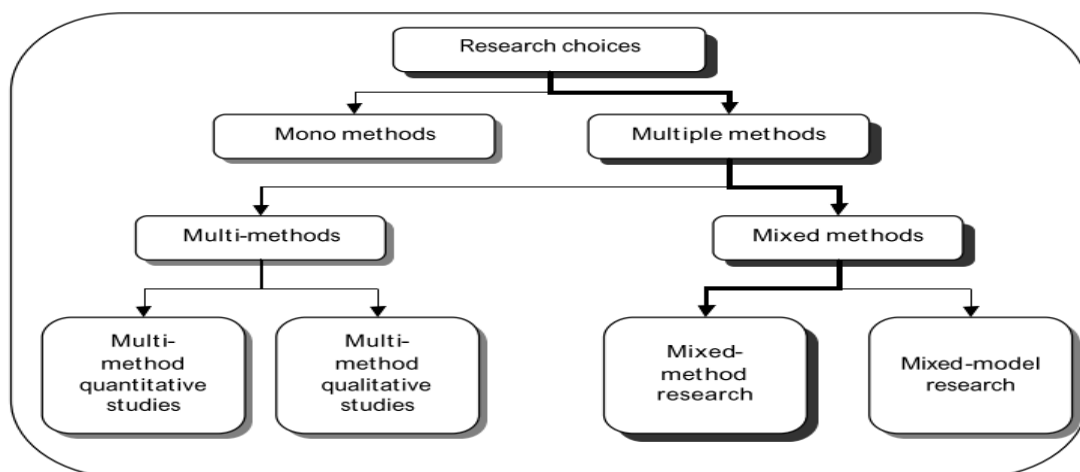
The fourth layer of the ‘research onion’ model entails research choices (Fig. 7.4):

1. Mono Method
2. Multi Method
3. Mixed Method

7.2.4.1 Mono Method

A mono-method approach utilises either quantitative or qualitative methods. This would mean that it uses a single data-collection technique and corresponding analysis.

Fig (7.4) Choices of research methods



Source: Saunders et al. (2007).

7.2.4.2 Multi Method

Multi-method research (multiple qualitative or quantitative techniques) uses more than one approach (Azorín et al., 2010). Research studies are not bound to blend

qualitative and quantitative methods but can also combine multiple quantitative methods or multiple qualitative methods.

The rationale for multi-method research is that most investigators use a single method which may lead to incorrect inferences and conclusions resulting from errors of measurement (Bryman, 2009). Moreover, adopting a variety of approaches of data collection and analysis will ensure higher levels of validity and reliability (Greener, 2008).

7.2.4.3 Mixed Method

The combined use of the two approaches in the same study, known as a ‘mixed-methods’ approach, has become a dominant and acceptable methodology in recent decades (Azorín & Cameron, 2010). Many researchers (De Lisle, 2011; O’Cathain, 2009; Creswell & Plano Clark, 2007) have emphasised the benefits of using both quantitative and qualitative techniques. The main reason for using a mixed method approach, according to Creswell & Plano Clark (2007), is that the integration of the two approaches in the same study may provide a comprehensive and better understanding of research problems than the two approaches conducted separately. Moreover, mixed-methods research is not intended to replace quantitative and qualitative approaches but to take the best and leave the worst of these two approaches, whether one is conducting a single study or considering a range of studies (Johnson & Onwuegbuzie, 2004).

7.2.5 Research Time Horizons

According to the research onion there are two types of time horizon: cross-sectional and longitudinal. The cross-sectional view is a snapshot of things at one particular time. The longitudinal view is a ‘diary’ view, looking at people or events over a period of time

(Saunders et al., 2009, p.156). In this research the time horizon was cross-sectional one because of the restricted time limit of three months.

7.2.6 Summary

The research 'onion' is a model which provides the researcher with methodical guidelines that enable the researcher to undertake a study in a structured, sequential manner. There is no overlap and no redundancy. It is a complete format, capable of undertaking research in an organised way. Every layer is arranged and meaningful, allowing little scope for deviation or mistakes.

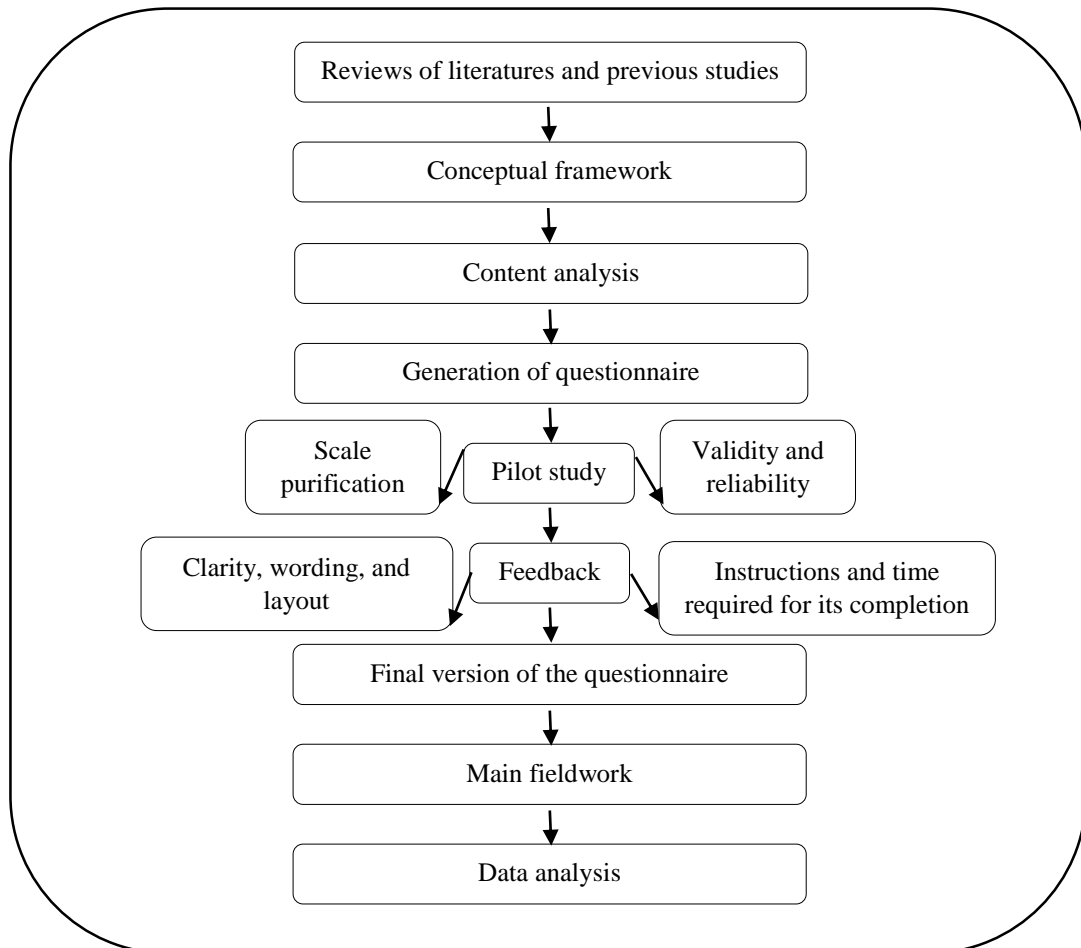
7.7 Method of data collection

Collection of data can be achieved in several ways, though the most common entail observations or surveys. With observational studies the researcher inspects the activities of a subject, or the nature of some material, without attempting to obtain a response from anyone. In surveys the researcher questions the subjects and collects their responses by personal or impersonal means.

The present study employed a single method of quantitative-data collection: that is, a survey by means of a questionnaire. The questionnaire was completed by respondents in several ways; some were self-administered, some sent and returned by mail, some were answered online. Although there are some concerns over the use of surveys (for instance, low response rates, and no control over the responses provided (Robson, 2002)), questionnaires offer a range of advantages for the researcher. Foremost amongst these is the relative ease with which to retrieve information in a standardised fashion from a large population in a short time (Robson, 2002). In addition, a questionnaire survey helps safeguard the anonymity of participants. Moreover, according to Saunders et al. (2007), the questionnaire survey enables researchers to examine and explain relationships

between constructs, in particular cause-and-effect relationships. The process of data-generation in this study is shown in Figure (7.5), which illustrates the two major stages: generation of the questionnaire, and translation and pre-testing of the questionnaire.

Figure 7.5 process of data-generation of the present study



Collecting the data for a survey can involve three methods: face-to-face interviews, telephone or fax surveys, and self-administered postal, email and/or web-based questionnaires (see Table 7.3 for advantages and disadvantages of these methods). In this study the researcher adopted three techniques (self-administered, postal, and web-based questionnaires). These methods are examined in the following sub-sections.

Table (7.3): Advantages and disadvantages of data-collection methods (Sekaran, 2003)

Type of questionnaire	Advantages	Disadvantages
Personal or face-to-face interviews	<ul style="list-style-type: none"> • Can establish rapport and motivate respondents. • Can clarify the questions, remove doubts, and add new questions. • Can read non-verbal cues. • Can use visual aids to clarify points. • Rich data can be obtained. • CAPI can be used and responses entered in a portable computer. 	<ul style="list-style-type: none"> • Takes personal time. • Costs more when a wide geographic region is covered. • Respondents may be concerned about confidentiality and anonymity. • Interviewers need to be trained. • Can introduce interview biases. • Respondents can terminate the interview at any time.
Telephone interviews	<ul style="list-style-type: none"> • Less costly and speedier than personal interviews. Can reach a wide geographic area. Greater anonymity than personal interviews. • Can be done using Computer-Assisted Telephone Interviewing (CATI) 	<ul style="list-style-type: none"> • Nonverbal cues cannot be noticed • Interviews will have to be short. • Obsolete telephone numbers could be contacted, and unlisted ones omitted from the sample
Personally-administered questionnaires	<ul style="list-style-type: none"> • Can establish rapport and motivate respondent. • Doubts can be removed. • Less expensive when administered to groups of respondents. • Almost 100% response rate ensured. • Anonymity of respondents is high. 	<ul style="list-style-type: none"> • Organisations may be reluctant to give a researcher time for the survey or give employees time to complete the questionnaire in.
Mail questionnaires	<ul style="list-style-type: none"> • Anonymity is high. • Wide geographic regions can be reached. • Token gifts can be enclosed to seek compliance. • Respondents can take more time to respond at convenience. • Can be administered electronically, if desired. 	<ul style="list-style-type: none"> • Response rate is almost always low. • A 30 percent rate is quite acceptable. • Cannot clarify questions. • Follow-up procedures for non-responses are necessary.
Electronic questionnaires	<ul style="list-style-type: none"> • Easy to administer. • Can reach globally • Inexpensive. • Fast delivery • Respondents can answer at their convenience. 	<ul style="list-style-type: none"> • Computer literacy is necessary • Respondents must have access to the internet. • Respondents must be willing to complete the survey.

7.7.1 Self-completion questionnaire or postal questionnaire

The questionnaire is a popular method of data-collection in the social sciences. It can be defined as a survey in which participants answer the questions without intervention by the researcher. It is also known as a self-administered questionnaire (Bryman & Bell, 2011). The most common forms of self-completion questionnaire are mail or postal. As its name implies, the questionnaire is sent through the post to predetermined participants.

The researcher asks participants to return the questionnaire by post, or deposit it at a certain location within their organisation, such as a box in the supervisor's office. Because of the distance between the researcher and the participants in such a survey, the researcher is unable to communicate or assist when participants are completing them, which can in turn lead to unresolved misunderstandings. With postal questionnaires, participants are not able to request clarification on confusing questions or terms. It is therefore important that the questionnaire is designed in such a way as to provide participants with a clear understanding of each question.

Bryman and Bell (2011), Wisker (2008), Polit and Tatano Beck (2006), Parahoo (2006), Oppenheim (1992, 2001) and others view postal questionnaires as a frequently-used method in a variety of research, highlighting several advantages and disadvantages of the method. These are listed in Table (7.4).

Table (7.4): advantages and disadvantages of postal questionnaire

Instrument	Advantages	Disadvantages
Self-completion questionnaire or postal questionnaire	<ul style="list-style-type: none"> • Cheaper to administrator (in comparison to interview) • Quick to administer (also in comparison to interview) • Absence of interviewer leads to the avoidance of interviewer bias • Can provide anonymity for respondents • Can gather large amounts of data from a widely dispersed population (such as KSA) • Respondents can complete the questionnaire in their own time, which may lead to more considered responses • Results can be presented in different formats • The sample can be statistically accurate 	<ul style="list-style-type: none"> • Poor response rates • Cannot assist • Involves a lot of administrative work (before being sent) • No opportunity to correct misunderstanding, to explain or probe • Do not know who has answered and no control over the order in which questions are answered • Poor design can produce misleading results • Questionnaires need to be kept short or they inhibit respondents from completing them • Not suitable for people with poor literacy skills or visually disabled people

Based on the advantages and disadvantages cited in Table 7.3, the questionnaire is considered an efficient data-collection method, and particularly suitable for this study

where the researcher knew what was required and how to measure the variables of interest (Sekaran, 2007). There is, however, an initial need to overcome some disadvantages that have been mentioned in Table (7.3). To cater for the problems involved in the absence of direct contact with respondents (which can result in misinterpretations), the researcher:

- 1) simplified the questions to ensure that they were unambiguous and fully understandable,
- 2) translated the questionnaire into Arabic,
- 3) proofread the questionnaire,
- 4) pre-tested by requesting some employees (from different backgrounds, different levels of education, and holding different positions in their organisations) to complete the questionnaire and by checking whether they all understood the meanings of the questions, and
- 5) conducted a pilot study.

These five steps ensured that the questionnaire was comprehensible by all participants.

To preclude a poor response rate (which is the main drawback to this type of questionnaire) the researcher endeavoured to make the survey user-friendly by providing a covering letter which described the researcher, outlined the objectives and importance of the study, and explained how to complete the questionnaire. The letter also explained how anonymity and confidentiality would be secured (Oppenheim, 1992). The researcher gave attention to the appearance and length of the questionnaire so that it would not appear too daunting. To this end, the questionnaire was produced in a very attractive format and the questions were minimised (after the pilot study) in number. Furthermore, to preclude the possibility of a poor response rate, the researcher supported the self-completion questionnaire with web and email questionnaires, as discussed in the next section.

7.7.2 Internet-based survey (email and web survey)

Over the past decade, the advancements in digital connectivity and the significant improvements in information and communication technology (and some disadvantages

of the postal questionnaire system) have motivated researchers to use email and web-based questionnaire methods.

In the late of 1980s and early 1990s the email survey technique was introduced (Evans & Mathur, 2005; Fricker & Schonlau, 2002) as an instantaneous method of communicating with participants, thereby avoiding postal costs and delays. This new method soon surpassed the traditional paper survey in its delivery and response times (Parker, 1992; Zhang, 2000), and it has had the added bonus of being capable of reaching any part of the world almost instantaneously.

Web-based surveys became widely available in the 1990s and quickly supplanted email surveying. As web surveying evolved, participants were provided with hyperlinks to websites containing the questionnaire (Fricker & Schonlau, 2002). Many researchers realised that the web-based survey was very easy to design and implement, offering an enhanced interface with the participant. Furthermore, many technological features could be exploited in web surveys; for example, multimedia and interactive surveys containing audio and video (Fricker & Schonlau, 2002). As noted by several researchers (Evans & Mathur, 2005; Jackson, 2003), web surveys accounted for approximately 50 percent of all marketing research revenues and would eventually account for one-third of all surveys conducted in the USA. Moreover, Martins (2010) went on to predict that the majority of all survey research would be done online.

Grossnickle and Raskin (2001, cited by Evans & Mathur, 2005) stated that:

“While initial forays were fraught with technical difficulties and methodological hurdles, recent developments have begun to expose the medium’s immense potential. The earliest online tools offered little more than the ability to deploy paper-based questionnaires to Internet users. Today, tools and services are available with a wide range of feature sets at a wide range of price points. One or more of them are almost certain to meet the needs of any marketing research professional.” (p.9)

Many researchers have emphasised the considerable benefits of using internet-based surveys (web-based or email surveys), particularly with the increasingly widespread usage of the internet and smartphone devices. Tables (7.5) and (7.6) summarise the advantages and disadvantages of internet-based surveys (Monroe & Adams, 2012; Bennett et al., 2011; Evans & Mathur, 2005; Scholl et al., 2002; Hogg, 2003; Andrews et al., 2003; Fricker & Schonlau, 2002; Boyer et al., 2001).

Table (7.5): The advantages of internet-based surveys

Advantages	Comments
Global reach	Can reach any part of the world in a very short time
Design Flexibility	Can be designed in many different formats (e-mail or e-mail with a link to a survey)
Convenience	Can be completed at any time convenient for participants
Speed and timeliness	Reaches to the field of the study in a very short time.
Ease of data entry	Data collected by web surveys are available online immediately after a survey is completed
Accuracy of data entry	Reduces human error and allows better data quality as it can be exported straight from the database to SPSS, for example.
Low cost	Low cost for preparation and zero cost for administration
Ease of follow-up	Follow-up reminders via instant emails
Large sample easy to obtain	Allows access to high numbers of potential participants
Control questions	The researcher is able to add, remove, and/or re-order questions even after distributing the survey
Required completion of answers	Researcher is able to construct the questionnaire so that the participant must answer a question before advancing to the next question
Built-in features	Researcher is able to include pictures, special formatting, audio or video links along with written text.

Table (7.6): The disadvantages of internet-based surveys

Disadvantages	Comments
<ul style="list-style-type: none"> • Technical issues 	Lack of familiarity by participants with internet protocols and other issues related to the link which could be broken down for technical reasons
<ul style="list-style-type: none"> • Difficulty of finding participant's email address 	It may not be easy for the researcher to locate the participant's e-mail address
<ul style="list-style-type: none"> • Privacy and security issues 	Security of transmissions and how data will be used may raise concerns, and participants may be concerned about anonymity and confidentiality
<ul style="list-style-type: none"> • Low response rate 	There are disagreements among researchers with regard to the response rate (i.e. which is superior: internet-based surveys or other means such as postal surveys?) Most researchers agree that the response rate of postal surveys is greater.
<ul style="list-style-type: none"> • Perception as junk mail 	Many participants have difficulty distinguishing between an important message and spam.

As the present study employed a single method (using a quantitative technique) for data collection, and because there are benefits to utilizing both postal questionnaires and internet-based questionnaires, the researcher used both formats (self-administered questionnaire or mailed questionnaire), and web-based questionnaire (online questionnaire) for this study.

7.8 Research framework

According to the literature there are many factors that affect e-government implementation such as technology infrastructure, training programmes, business environments, social and cultural environments, legal environments, and governmental policies (Nordfors et al., 2006; Zhao's, 2006; Ofer, 2008; Gupta, 2009; World Bank, 2009; Gulev, 2009;). However, this research focused on leadership and organisational culture where some leadership styles would manipulate and affect organisational culture to produce a better level of e-Government (e-services). Figures 7.7 and 7.8 illustrate the possible relationships and influences. (See Chapter Six for more details).

Figure (7.6): The link between leadership style, organizational culture, national culture and e-services implementation

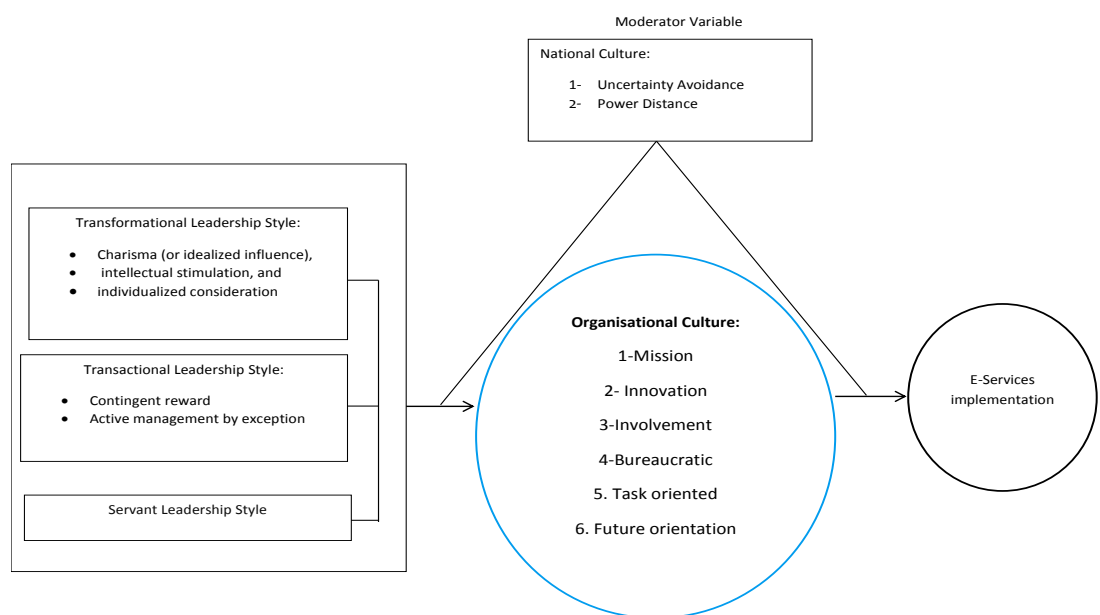
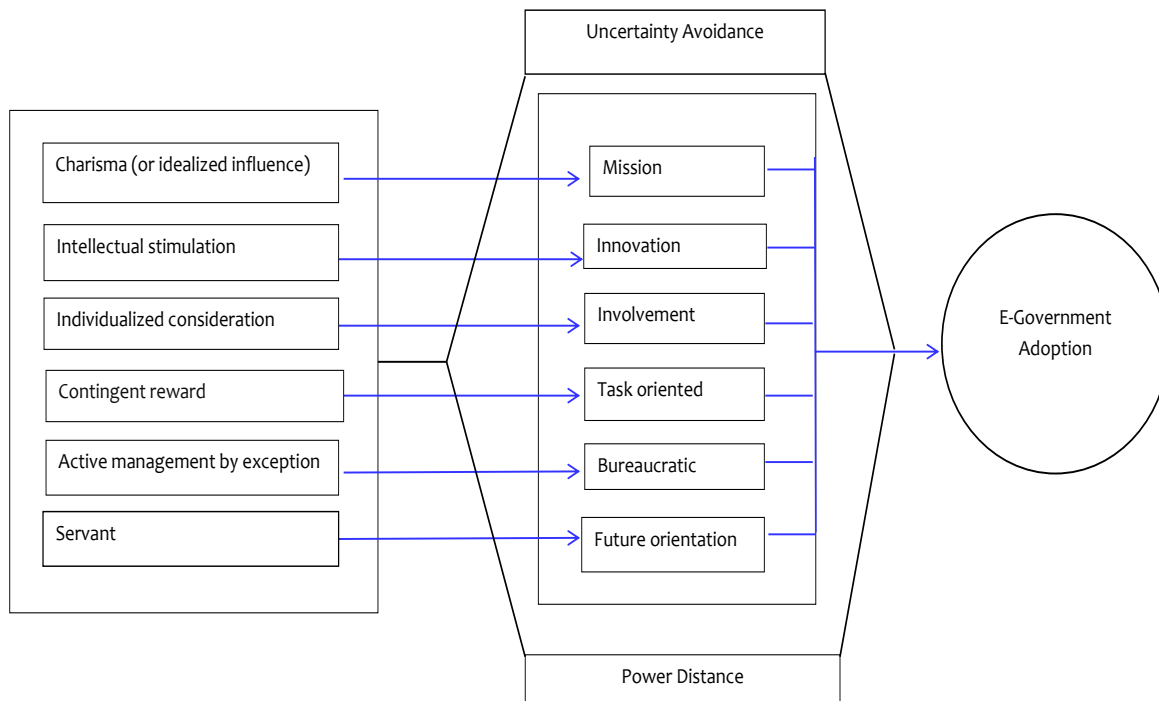


Figure (7.7): the link between leadership style, organizational culture, national culture and e-services implementation



7.9 Controlling of the variables

According to their ability to manipulate variables, researchers differentiate between experimental and ex-post facto design. With the former, the researcher tries to control and/or manipulate certain variables in order to study the effect of such controls or manipulations. In the latter, the researcher has no control over the variables in the sense of being able to manipulate them. In this case, the researcher reports what has happened or what is happening. The issue of controlling or manipulating the variables is very complicated, and is in fact not possible in any organisation. In this study, therefore, no attempt was made by the researcher to control or manipulate the study variables. Hence the study is classified as ‘ex-post facto research’.

7.10 The research environment

Studies can be classified as field studies or laboratory studies. Field studies occur under actual environmental conditions. Laboratory studies are usually conducted under simulated or artificial conditions. This study is therefore classified as a field study because it was conducted under actual environmental conditions.

7.11 Designing the questionnaire

The first draft of the questionnaire was further refined through a rigorous process of pre-testing and piloting. The first step was to trial the draft with PhD students, teachers, and senior officers from various countries, given that these comprised the research volunteers. They were briefed by telephone or email, and they provided many comments relating to the wording and order of the questions. All their comments were taken into account at this stage.

As a second step, the questionnaire was sent by email to five academic staff at different universities in order to check the extent to which the questions were clear, understandable, relevant to the KSA environment, and appropriate for the purposes of the research. It should be noted that two of the academics were in senior positions in their respective universities in KSA, and a number of the contacted professors taught data-collection methods and questionnaire design in their respective universities. Colleagues of the researcher provided further comments, particularly regarding the extent to which the questionnaire's language aligned with the language of the KSA. A professor specialising in questionnaire design and construction reviewed the final version prior to the pilot study. The questionnaire was then used for the pilot study.

7.12 Pilot study

Prior to using a survey questionnaire to collect data it should be piloted (Saunders et al., 2007) to check that respondents do not experience problems in understanding or completing it. Fink (2003), recommended that a minimum of ten people should be asked to answer the questions. The questionnaire was therefore sent to 35 randomly-selected participants within the five organisations that had been selected for this study. They were addressed directly to participants via email (20 people), or handed directly (15 questionnaires); the latter were asked to complete it and to comment on any questions that they could not understand. For a pilot study to be successful it must be treated as one would treat a final survey so that any problems can be identified and addressed in advance. To meet this requirement a special letter was prepared for the respondents (see Appendix A).

The pre-test and pilot survey offered an opportunity to focus on the issues of clarity, wording, validity, layout, instructions, and the time required for its completion. It requested comments from the respondents on any aspect of the survey, including ideas for improvement. In particular, they were asked to critically appraise the questions, and add questions that they thought would be useful for the survey. The pilot survey also provided the opportunity to test the data-coding scheme, and to gain experience with SPSS version 20 in small-scale data analysis using real data. The data were used to simulate the hypotheses tests to ensure all the necessary data were collected by the survey.

7.12.1 The results of the pilot study and final modifications to the questionnaire

During the pilot stage, five of the 15 questionnaires distributed personally were returned complete (33 percent) and 11 out of 20 questionnaires distributed (via email) were completed (55 percent). However, three questionnaires (one paper and two electronic) were excluded due to suspicions that the participants completed them without

due attention. The excluded participants had selected ‘strongly agree’ or ‘strongly disagree’ for nearly all questions, regardless of the fact that some of the questions had been reversed.

The questionnaires were distributed simultaneously (in person and electronically) on 12th of March 2013 and participants were issued reminders (once) via email or telephone. All electronic forms had been completed by the 19th of March, and the last of the paper surveys had returned by the 25th of March. The response rate was 44 percent, which was acceptable, and it was therefore decided that no additional reminders would be sent to non-respondents and no further questionnaires were needed. Although the feedback from respondents suggested that the questionnaire required refinement, it was evident that the respondents found the questionnaire understandable and easy to complete.

Many modifications were made to the questions as a result of the pre-test and pilot tests. The number of questions was reduced (though the important core questions were retained) and most modifications related to the layout, instructions, and clarity of the content; such modifications were all designed to make the survey more user-friendly.

7.12.2 Content of the final version of the questionnaire

The final version (see Appendix A) was designed to capture information on three variables: the leadership (independent variable), organisational culture (mediator variable), and national culture (moderator variable). Accordingly, the questionnaire was divided into three parts, the first of which related to the leadership dimensions (33 items) and covered three leadership dimensions (transformational, transactional, and servant styles).

The transformational leadership scale was composed of three subscales (idealised influence, individual support, and intellectual stimulation). Transactional leadership was

represented by two subscales (contingent reward, and management-by-exception (active)). A single dimension was used to delineate distinct servant-leadership behaviour.

The second part of the questionnaire related to organisational dimensions (the mediator variable). It covered six dimensions: involvement, mission, innovation, task orientation, bureaucracy, and future orientation (60 items). National culture was measured in the final part of the questionnaire; this consisted of two dimensions: uncertainty avoidance, and power distance (eight items).

7.13 The validity and reliability of the questionnaire

Whatever procedure for collecting data is selected, it should always be examined critically to assess its validity and reliability. A researcher has to ensure that the measures he/she has decided to use are well-suited to the subject and to the research questions. Validity refers to whether or not a test measures what it claims to measure, whereas reliability refers to the degree to which measurements can be replicated. The concern here is with the stability of measures and the accuracy of measurements. Validity and reliability are discussed in more detail in the following sub-sections.

7.13.1 Validity

Validity is the most important criterion for research (Bryman & Bell, 2011). Validity is concerned with the integrity of the conclusions that a researcher has drawn from the research. It is used to test how well an instrument that has been developed is able to measure the particular concept it is supposed to measure. This means that if the methods, approaches, and techniques fit with and measure the phenomenon that has been researched then the findings are likely to be valid (Wisker, 2008).

A number of types of validity (or evidence of validity), and different ways of measuring validity have been developed. Adcock and Collier (2001, cited by Dul & Hak,

2008), found that 37 different adjectives of conceptualization and measurement have been attached to this concept of validity – ‘face’, ‘concurrent’, ‘predictive’, ‘convergent’ and ‘construct’, to name but a few. These adjectives, however, do not indicate different types of validity but rather different types of evidence for validity (Dul & Hak, 2008), as explained in the following paragraphs.

- **Face validity**

A researcher who develops a new measure should establish ‘face validity’. This means that a non-researcher or layperson, or possibly even those with experience, can broadly see that this is a valid method of researching this question and that it makes sense as a method. In other words, the measure should reflect the content of the concept in question (Bryman & Bell, 2011).

- **Concurrent validity**

Concurrent validity concentrates on the extent to which scores on a new measure are related to scores from a criterion measure administered at the same time (Salkind, 2010). The researcher employs a criterion on which cases (people, for example) are known to differ and that is relevant to the concept in question (Bryman & Bell, 2011).

- **Predictive validity**

This approach is similar to concurrent validity, but the researcher uses a future criterion measure (Bryman & Bell, 2011) rather than a contemporary one, as in the concurrent validity. Predictive validity therefore, allows the measurement specialist to judge how well a test predicts future performance.

- **Construct validity**

This refers to the degree of confidence we have that the phenomenon of interest has been appropriately measured or studied (Masood, 2006). It is an overarching term to encompass all forms of validity (Drew & Rosenthal, 2003). As noted by Drost (2011), construct validity refers to how well the researcher transformed or translated a concept, idea, or behaviour (which is a construct) into a functioning and operating reality (Trochim, 2006). This means that the researcher is encouraged to deduce hypotheses from the theory that is relevant to the concept (Bryman & Bell, 2011).

- **Convergent and discriminant validity**

Convergent and discriminant validity are both considered sub-categories of construct validity. Campbell and Fiske (1951, cited in Drost, 2011), reported that construct validity can be assessed by examining its convergent and discriminant validity. Convergent validity refers to empirical evidence that shows communality between a given test score and other indicators of the same construct. In other words, convergent validity is the extent to which a scale correlates positively with other measures of the same construct. A researcher therefore needs to establish convergent validity if he/she is to confirm that measures that should be related are, in reality, related (Trochim, 2006). Discriminant validity, the other component of construct validity assessment, refers to a scenario in which the empirical evidence shows a lack of communality with the test score and carries indicators of a distinct construct. In other words, discriminant validity is the extent to which a scale does not correlate with other conceptually-distinct constructs. A researcher, here, therefore needs to show that measures that should not be related are in reality not related (Trochim, 2006).

It should be noted that in this study the following steps were taken to ensure questionnaire validity:

1. The objectives of the study were stated and defined very carefully (see Chapter Six);
2. The questionnaire was pre-tested and reviewed by volunteers and by members of staff, and a pilot study was undertaken;
3. Many questions were used from previous studies that had been used in different cultures, different environments, and at different times, a measure that contributed to construct validity.

7.13.2 Reliability

'Reliability' is defined as the extent to which data collection technique(s) (e.g. a questionnaire, test, observation) produces the same results on repeated trials. The term is commonly used to answer the question: if the same thing is measured several times, how close are the measurements to each other? That is, reliability concerns a researcher's confidence that the research and its findings are repeatable. Bryman and Bell (2011) asserted that three prominent factors should be considered when checking the reliability of a measure. These are:

- 1. Stability** (Test-retest reliability): this concerns whether or not a measure is stable over time. Stability in a measurement prevents the results that relate to a sample of respondents from fluctuating over time. Moreover, a high degree of stability indicates a high degree of reliability (Golafshani, 2003).
- 2. Internal reliability**: this concerns the extent to which items on the test or instrument are measuring the same thing. It measures consistency within the instrument (e.g. questionnaires) and how well a set of items measure a particular behaviour or characteristic within the test (Drost, 2011).

3. Inter-rater (or inter-observer) consistency

When human judgement or rating are used to measure a behaviour, then the results that the researcher gets should be questioned in terms of whether they are reliable and consistent or not. Inter-rater (or inter-observer) reliability is used to assess the degree to which different raters or observers make consistent estimates of the same phenomenon (Moulton, 2012).

It was not possible to send the same questionnaire to the same respondents to complete at two different times. Although it was known that respondents would be unlikely to agree to complete the questionnaire twice, three respondents nevertheless agreed to receive a second copy of the questionnaire. The second copy was sent to them two months after the first, given that this period was considered long enough to reduce bias. The replies were virtually identical, thus suggesting that the responses were likely to be highly stable over time. For further confirmation, a number of the respondents were asked to clarify their responses by e-mailing them and asking them to provide further responses to several of the questions they had already answered. There were no significant differences in their answers, thus indicating that the questionnaire was likely to meet the test-retest reliability requirements.

7.14 Measurements and Measures

In this study, there were three variables that needed to be examined and measured.

These were:

- Leadership styles
- Organisational culture, and
- E-Government implementation.

According to Sekaran (1992 p.150), objects that can be physically measured by calibrated instruments (such as measuring the physiological phenomena pertaining to humans) will not create problems. However, when it comes to measuring subjective phenomena - feelings, attitudes and perceptions - the problem of measuring becomes apparent. Sekaran (1992, p. 150) said that “there are at least two types of these variables: one lends itself to some objective and precise measurement, the other is more nebulous and does not lend itself to precise measurement because of its subjective nature”. This study, however, contained the requirement to be both subjective (Organisational Culture and Leadership Style) as well as objective and precise (e-Government implementation).

- **Leadership Style**

Leadership effectiveness has been a critical issue for many researchers and writers since the birth of leadership theories. Therefore, a large numbers of measurement models have been developed to examine effective leadership.

There are many ways to examine and measure leadership effectiveness. Leaders can be evaluated according to their organisational performance (such as outcomes and productivity) or evaluated through surveys of subordinates who are asked to assess their leader’s behaviour. The most common leadership instruments are discussed below.

- **Transformational and transactional leadership style**

Over the last two decades many measures have been used to delve onto transformational and transactional leadership. In the next section the most common leadership measurement instruments are discussed.

- **The Transformational Leadership Behaviour Inventory (TLI)**

The Transformational Leadership Behaviour Inventory (TLI) was developed by Podsakoff et al. (1990). The model assesses transformational and transactional leadership

components and it evolved from earlier research by Avolio and Bass (1988), Bass (1985), Bradford and Cohen (1984), Conger and Kanungo (1987), and House (1977). While the transactional leadership sub-scale is a contingent reward, the transformational consists of six transformational factors; a 'core' transformational-behaviour construct which comprises three sub-factors: (1) articulating a vision; (2) providing an appropriate model; and (3) fostering the acceptance of group goals, (4) high performance expectations; (5) providing individualised support; and (6) intellectual stimulation (Podsakoff et al., 1990, p. 112). Bass and Riggio (2006) asserted that the TLI is the most widely used leadership instrument.

Many researchers have claimed that TLI's psychometric properties are acceptable for research purposes (Odegaard, 2008; Sylvester, 2009; Riaz & Haider, 2010) and TLI has confirmed factorial, discriminant, and predictive validity (Schriesheim et al., 2006; Podsakoff et al. 1996). Furthermore, it is behaviourally oriented, well validated, and has been used in various cultures and various forms in research (Podsakoff et al., 1990; Farh & Cheng, 1999; Bass & Riggio, 2006). However, TLI has been criticised because the correlations among the first three dimensions that assessed transformational components were very large (Podsakoff et al., 1990).

- **The Leadership Assessment Inventory (LAI)**

The Leadership Assessment Instrument (LAI) was developed to evaluate and quantify leaders' personal characteristics, as defined by the High Impact Leadership Model (Linkage, 2003). This instrument was intended to provide multi-rater feedback on leaders' behaviour that could be perceived by both a leader and his/her subordinates (Turkel, 2008). It was developed from various leadership capabilities and competencies that were rated for their importance (Linkage Consulting Research Team, 1998, cited in Turkel, 2008). This instrument, however, measures the frequency that a leader displays

75 specific behaviours that represent ten competencies and five skills of the High Impact Leadership Model (Tukel, 2008). The LAI instrument was not specified to evaluate transformational or transactional leadership styles. According to Bass and Riggio (2006) this instrument is now difficult to obtain and rarely used in research. Therefore, it was excluded.

- **The Follower-Belief Questionnaire and the Attributes-of-Leader-Behaviour Questionnaire**

The Model of Charismatic/Transformational Leadership was developed by Behling and McFillen (1996) to evaluate transformational leadership and its positive contribution to followers' beliefs and behaviour. This model was based on six attributes of leader behaviour, and three beliefs held by the followers (Nandal & Krishnan, 2000). These attributes included displaying empathy, dramatizing missions, projecting self-assurance, enhancing leaders' images, assuring followers of their competency, and providing followers with opportunities to experience success (Lifeng & Kan, 2007, p.3). According to McCann et al. (2006) this model was partially supported by recent research which raised questions about specific attributes of leaders' behaviour applied in the model. However, this model is rarely used in research and it was not used in this study.

- **The Transformational Leadership Questionnaire (TLQ)**

The Transformational Leadership Questionnaire (TLQ) was developed by Alban-Metcalf and Alimo-Metcalf (2000) to measure the nature of transformational leadership. This model was established from views of different levels of management in local government in the UK. The TLQ scrutinises the following aspects: genuine concern for others, decisiveness, determination, self-confidence, integrity, trustworthiness, honesty, openness, empowerment, development of potential, inspirational networking,

promoter, accessibility, approachability, clarifies boundaries, involves others in decisions, encourages critical and strategic thinking (Bass & Riggio, 2006, p. 30).

Authors of the TLQ claimed that all leadership studies were inclusive of gender and ethnicity dimensions when introducing models of leadership. Moreover, they claimed that women had been found to be transformational leaders to a greater degree than men. Therefore they asserted (Metcalf and Alimo-Metcalf, 2000, p.281) that it was necessary to design a questionnaire which took into account both male and female aspects of leadership. Alban-Metcalf and Alimo-Metcalf (2000, 2001, 2007) found that the TLQ “possesses the criteria of reliability, construct, content and convergent validity” (Schalkwyk, 2011, p. 155). Although various studies have used the TLQ, there is still a need for further research to examine the predictive validity and generalizability of the instrument (Sylvester, 2009). In addition, since this form of questionnaire was constructed with the specific view of using it in public sector organisations (Bass & Riggio, 2006), it was not used in this study.

- **The Rafferty and Griffin (2004), transformational questionnaire**

The Transformational Questionnaire (TQ) was developed by Rafferty and Griffin (2004) to measure transformational leaders’ behaviours. They suggested a five-factor model of transformational leadership comprising: inspirational vision, communication, intellectual stimulation, supportive leadership, and personal recognition. Their instrument comprises 15 items, primarily derived from House (1998) and Podsakoff et al. (1990). A 5-point Likert scale was used for all items, where 1 represented ‘strongly disagree’ and 5 represented ‘strongly agree’.

Many studies have used TQ to assess the transformational leadership style in different contexts (e.g. industry and education) and many researchers have confirmed the questionnaire’s validity and reliability (Saravi, 2012; Shah, 2011). According to Rafferty

and Griffin (2004) the Cronbach's alpha for the sub-scales of the instrument ranges from .82 to .96. Although it is a reliable and a valid instrument, and derived from valid and reliable models, it has not been applied widely in research.

- **The Global Transformational Leadership (GTL) scale**

The Global Transformational Leadership scale (GTL) (Carless, Wearing, & Mann, 2000) was originally developed to measure transformational leadership behaviour. The GTL was designed to measure seven key leadership behaviours (communicates a vision, develops staff, provides support, empowers staff, is innovative, leads by example, and is charismatic) (p.390). Although it is a reliable and a valid instrument that is short and easy to administer (Overstreet, 2012) and bears strong evidence of internal consistency (Perlmutter, 2007), it does not allow specific analysis of transformational leadership behaviours and nor does it identify which components predict various outcomes (Wefald, 2008). Furthermore, according to some researchers (Sylvester, 2009; Schalkwyk, 2011) it has not been applied widely in research.

- **The Multifactor Leadership Questionnaire (MLQ)**

The most recognised instrument to measure Transformational Leadership Theory is the Multifactor Leadership Questionnaire (MLQ). The MLQ was developed in the mid-1980s to measure both transformational and transactional behaviour and to examine the nature of the relationships between these behaviours, organisational effectiveness, and employee satisfaction (Lowe et al., 1996).

The early form of the MLQ was used initially by Bass (1985) in the US Army by having military officers rate their superior officers. A considerable research base now exists for the MLQ, wherein associations between transformational, transactional, and laissez-faire leadership components and leader-effectiveness have been researched within

various settings (Lowe et al., 1996; Jabnoun & Juma Al Rasasi, 2005; Sylvester, 2009). It has been applied in over 75 research studies, and has been tested in a variety of organisational settings ranging from military environments to industrial and religious organisations (Connell, 2005). Furthermore, it has been used in mental health and other public-sector organisations, health-care settings, and service settings (Aarons, 2006, p. 1163).

There are several versions of the MLQ, some longer than others. For example, as noted by Bycio, Hackett, and Allen, (1995), Bass (1985) mentions a Form 2, Form 4, a modified Form 4, and an unnumbered 37-item MLQ. Hater and Bass, (1988) introduced Form 5, Waldman, Bass, and Yammarino (1990) introduced Form 11R, and Howell and Avolio (1993) prepared Form 10. The number of items and their specific content vary among these forms. However, all measure the extent to which leaders engage in transformational, transactional, or laissez-faire behaviours.

The content of the MLQ has improved over time and it has undergone a number of modifications and refinements since its first publication in 1985. Additional transformational and transactional behaviours have been added to the recent versions (Yukl & Gary, 1999). However, these modifications make it difficult to compare the historical results and to develop and accumulate knowledge (Tejeda et al., 2001). A more recent version is the Multifactor Leadership Questionnaire (MLQ) Form 5X (Bass & Avolio, 2000) which has been referred to as the most popular version of the instrument (Antonakis & House, 2002; Judge & Piccolo, 2004; Schriesheim, Wu, & Scandura, 2009).

Despite the fact that the MLQ has been the most broadly used survey to measure full-range leadership theory (Kirkbride, 2006; Avolio & Yammarino, 2002; Alimo-Metcalfe & Alban-Metcalfe, 2001) and “is the best validated instrument to measure transformational and transactional behaviours” (Ozaralli, 2003, p. 338), a number of

issues have been identified with regard to this instrument. The stability of the MLQ was one of most widely reported issues in different studies (Bycio et al., 1995; Carless, 1998a; Tepper & Percy, 1994). The construct dimensionality of the instrument has also been questioned (Bycio, et al., 1995; Tepper & Percy, 1994). Furthermore, other criticisms of the MLQ have focused on the validity of the test as a means of quantifying the various scales and dimensions within transformational leadership and also contingent reward as a sub-dimension of the transactional leadership style (Antonakis, Avolio & Sivasubramaniam, 2003).

Antonakis, Avolio and Sivasubramaniam (2003) examined the reliability of the MLQ and were concerned with the consistency of results gathered from different samples in different contexts, and the extent to which the context in which data were collected might impinge upon test results. In their study, they used similar business samples involving 2279 male and 1089 female raters who evaluated same-gender leaders. Their study showed “strong and consistent evidence that full-range leadership theory best represented the factor structure underlying the MLQ (Form 5X) instrument” (Antonakis, Avoliob & Sivasubramaniam, 2003, p.283). Accordingly, they claim that the MLQ (Form 5X) is indeed a suitable test to measure across all leadership models and to underpin related theories of leadership. Results did not vary according to gender, since the test produced valid results in male and female groups when the same characteristics were tested.

A number of meta-analyses conducted by Gasper (1992), Lowe et al. (1996), and Patterson (1995) have shown impressive correlations between MLQ transformational components and effectiveness, satisfaction, and increased effort on the part of followers (Alimo-Metcalfe & Alban-Metcalfe, 2001). Furthermore, other studies have suggested that the MLQ leads to a correct and objective evaluation of leaders along the different dimensions of leadership (Lievens et al. 1997) and the results have been repeatedly

validated by leadership experts (Jones & Rudd, 2007). Avolio et al. (1995, cited Antonakis, Avolio & Sivasubramaniam, 2003), claimed that the MLQ has a construct validity. They emphasised that MLQ (Form 5x) revealed high internal consistency and factor loadings. Bass and Avolio (1997) provided similar confirmation of its validity.

- **The Multifactor Leadership Questionnaire (MLQ) Form 5X**

The Multifactor Leadership Questionnaire (MLQ Form 5x) was designed by Bass and Avolio (1997). As has been mentioned above, this version was created based on the results of previous versions of the MLQ. Some leadership researchers, writers, and scholars have recommended various additions or deletions of items (Antonakis, Avolio & Sivasubramaniam, 2003). Therefore, this version captures 45 items describing nine distinct leadership behaviours. The transformational leadership scale is composed of five sub-scales (idealised influence as attributed, idealised influence as behaviour, inspirational motivation, individual consideration, and intellectual stimulation). Transactional leadership was presented by three sub-scales (contingent reward, management-by-exception-active, and management-by-exception-passive). Non-leadership was described by one subscale (laissez-faire).

In this study the researcher excluded laissez-faire behaviour and management-by-exception-passive from the research model. These behaviours represent non-leadership, many studies finding that laissez-faire has no effect on followers (Jones & Rudd, 2007), represent ineffective leadership behaviour (Judge & Piccolo, 2004), and produces “poor, ineffective leadership - highly dissatisfying for followers” (Avolio, 1999, p. 55).

In their study ‘An Assessment of College of Agriculture Academic Program Leaders (Deans) Leadership Styles’, Jones and Rudd (2007) found that the laissez-faire scale attained the lowest mean score of all the leadership styles. Work by Lowe et al. (1996), entitled ‘A Meta-Analytic Review of The MLQ Literature’, even excluded laissez-faire

leadership, and Judge and Piccolo (2004) regarded it as something wholly separate from transformational and transactional leadership, given that it avoided decision-making and positive action, both of which would be needed in an e-Government setting. In their study, 'A Meta-analysis of Transformational and Transactional Leadership Styles and Personality', Bono & Judge (2004) found that Avolio et al. (1999) had combined management-by-exception (passive) and laissez-faire into a single dimension; Jones and Rudd (2007) treated management-by-exception (passive) and laissez-faire leadership as sub-scales of non-leadership, and Judge and Piccolo (2004) asserted that management-by-exception (passive) was ineffective leadership behaviour.

Zagoršek et al. (2009) studied the impacts of transactional and transformational leadership on organizational learning; they claimed that management-by-exception (passive) relates more to laissez-faire leadership than to contingent reward leadership. In their study, Zagoršek et al (2009) found a negative correlation between MBE (p) and laissez-faire and leader effectiveness; (-.28) and (-.29) respectively. Lowe et al. (1996) and Dumdum et al. (2002) in their meta-analyses also provided evidence that MBE (p) has low reliability among other transformational and transactional scales.

These claims, and results from previous studies on transformational leadership theory, prove the pronounced weakness in these two sub-scales of leadership which produce non-leadership. In the e-Government environment, and particularly during the implementation phase, leadership plays an important role. This stage of e-Government needs a clear vision, long-term goals, coaching and mentoring, and innovative and creative leadership, which cannot be attained by exhibiting laissez-faire or MBE (p) leadership behaviour. Consequently, these two sub-dimensions of transactional behaviour⁶ were excluded from the research model because they could not contribute

⁶ Although several studies dealt with laissez-faire as a separate dimension, some studies dealt with it as a sub-dimension of transactional behaviour.

positively to the implementation of e-Government. Furthermore, to avoid overlapping between transformational behaviour and servant behaviour, the researcher excluded transformational leadership's sub-dimension 'inspirational motivation'.

According to Liden et al. (2008), servant leadership resembles inspirational motivation of transformational leadership, as servant leaders inspire enthusiasm and inspiration in followers (p. 163). Bass (2000) stated that servant leadership is "similar to the transformational component of inspiration" (p.33). Graham (1991) identified the inspirational dimension as a dimension that operationalizes the concept of servant leadership. Furthermore, according to Tracy (2012), the most powerful of motivational leaders is the servant-leader. Stone (2010) stated that transformational and servant leaders both inspire others to follow. Graham (1991) asserted that both theories describe an inspirational approach to leadership. Consequently, in this study three scales were used (vision, intellectual stimulation, and individualized consideration) as transformational behaviours, and two scales (contingent reward and management-by-exception) as transactional behaviours.

- **Servant leadership style**

The servant leadership construct has been introduced in the literature review. It contains inconsistent dimensions (Liden et al. 2008) necessitating the introduction of many empirical models to measure it. The most common servant leadership instruments have been discussed.

- **Organisational Leadership Assessment (OLA) (Laub, 2003)**

The Organisational Leadership Assessment (OLA) (Laub, 1999, 2003) is considered to be the most appropriate model for measuring servant leadership at an organisational level (Irving, 2005). According to Laub (2003, p.4), "the overall organisational leadership

assessment score is highly recommended for research purposes”. Furthermore, this instrument provides an assessment for job satisfaction. OLA includes 74 items to measure servant leadership, and six additional items to assess job satisfaction (Laub, 2000). The OLA has been proven by Thompson (2002) to be a valid instrument for measuring job satisfaction and servant leadership in organisations (Laub, 2000).

- **Servant Leadership Questionnaire (SLQ) (Barbuto & Wheeler, 2006)**

Barbuto and Wheeler (2006) suggested a construct of servant leadership based on the 10 traits of servant leaders determined by Spears (1995). They added a calling scale, which focuses on serving others (Dannhauser, 2006). It consists of a 23-item questionnaire that measures five servant leadership factors. Two types of SLQ exist that can be used as a self-rater or follower-rater.

- **The Servant Leadership Assessment Instrument (SLAI) (Dennis, 2004)**

The Servant Leadership Assessment Instrument (SLAI) was developed by Dennis (2004) as a means of measuring the seven concepts identified by Patterson (2003). SLAI consists of 42 items that cover a variety of servant leadership behaviours. According to Waddell, (2006) this instrument was validated as being capable of measuring five of the seven factors identified by Patterson (2003).

- **Revised Servant Leadership Profile (RSLP) (Wong & Page, 2003)**

The Revised Servant Leadership Profile (RSLP) was developed by Wong and Page (2003) based on the opponent-process model to measure servant leadership behaviour. The RSLP consists of 10 sub-scales; eight represent servant leadership behaviours and two represent attributes antithetic to servant leadership (Wong & Page, 2003). In this version, the authors created additional items, raising the number of items to 97.

- **Multidimensional Measure of Servant Leadership (2008)**

The Multidimensional Measure of Servant Leadership was developed by Liden et al. (2008). They reviewed existing taxonomies of servant leaders and developed a nine-dimension model. They also provided evidence of construct validity for seven servant leadership dimensions, with 28 items representing these dimensions, and found that a servant leader made a unique contribution (well beyond that of a transformational leader) to community citizenship behaviours, in-role performance, and organisational commitment (Phipps, 2010, p. 153).

Writers and researchers have expressed confusion over how servant leadership could operationalize. Dierendonck (2011) claimed that servant leadership has been represented by a variety of dimensions so that there is scant consensus between researchers and writers about how it works. Thus far there are at least nine models to measure servant leadership, each with its own distinctive interpretation of what comprises servant leadership (Dierendonck, 2011). Although all models contain servant-hood as a main dimension (i.e. willingness to serve others), some dimensions of servant leadership models have overlapped with other leadership theories, creating confusion in the servant leadership construct.

This study investigated the leadership style that forms the most desirable organisational culture for e-Government implementation. It focused mainly on transactional, transformational, and servant leadership styles as independent variables. However, the latter two styles are similar (Liden, Wayne et al., 2008; Fields & Winston, 2010; Smith, 2005; Stone et al. 2003). According to (Stone et al., 2003; Winston, 2011; Sokoll, 2011 and many others) current operationalizations of servant leadership, including behaviours and attributes, are not unique to the theory. For example Stone et al. (2003) claimed that transformational leadership and servant leadership incorporate the

same traits, such as influence, vision, trust, respect, credibility, risk-sharing, delegation, integrity, and modelling (p.354). Likewise Winston and Fields (2011) stated that servant leadership might include behaviours and attributes such as integrity, listening, goal-setting, influence, and vision, which are attributes and behaviours of transformational leadership. Consequently, to avoid overlap between the two styles, the researcher adopted the model by Field and Winston (2010) to measure servant leadership behaviour. This model has distinctive behaviours of servant leadership, and it contains a single-dimension that focuses on the leader's service to, and development of, followers.

Winston and Fields (2011) followed a two-stage procedure to develop this model. The first was to gather all items in the literature that had been used to measure servant leadership. They then engaged a panel of 23 researchers to evaluate the items. Each researcher was asked to rate each item using a four-point scale ranging from 1= not related to servant leaders, to 4= highly descriptive of servant leaders. They then retained only the most highly rated items, which had been rated by participants as 3.5 or above. This produced 22 behaviours for servant leaders.

In the second stage, Winston and Fields (2011) developed a questionnaire that included the 22 items that had resulted from the first stage together with the measurements of servant leadership obtained from an instrument developed by Liden et al (2008). This instrument was based on seven dimensions, including: (1) conceptual skills, (2) empowering employees, (3) helping subordinates grow, (4) putting subordinates first, (5) behaving ethically, (6) emotional healing and (7) creating community value (p.166). In their instrument, Liden et al (2008) used 27 items to represent these seven scales of servant leadership. Winston and Fields (2011) also included transformational and transactional leader behaviours, as measured by Avolio, Bass, and Jung (1999) (described above). Furthermore, leadership effectiveness has been

included in the questionnaire and measured by a six-item scale developed by Ehrhart and Klein (2001). To arrive at an assessment of the effectiveness of a particular leadership style, each respondent needed to identify six factors: (1) how well she/he had performed under the leader, (2) how much she/he had enjoyed working with the leader, (3) how well she/he got along with the leader, (4) to what extent she/he felt the leader's style matched his/her own, (5) whether she/he admired the leader, and finally (6) how close the leader came to his/her own vision of the ideal leader.

Winston and Fields (2011) then conducted an exploratory factor-analysis of the 22 items to examine whether these items might be reduced further. They obtained one factor containing 10 items (see Servant Leadership Theory in Chapter Two) accounting for 75 percent of the total variance. These items, according to Winston and Fields (2011), contributed positively to a scale reliability of $\alpha = .96$. Furthermore, Winston and Fields (2011) confirmed empirically its convergent-discriminant validity. The result was a single-dimension consisting of ten items that measured the distinctive behaviours of servant leadership. This instrument was empirically tested across multiple industries, which confirmed its reliability and convergent-discriminant validity (Fields & Winston, 2011).

The most well-known instruments for measuring transformational, transactional, and servant leadership have now been presented. These instruments were used to measure different leadership behaviours and to examine the relationships between these behaviours and organisational effectiveness and employee satisfaction.

The Multifactor Leadership Questionnaire (MLQ), the Transformational Leadership Behaviour Inventory (TLI), the Rafferty and Griffin (2004) Transformational Questionnaire, the Global Transformational Leadership (GTL) scale, and Winston and Fields' (2011) work on servant leadership have been the most widely-used tools in this

research. Strong evidence for the internal consistency exists for these instruments. Psychometric properties are acceptable for research purposes, and all of the above instruments demonstrate factorial, discriminant, and predictive validity. Moreover, they are behaviourally oriented, well-validated, and have been used in various cultures and various forms in research.

Consequently, to measure the independent variables (transformational, transactional, and servant leadership behaviours), the researcher designed a new questionnaire based on the most encompassing questionnaires used in previous research. These questionnaires are: The Multifactor Leadership Questionnaire (MLQ) Form 5X, The Transformational Leadership Behaviour Inventory (TLI), The Rafferty and Griffin (2004), Transformational Questionnaire and The Global Transformational Leadership (GTL) for measuring transformational and transactional leadership behaviour, and Winston and Field's (2011) instrument for measuring servant leadership behaviour. Four criteria were employed in selecting items from different questionnaires: first, the most repeated questions in all the questionnaires; second, the questions that matched and (served) the hypotheses developed for this study; third, the clearest meaning representing the dimension to be measured; and fourth, the most appropriate wording for the country being studied (KSA).

As this study concerned an examination of the effects of leadership styles on organisational cultures and e-Government implementation, the questionnaire encompassed three leadership styles (transformational, transactional and servant styles). The transformational leadership scale is composed of three sub-scales (charisma (idealised influence), individual support, and intellectual stimulation). Transactional leadership is represented by the two sub-scales (contingent reward and management-by-exception - active) and a single dimension (distinct servant leadership behaviour).

Therefore, the questionnaire measured six sub-scales of leadership style. It consisted of 34 items for measuring different leadership behaviours: 15 items for the three transformational leadership sub-scales; five items for articulating a vision, five items for individual support; five items for intellectual stimulation; nine items for the two transactional leadership sub-scales; five items for contingent reward; four items for management by exception – active, and ten items to measure the single dimension of the distinct servant leadership.

- **Organisational culture**

As we have reviewed in Chapter three (organisational culture), researchers and writers have generated many cultural dimensions, those writers and researchers forming two groups: managerial theorists, and cultural researchers. Each group has focused on different aspects of the organisational issue. Managerial theorists have focused on those dimensions of organisational culture that might be related to organisations' performance, whereas cultural researchers have focused more on those dimensions related to employee behaviour. Interestingly, among these two categories, there are some repeated dimensions.

The goal of this section is to identify and describe instruments appropriate for measuring the various dimensions of organisational culture that have been selected and discussed in Chapter Six. Previous discussion (Chapter Five) reveals that although there is no consensus between managerial theorists and cultural researchers on the appropriate dimensions of organisational culture that should be created (or manipulated) within organisations to adopt information technology, particularly e-Government, the most common dimensions of organisational culture that might contribute positively to e-Government implementation are as follows:

1. Involvement (Denison & Mishra, 1995)

2. Mission (Denison & Mishra, 1995)
3. Innovation (Wallach, 1983)
4. Task orientation (Harrison, 1972; Handy, 1979)
5. Bureaucracy (Wallach, 1983)
6. Future orientation (House et al. 2004)

And two national, cultural dimensions:

1. Uncertainty avoidance (Hofstede et al, 1991)
2. Power distance (Hofstede et al, 1991)

- **Measurement of Organisational Culture**

The study of organisational cultures and how they can be measured and evaluated are the focus of many disciplines (Mannion, 2008). According to Wilderom et al. (2000) “no generally endorsed or applicable framework exists that allows us to measure and compare organizational cultures comprehensively” (p. 201). Nevertheless, a significant number of writers and researchers have proposed methods of measurement. Jung et al. (2009) identified seventy instruments for exploring and assessing organisational culture. Some researchers (Schein, 1990; Ott, 1989; Schwartz & Davis, 1981; Trice & Beyer, 1993) studied organisational culture qualitatively (for example by interviewing, ethnography, and observations), emphasising personal bias/preference rather than frequency of occurrence (Lim, 1995). Others claimed that culture should be measured quantitatively (Denison & Mishra, 1995; Hofstede, 1984, 1991; House et al., 1999). Table (7.7) shows methods that have been used to measure organisational culture.

Table (7.7): Methods of measuring organisational culture

Researchers/ writers	Date	Measurements used to assess organisational culture
Harrison	1972	General Observation
Handy	1979	General Observation
Mintzberg	1979	Traits from Observation and Qualitative Analysis
Hofstede	1981	Traits from Questionnaire and Quantitative Analysis
Deal and Kennedy	1982	Traits, Observation, Focus Groups, Questionnaires, Quantitative and Qualitative Analyses
Schein	1984	Traits, Focus Groups, Qualitative Analysis
Denison	1984	Case-studies, Observation, Questionnaires, Quantitative and Qualitative Analyses
Kotter and Heskett	1992	Questionnaires, and Qualitative Analysis
Johnson	1997	Focus Group, Qualitative Analysis to identify traits

Source: Judson (2009)

It can be seen from Table (7.1) that there is no consensus between writers and researchers about how best to measure organisational culture, and their disagreements are rooted in the origins of the concept of culture (Muijen & et. al, 1999). According to Van Muijen (1998, p125) it is an easy matter to use questionnaires to measure perceptions about an organizational culture. However, it is quite a different challenge to develop a more complete and valid picture, which would entail describing basic assumptions, deciphering symbols, and peeling away layer upon layer of deeper meaning. For this, a qualitative approach is essential.

Using questionnaires to investigate organisational culture might not be the ideal option because the questions are motivated - at least to some extent - by *a priori* assumptions which, by their nature, beg specific answers; and the latter may not in the end be relevant or comprehensive enough to arrive at a proper understanding of the organisations under scrutiny (Sackman, 1991). This point was noted by Lim (1995) who saw an inherent weakness in such questionnaires, given that they demonstrated the cultural perspective of the researchers rather than an empirical attempt to expose the true culture of an organisation (Evered & Louis, 1981). A further criticism of this approach was made by Schein (1990) who saw such questionnaires as measuring only the most superficial aspects of organisational culture without taking a deeper, holistic view. Nevertheless, the use of qualitative methods in the study of organisational culture is well

established and widely used, since it enables members of organisations to interpret their experiences subjectively and to understand how they impinge on their behaviours (Van Muijen et al., 1999). Nonetheless, as can be seen from the literature on organisational culture, the phenomenon (at least in its early stages) was not easily quantifiable since most cultural conceptualizations are deep and intangible. Researchers believed that quantitative measurements were inappropriate for an understanding of organisational culture because they were maladapted to capturing the subjective and unique aspects of each culture (Bellot, 2011). These considerations were the reason many researchers preferred to employ qualitative methods.

A particular problem with the qualitative method is that it is so diverse, so widespread, in its approach that it becomes extremely difficult to examine organisational culture systematically over time or, indeed, to enable researchers and writers to carry out systematic comparisons between studies (Xenikou & Furnham, 1996; Sackman, 1991). Moreover, qualitative approaches are always time-consuming and inherently subjective, thus detracting from their heuristic value as genuinely useful tools for hypothesis-testing and theory-building (Lim, 1995). Schein (1990) argued that a vast number of such studies would need to be conducted to arrive at any theoretically valid inventory of the general principles of organisational culture.

Most of the studies of national and organisational culture and measurements are, therefore, based on a quantitative approach (Hofstede et al. 1990; House et al., 1999; Smith et al., 1989, 1996). By using specially designed questionnaires for measuring organizational culture researchers can conduct a large-scale survey to study and compare cultures across organisations. Furthermore, they can also set up a longitudinal study about each organisation. A great advantage of using questionnaires is that it is possible to investigate a large sample at minimum cost (Lim, 1995). Questionnaires, therefore, are

not only apparently more objective but also allow precise, quantitative comparisons between one questionnaire and another. (Sackman, 1991). The most common organisational instruments are discussed below.

- **Organizational Culture Index (OCI)**

The Organizational Culture Index (OCI) was established by Wallach (1983). It was prepared to assess the culture of the organisation and was designed and developed by building on the works of Litwin and Stringer (1968) and Margerison (1979). Wallach's (1983) organisational culture index profiles are divided into three stereotypical dimensions which cover most of the elements assessed by researchers into organisational culture: bureaucratic, innovative, and supportive. The OCI is comprised of 24 items, and each organisational cultural dimension in the instrument is assessed by eight items. Survey respondents are required to report the extent to which each of the items is characteristic of their organization along a 4-point Likert scale.

Many studies have confirmed the reliability of the OCI (Khan & Rashid, 2012; Yahyagil, 2004; Chen, 2004; Lok & Crawford, 1999 & 2003; Koberg & Cushmir, 1987). As noted by Manjegovda (2011), the OCI has been used extensively in the past as well as more recently in a variety of cultures (e.g. Turkey, Malaysia, North America, Australia, India, China and Taiwan). The psychometric properties of the questionnaire have been reported as having sub-scale alpha coefficients from 0.75 to 0.91 (Koberge & Chusmi 1987). Consequently, it was decided that the OCI was best suited for the present study for measuring two organisational cultural dimensions: innovation and bureaucracy. Sixteen items were selected from the OCI to formulate the first part of the questionnaire, which was designed to measure dimensions within organisational culture. The descriptive items of the two dimensions of the survey are shown in Table 7.8.

Table 7.8: Organisational Culture Index

Dimension	Descriptive items
Innovative	Risk taking
	Result-oriented
	Creative
	Pressurised
	Stimulating
	Challenging
	Enterprising
	Driving
	Structured
Bureaucracy	Ordered
	Procedural
	Hierarchical
	Regulated
	Established, solid
	Cautious
	Power-oriented

- **The Denison Organizational Culture Survey (DOCS)**

The Organizational Culture Survey (OCS) was developed by Denison and Mishra in 1995. It measures four organisational culture dimensions (or traits): involvement, consistency, adaptability, and mission. These traits have been grouped together into two categories - the internal integration and external orientations of organisations. The first two traits (involvement and consistency) are related to the internal dynamics of the organisation whereas the latter two (adaptability and mission) are related to the external environment of organisations. Each trait contains three indices, so there is a total of 12 indices (Table 7.9). Thus, the survey consists of 60 items, or five items per index. One example of these items is: “There is a long-term purpose and direction”, which represents the mission trait. Responses are on a five-point scale, ranging from 1 = Strongly Disagree to 5 = Strongly Agree.

Table 7.9: The Organizational Culture Survey (OCS) Indices

Trait	Index
Involvement	<ul style="list-style-type: none">● Empowerment● Team orientation● Capability development
Consistency	<ul style="list-style-type: none">● Core values● Agreement● Co- ordination and integration
Adaptability	<ul style="list-style-type: none">● Creating change● Customer focus● Organisational learning
Mission	<ul style="list-style-type: none">● Strategic direction and intent● Goals and objectives● Vision

Numerous studies have used the DOCS and, according to Denison et al. (2012), numerous unpublished dissertations and technical reports have done likewise. According to Denison et al. (2012) the DOCS is the only effective instrument that has advanced beyond the initial stages of scale development.

Several major industries have been used to conduct the exploratory test (e.g. manufacturing, business services, finance, insurance, real estate, retail, and wholesale). The test used a quantitative technique with a sample of top executives (including chief operating officers and chief finance officers) of 764 organisations (Manjegovda, 2011). The factor structure and scale reliabilities have been confirmed in prior studies (Kotrba et al., 2011). Cho (2000) conducted a study of the validity and reliability of the DOCS where the four cultural traits of the model were estimated separately. In his study, Cho (2000) obtained alpha coefficients in the range of 0.620 to 0.900. Furthermore, data consistently confirmed a good fit to the theorised model of organisational culture (Yilmaz & Ergun, 2008).

The link between DOCS and organisational effectiveness outcomes was demonstrated empirically from the very start of the development of the instrument, while many additions and modifications have been introduced by later studies (Denison et al., 2012). Moreover, the generalizability of the DOCS predictive validity to other

effectiveness outcomes has also been examined, and many studies have confirmed its generalizability. As noted by Denison et al (2012), both Gillespie et al. (2008) and Boyce (2010) have confirmed the positive association between scores on the DOCS and levels of customer satisfaction and sales in a variety of firms. Furthermore, many studies have examined the psychometric characteristics and predictive validity of the survey (Fey & Denison, 2003; Denison et al., 2003, 2004; Bonavia et al. (2009). Some organisations from different parts of Asia have been compared to others in the rest of the world, the results showing similar mean levels and predictive patterns between the indices and effectiveness outcomes (Denison et al., 2012). These studies, however, provide an initial indication that the instrument can be translated into other languages.

The current study utilised two traits from Denison and Mishra's (1995) model: involvement and mission culture (see Chapter Five). Accordingly, it was found that DOCS was best suited for this study for measuring the two organisational cultural dimensions (involvement and mission culture). Sixteen items were selected from the OCI to formulate the first part of the questionnaire that was designed to measure organisational cultural dimensions. The descriptive items of the two dimensions of the survey are shown in the organisational culture questionnaire in appendix (A).

- **The organisational culture inventory (OCI)**

The organisational culture inventory (OCI) was established by Cooke and Lafferty (1987) to assess behavioural norms in organisations working within North America. The OCI assesses normative beliefs and shared behavioural expectations quantitatively. It measures 12 groups of behavioural norms linked with three 'clusters' or styles of organisational culture: constructive, passive/defensive, and aggressive/defensive. The conceptual framework for the OCI is based on distinguishing between an organisation's focus on people or tasks (Bellot, 2011; Kwantes & Boglarsky, 2006), or between higher-

order needs and security needs (Balthazard, Cooke & Potter, 2006; Kwantes & Boglarsky, 2006).

The instrument focuses on 12 scales (Table 7.10) which describe how people adapt to the demands and expectations of their organisation (Bellot, 2011; Balthazard, Cooke & Potter, 2006). Altogether there are 96 items in the OCI, and these are sub-divided into 12 scales comprising eight items each. Each item defines distinct but interconnected sets of thinking, behavioural norms, and expectations. On a scale of 1 = (not at all) to 5 = (to a very great extent), participants were asked to judge to what degree these items were regarded as essential to the cultural ethos of their organisation.

Table 7.10: Organisational cultural styles, normative beliefs and behavioural expectations

Styles of organizational culture	Normative beliefs and behavioural Expectations
Constructive	Achievement Self-actualizing Humanistic-encouraging Affiliative
Passive/defensive,	Approval Conventional Dependent Avoidance
Aggressive/defensive	Oppositional Power Competitive Perfectionistic

Source: Cooke & Lafferty (1987)

Thousands of organisations have used the inventory and over two million respondents globally have completed the questionnaire (Balthazard, Cooke & Potter, 2006). It has been used for many purposes, particularly to assess organisational culture in industries (Bellot, 2011). The questionnaire has been adopted by numerous countries and translated, for example, into Spanish, German, French, Chinese and Dutch (Balthazard, Cooke & Potter, 2006).

Studies have shown the OCI to be both valid and reliable (Smith, 2001); it does measure the concepts it was designed to measure, and it measures those concepts consistently (Sekaran, 1992). Furthermore, it proves its generalizability across a large set of industries (Delobbe, nd). Sound theory, thorough research, and careful testing and validation are recognised to be the basis of the OCI (Human Synergistics International's Web site). As noted by Denison et al. (2012), Ashkanasy et al. (2000) reviewed a sample of 18 cultural instruments using four evaluative criteria: scale reliability, consensual validity⁷, construct validity, and criterion-related validity. They concluded that just two instruments, the OCI and the Organisational Culture Profile, (O'Reilly et al., 1991) had research support for all four types of evidence.

This study adopted the task-orientation cultural dimension initiated by Harrison (1972) and Handy (1979) as one of the organisational culture dimensions that contribute to e-Government implementation in Saudi Arabia. It was found that the OCI was best suited to this study for measuring this organisational cultural dimension (task-oriented culture). According to the OCI, task-orientation is measured by ten items describing behaviours that might be expected, or implicitly required, of members of an organisation. The descriptive items are shown in the organisational culture questionnaire in appendix (A).

- **Value Survey Module (VSM)**

The Value Survey Module (VSM) was developed by Hofstede in 1984 to capture his well-known national culture model. Hofstede's initial model (1980) included four dimensions: power distance, individualism–collectivism, uncertainty avoidance and masculinity–femininity. In the 2000s, cooperation between Hofstede and Bulgarian

⁷ Measuring phenomenon on an organisation-level through individual perceptions requires that instruments assess traits that are sufficiently invariant across the members of a given organisation (Rousseau, 1990).

scholar Michael Minkov yielded another two dimensions: long term-short term orientation, and indulgence–restraint (Hofstede, 2011). Therefore, to assess the four-value framework and then extend it to five and six values (Hofstede, 1980 and 1994; Hofstede & Minkov, 2010), Hofstede developed the Values Survey Module (VSM). This instrument has undergone many modifications since it was first used in 1982 (VSM82), and a later version was issued in 1994 (VSM94) (Hofstede, 2011).

To develop this instrument, Hofstede originally studied data which were collected from IBM (a large multinational business corporation) in 1984. The most recent version was the Value Survey Model 2008 (VSM 08) which measures the five dimensions of the national culture model. It consists of 34-items, comparing cultural values and sentiments of similar participants from two or more countries. In this instrument, individuals are asked about the values and perceptions of their work situation (Bergiel et al., 2012). Survey respondents are required to indicate their answers using a 5-point Likert scale. Seven dimensions are measured in this instrument: power distance, individualism - collectivism, uncertainty avoidance, masculinity–femininity, long-term orientation, indulgence–restraint, and monumentalism–flexibility (Hofstede, 1980 and 1994; Minkov, 2007; Hofstede & Minkov, 2010; Hofstede, 2011). While the old version of the instrument (VSM 94) was used for many years (Oshlyansky et al., 2006; Oshlyansky, 2007; Yoo et al. 2011), the new version of the instrument (e.g. VSM 08) is described as a more complete and less-complex version (Hofstede, 2011).

Spector et al. (2001) evaluated the psychometric properties of Hofstede's five cultural dimensions using Hofstede's instrument (VSM94), finding unacceptably low reliability at the individual level. They used the five-dimension model with 7,000 employees from 23 countries; it resulted in only 13 achieving a reliability measure of .70. Therefore, Hofstede's metric did not hold at the individual level (Yoo et al., 2011).

Bearden et al. (2005) also found the instrument disappointing from the point of view of its overall reliability.

In contrast, many studies have empirically supported the convergent validity of Hofstede's VSM against instruments that have been developed to assess Hofstede's model of national culture (Taras et al., 2012). In addition, applying different versions of VSM showed a range of between 64.5 percent and 77.0 percent for all dimensions, with the exception of the individualism dimension, which scored 31.6 percent (ibid). Confirming this, Hofstede, et al. (2008) asserted that the reliability and validity factor for VSM 8 has to be "taken for granted" (p.10). According to Hofstede (2001) the initial model produced Cronbach alphas of .842 for power distance, .770 for individualism, .760 for masculinity and .715 for uncertainty-avoidance. A value greater than .700 is to be considered reliable (Hofstede, 2001).

The study being reported in this thesis adopted the power distance and uncertainty avoidance dimensions of the national culture model initiated by Hofstede (1980). These dimensions, however, were adopted as a moderator variable. Accordingly, it was found that VSM 08 was best suited for this study for measuring the organisational cultural dimensions (power distance and uncertainty avoidance). According to VSM 08, these two dimensions are measured by eight questions (four questions each) describing behaviours that might be expected or implicitly required of members of an organisation. The descriptive items are shown in the organisational culture questionnaire in appendix (B).

- **GLOBE Project (Global Leadership and Organizational Behaviour Effectiveness Project) (Form Alpha and Form Beta)**

The GLOBE study (House et al., 2004) focused on leadership and cultures (at organisational and national levels) and expanded the Hofstede model from five dimensions of national culture to 18 (Hofstede, 2006).

The GLOBE study was first developed by House in 1991. Initially, he was aiming to oversee an international research project on leadership but in the mid-1990s it was broadened to include other aspects of national and organisational cultures. In this review, however, the researcher focused on the section dealing with culture, since the aim of this review was to find the most appropriate instrument for measuring culture on a national level.

For three years in the mid-1990s over 160 social scientists and management scholars (Javidan et al. 2005) collected data from about 17,000 middle managers in 951 local organisations. Their study measured leadership and culture at different levels (e.g. at organisational and national levels) in three types of industry (financial services, food processing, telecommunications) in 62 cultures⁸ (House et al., 2004; Javidan et al. 2005; Hofstede, 2006; Shi and Wang, 2011).

Following this comprehensive work on leadership and culture, questionnaires to measure culture and leadership practices were developed. In their study, House et al (2004) specified nine cultural dimensions: uncertainty avoidance, power distance, institutional collectivism, in-group collectivism, gender egalitarianism, assertiveness, future orientation, performance orientation, and humane orientation. The questionnaire items which relate to these dimensions were derived from the relevant literature on the subject, and they had also been identified by focus groups in several cultures (House et al., 2004). Respondents were asked to rate some items on a 7-point Likert-scale from 1, indicating high agreement, to 7, indicating high disagreement.

The GLOBE study differentiated between cultural values and practices (Javidan et al., 2006) since the research team believed that culture at national and organisational levels might be defined broadly as “values, beliefs, norms, and behavioural patterns of a

⁸ Five countries in the Middle East and North Africa (Qatar, Morocco, Kuwait, Egypt, and Turkey)

national group” (Leung et al., 2005, p.357). Therefore, items (or questions) in the instrument were represented in two formats at the organisational or societal levels. Questions with an (‘As Is’) response format explain organisational and societal practices whereas questions with a (‘Should Be’) response format explain organisational and societal values. Therefore, the study produced 18 scales to measure the practices and values of culture (House et al., 2004), nine dimensions ‘as is’ and nine dimensions ‘should be’.

The GLOBE study has faced many criticisms, chiefly from Hofstede (2006) who protested that GLOBE “not only adopted the dimensions paradigm, they also started from my choice of five” (p. 883). Another criticism of the GLOBE study is that respondents were managers (Hofstede, 2006), who cannot be considered a comprehensive representation of all the members of an organisation. Furthermore, although GLOBE’s respondents were international, the project design and analysis still reflected US hegemony (Hofstede, 2006, p. 884). Hofstede added that the study did not distinguish adequately between organisational culture and national culture, which he considered to be fundamentally different from one another. It was illogical, therefore, to ask respondents the same question in these very differing contexts (Hofstede, 2006: p. 884). Despite these comments, the GLOBE study has received less criticism than Hofstede’s work, perhaps because the study is relatively new and has not yet been fully analysed and tested (Shi & Wang, 2011).

According to Javidan et al. (2006), GLOBE instruments have undergone stringent tests of validity and reliability across cultures. Bertsch (2012, p 10) claimed that “the GLOBE scales proved to be reliable and valid”, and House et al. (2004: 21) stated that “the scales have a construct validity” at the societal and organisational levels of analysis. Javidan et al. (2006, p. 889) maintain that the dimensions and constructs of the GLOBE

study are relevant across cultures, wide in their scope, and theoretically well-founded and accessible to empirical verification.

As stated above, this study adopted future orientation (House et al. 2004) as a salient dimension of organisational culture. Accordingly, it was considered that the GLOBE Research Survey (Form Alpha) would be the most suitable selection for studying future orientation, which is the subject of four questions in the survey. The relevant, descriptive items for future orientation are shown in the organisational culture questionnaire in appendix (A).

7.15 Evaluating E-Government

The transformation from traditional to electronic government is quite difficult and complicated, and specific standards are required to assess the success of e-Government initiatives. E-Government evaluation has, therefore, been a matter of extensive study over the last decade. Several national and global models and surveys of e-Government have been developed (Accenture, 2000; Brown University, 2001; UN 2002, 2003, 2004; UNPAN, 2003b; Capgemini Europe, 2002), the aim being to identify the ‘best practice’ in e-Government; that is, the one which results in the highest performance.

Several e-Government evaluation-frameworks over the last decade have been cited in the literature (Al-Nuaim, 2011), and they include:

1. Accenture (2000)
2. Brown University (2001)
3. United Nations (2002)
4. Capgemini Europe (2002)

However, these frameworks have been applied in different environments, and while the United Nations and Brown University frameworks were applied worldwide, the Accenture and Capgemini frameworks were used in 22 developed countries and in various European countries.

Globally, the United Nations has established and developed an e-Government Readiness Index in order to take into account all countries and, in particular, developing countries. By using a combined evaluation of the capacity and the desire of countries to use e-Government, this index shows the respective levels of e-Government readiness. The main element in the assessment is 'website development patterns'. Characteristics such as the infrastructure already available and levels of education are included in the index in order to show how IT is being used to encourage access and include people in the experiment. Therefore using internet technology to provide services, products, and information, and human capital infrastructure development are essential factors in the measurement of the success of e-Government (European Communities, 2007).

The United Nations Public Administration Network (UNPAN, 2003b) carried out a survey to assess e-Government readiness for its 191 member states. They used two primary indicators - the state of e-Government readiness, and the extent of e-Participation - to establish their 191 members' rankings. The E-Government Readiness Index is based on three indices: website evaluation, communication infrastructure, and human capability. This model, however, has been criticized as it does not evaluate government websites correctly. Some features from different phases might be selected and adopted by some government websites which will not be ranked appropriately in the UN phases (Al-Nuaim, 2011). Furthermore, the UN model has combined two functions (online forms, and e-Payments) into a single phase even though they require highly advanced technologies.

Capgemini conducted a survey to assess e-Government in Europe. The survey was first carried out in 2001 and then repeated on a yearly basis. This survey takes the e-Government policy indicator of the e-Europe action plan (e-Europe 2005) and evaluates it across a number of parameters: (1) development of online public services, (2) availability of broadband at competitive prices, (3) internet security, and (4) the promotion of a thriving e-Business environment (Jansen, 2005: p.5). To monitor the e-Europe action plan Capgemini (2005) summarised the original 2002 indicators as:

- 1) The public services available online, and
- 2) The number of public services entirely available online.

The European Commission selected 20 top-priority public services, the target groups being citizens and businesses. Citizens were the target group for 12 basic public services and the other eight were designed to deal with the business sphere. In order to measure e-Government in Europe a four-stage framework was defined (Capgemini, 2004; Molnár, 2007):

- Stage 1: Information: this stage checks whether specific public services are available.
- Stage 2: One-way interaction: in this stage, to obtain specific public services, users are able to obtain documents in a non-electronic way, and submission follows in the conventional way
- Stage 3: Two-way Interaction: to obtain specific public services, users are able to obtain documents and information electronically, but submission and/or payment of dues take place in the conventional way.
- Stage 4: transaction: users are able to receive and complete all transactions electronically.

The procedure matches the 20 basic services against the four stages of development listed above, and it assesses them in terms of their readiness and online availability (Capgemini, 2006). The main issue with this model was that it was limited to European Union nations and concentrated on just 12 services for citizens. As such, it does not, and will not, represent the full picture of e-Government projects.

The Brown University study (2001) has been criticized as well. The methodology adopted by Brown University (2007) was based on the assessment of online services and website features. They gave 28 percent of the total score to evaluating online services whereas 72 percent was allocated to website features. Therefore, by allocating online services just 28 percent of the score the research team underestimated online services, which are considered to be the most important aspect of e-Government practices (Al-Nuaim, 2011).

In the year 2000, Accenture tested the level of e-Government adoption in 20 developed countries. Accenture's annual e-Government leadership-appraisal reports described the typical services that national agencies should have offered online to accommodate the needs of citizens and businesses in 2001 (Peters et al., 2004). They evaluated the websites of national agencies in developed countries in order to determine how developed and refined these services were (service maturity breadth) and the extent to which e-Government had been successfully implemented (service maturity depth) (Peters et al., 2004).

Accenture's study investigated 206 national government services which were divided between 12 service sectors: education, human services, transport, justice, security, administration, postal, revenue, customs, regulation, democracy, and defence. The study examined the websites of 20 countries in 2000 (many new countries are

included every year) and to heighten reliability, the research was conducted within a two-week period.

The model focuses on service maturity to measure the level of e-Government implementation of the countries in the research. In their model, Accenture used the term ‘service maturity’ to indicate the level to which a government had developed an online presence. This term, however, consists of two aspects: service maturity breadth, and service maturity depth.

‘Service maturity breadth’ reflects the number of services which agencies provide online, while the second measure, ‘service maturity depth’, refers to the level of sophistication of each service. The overall maturity levels of services are measured as the product of service maturity breadth and service maturity depth.

The Accenture study measures service maturity in three stages:

1. Publish - Passive/Passive Relationship

No direct communication or interaction between the government agency and the end user. Example - publication of legislation online.

2. Interact - Active/Passive Interaction.

Communication is one-way. The end-user communicates with the government agency online but not vice versa.

3. Transact - Active/Active interaction.

Communication is two-way between the end-user and the agency. Example; online transactions with electronic confirmation.

The Accenture model is a user-centric model and its main objective is to assess government agency websites according to the number of services they offer and the level

of maturity that each service reaches electronically. In fact, the assessment model of e-Government must focus on the important and critical factors that influence the success of e-Government. It should assess the availability of public services for the users as well as the quality of these services (e.g. accessibility, efficiency, and effectiveness).

Based on the e-Government definitions that have been reviewed in the literature (Chapter 4) the most important component of e-Government projects is the availability of online services. Thus, the hallmark of e-Government is to deliver the required services to citizens by electronic means. The e-Government project in Saudi Arabia is a user-centric vision. It focuses mainly on providing better services to citizens with the vision that “users will be able to enjoy world class government services offered in a seamless, user friendly and secure way” (Yasser, 2006).

It may be concluded from the short review of literature on the four models presented above that the model most consistent with the Saudi government’s vision for e-Government is the Accenture model. Therefore this model was adopted for research purposes to measure the level of e-Government implementation in the agencies under review in this study.

As has been shown (Chapter 4), the ‘Yesser’ project is considered to be the main enabler/facilitator of e-Government implementation for government agencies in Saudi Arabia. This project identified 150 top-priority services to be implemented electronically at an advanced level through the central e-Government portal. Consequently, the present study took into account Yesser’s vision and objectives as a basis for an assessment of e-Government in the selected organisations. However, the researcher added a number of other services to each organisation. These services were based on the relevant literature on e-Government and on all the services formerly provided in the traditional manner (i.e. before any e-Government initiative). Whether or not these services were subsequently

provided was a central line of inquiry in this investigation and thus provided a further (value-added) measure of the extent to which e-Government had been implemented. The level of e-Government implementation in each organisation was based on the comparison between the number of (traditional) services of the selected organisation and the number of services then provided electronically. This yielded a horizontal (quantitative) measure of the implementation of e-Services in each organisation and provided an insight into the primary parameter of 'service maturity breadth'. The researcher examined the aspects of service-maturity which, as has been seen, can be perceived (subjectively) as falling somewhere along the secondary parameters of 'publish, interact and transact' (see above). This approach measured e-Services vertically (qualitatively) and provided the second dimension of measurement: 'service maturity depth'.

To evaluate the extent to which e-Government has been implemented in the selected organisations, the researcher included government services to individuals (G2C), government services to business (G2B), and government services to government entities (G2G). Note that internal (i.e. non-public) services provided by the agencies (G2E) were not taken into account in this study.

The services under consideration were weighted differently depending on their maturity level (see above) and assessed as follows:

1. **Information:** no interactive services are provided online. Data and information only are provided about services (e.g. information about service requirements, explanations about how the service can be provided, terms and conditions, and working hours). Non-interactive (static) information provided online in the native language scores 1.
2. **Interaction:** some interactive services are provided online, enabling the customer to communicate with the agency (e.g. online applications, searches, uploading of

forms, and communication with the agency by email). Each online service scores 2.

3.Integration: all services are interactive online and are interconnected and integrated either within the agency or with other agencies through a one-stop government portal. Each online service scores 3.

However, a number of mitigating factors were taken into consideration: the number of services in each organisation may well be different; it may not be necessary for all services to be delivered online; some services might, by their very nature, best be delivered wholly or in part. Consequently, to ensure that the framework developed for this study represented a realistic and accurate measure of e-Government implementation, the average of each stage was taken separately, based on the number of government services in existence and the number of services actually implemented online. Once again, the averages of all phases were taken to measure the total average e-Government implementation in each organisation. It is seen, therefore, that this approach to measuring e-Government implementation offered a reliable, empirical reflection of the level of e-Government implementation in those organisations which provided the data for this investigation.

To sum up in this chapter, the research design was described and justified; the methodology and data collection methods and the research design were also be explored. In addition, the instruments that have been used to assess the study's variables were reviewed. Construction of this study's questionnaire was explained and the content of the final version of the questionnaire was detailed.

The research 'onion' is a model that provides the researcher with methodical guidelines that enable the researcher to undertake a study in a structured, sequential manner. Therefore, this study has adopted the research onion layers. That is: it adopted a

positivism philosophy, deductive approach, using a survey, a mono method choice and cross-sectional as time horizon.

CHAPTER EIGHT

DATA ANALYSIS AND RESULTS

8.1 Data analysis

This chapter discusses the analysis and results of the study. Data were collected from five organisations in Saudi Arabia⁹: Umm Alqura University (Makkah), King Abdulaziz University (Jeddah), Makkah Municipality, the Ministry of Commerce and Industry (Makkah), and Saudi Airlines. These organisations represent both the public and private sectors. The researcher selected two types of organisation from the public sector - Makkah Municipality, and the Ministry of Commerce and Industry - and two from the educational sector - Umm Alqura University and King Abdulaziz University. The private sector was represented by Saudi Airlines.

The questionnaire was compiled in English and Arabic, these being prepared as self-administered questionnaires, mailed questionnaires, and Web questionnaires (see Section 7.1 for more details).

8.2 Partial Least Square (PLS) Technique

Partial Least Square (PLS) is a variance-based technique used for testing structural equation models. PLS is a second-generation multivariate method capable of identifying both linear and nonlinear relationships among variables/constructs (Taskin, 2007). It focuses on maximizing the variance of the criterion variable explained by the predictor variables (Mohamadali, 2012). PLS, according to Chin and Newsted (1999), is variance-based, prediction-oriented, and non-parametric, has the ability to model in both formative and reflective relationships, and is capable of accurate prediction, even with complex models (p.314). PLS software is more efficient for exploratory use (Chin, 1998). The

⁹ These organizations will be named randomly as organizations (A, B, C, D and E) for privacy reason.

overall model, in PLS, consists of two parts: the inner (structural) and the outer (measurement). While the inner part examines the relationships between latent variables, the outer part looks at the relationships between the latent variables and their manifest variables (indicators) (Garzy, 2011). That is, the outer part refers to how each set of indicators relates to the latent variable. Unlike covariance-based SEM, which estimates first model parameters and then case values, PLS starts by calculating case values. Consequently the latent variables (LVs), in PLS, are measured as exact linear combinations of their empirical indicators (Fornell & Bookstein, 1982). As noted by Urbach and Ahlemann (2010), PLS can be used either for theory confirmation (confirmatory factor analysis) or theory development (exploratory factor analysis). The software allows for the use of many alternative re-sampling algorithms: stable, bootstrapping, jackknifing, blindfolding and parametric (Kock, 2013). In the stable method, for example, which has been adopted in this study, P values are calculated through non-linear fitting of standard errors to empirical standard errors generated with the other re-sampling methods available (Kock, 2013, p. 26). In other words, in stable method, P values that would approximate the ‘average’ P values are generated by the software’s other re-sampling methods. The stable method, however, yields fairly reliable results for path coefficients associated with direct effects (ibid, p. 26).

There are many features of PLS which can be used and adopted through different studies (Henseler et al., 2009; Gefen et al, 2000; Vinzi et al., 2010; Chin, 1995). Of these features, PLS:

1. Makes no distributional assumption.
2. Does not require a large sample size. PLS could be performed with a sample size as small as 50 (Chin, 2003).
3. Can estimate complex models with several latent and manifest variables.

4. Can deal with reflective and formative variables.
5. Is suitable for prediction-oriented research.

8.3 Choosing Partial Least Square (PLS) technique as a Method of Analysis

For several reasons this study selected the PLS technique over other approaches as a method of analysis:

1. The study's model is complex, with a large number of LVs and indicator variables. In this study, the hypothesized model could be classified as a complex model; it has 14 latent variables which are measured with 88 indicator variables.
2. The relationship between indicators and LVs has to be modelled in different modes (i.e. formative and reflective measurement models). The suggested model in this study has idealized influence, intellectual stimulation, individual support, contingent reward, management by exception, servant leadership, empowerment culture, team orientation culture, capability development culture, future orientation culture, strategic direction and intent culture, goals and objectives culture, vision culture, innovative culture, bureaucracy culture, and task culture. These are called reflective measures wherein all of the indicators are expected to be highly correlated with the latent variable score (Kock, 2013, p. 89). The national culture and e-services constructs are formative measures in which the indicators are expected to measure certain attributes of the latent variable but are not expected to be highly correlated with the latent variable score (ibid, p. 88).
3. The analysis of formative constructs using the covariance-based SEM technique is not an easy task since formative construct involves identification rules, whereas the PLS path allows for easy handling of these constructs (Wetzels, 2009, p. 190).
4. Estimation Assumption. PLS is not based on a specific distribution, which indicates that it is appropriate for data from non-normal or unknown distributions

(Chin, 2010). In this study there were some constructs that are not normally distributed. Consequently, it was considered preferable to apply PLS.

5. Small sample size. Other techniques, such as covariance-based SEM, require a minimum of 200 participants, but as mentioned, PLS is suitable when the sample size is relatively small. For some organisations in this study there were less than 200 participants. This means the sample size did not meet the requirements of SEM. PLS was therefore more suitable for analysing the data.
6. Prediction-estimation for the model is essential. The theoretical model for this study included leadership as the predictor variable and e-services as the criterion variable, with organisational culture as mediator and national culture as moderator; this is a relatively new approach and had not been combined or tested. The suggested model is known as a predictive model in which all new latent variables have not previously been tested together in a single model.

Based on the above criteria, and due to its powerful predictive capability, the PLS technique has been used in a wide variety of disciplines (Gaskins, 2013) including management, marketing, information systems, and finance and economics. Consequently, it was employed by this study to generate model fit indices and general model elements.

8.4 Software Used for Analysis

This study used SPSS version 20 and WarpPLS 4.0 to analyse the data. Demographic details of participants, which may be necessary for interpreting results, utilises SPSS software. The theoretical model of this study is a path model that formalized the hypothesized relationships between leadership styles, organisational culture variables, and e-services implementation. This theoretical model was statistically analysed using path analysis with WarpPLS 4.0, a structural equation modelling software package. WarpPLS 4.0 is designed to identify non-linear relationships among variables of a

theorized model by conducting linear and non-linear (or ‘warped’) regression analysis (Kock, 2013). SEM is a combination of confirmatory factors and path analysis, which allows the inclusion of latent variables that are not directly measured (Tomarken & Waller, 2005). Furthermore, in contrast to regression, SEM allows for the simultaneous assessment of multiple independent and dependent constructs, including multi-step paths (Gefen, Straub, & Boudreau 2000) and mediating effects. According to Chin (1998), PLS maximizes the explained variance of dependent variables by disaggregating the overall causal model into partial equations which are solved simultaneously. Furthermore, in investigations of both natural and behavioural phenomena most relationships between variables are non-linear and are usually U-shaped or S-shaped (Kock, 2012). When calculating path coefficients, respective p -values, or R^2 coefficients, other SEM techniques (such as AMOS, LISREL, and EQS) do not usually take non-linear relationships between latent variables (Mohamadali, 2012). By way of contrast, WarpPLS is the first and only to explicitly identify non-linear functions connecting pairs of latent variables in SEM models and to calculate multivariate coefficients of association (Kock, 2013, p.5). Furthermore, the program can handle linear as well as S- and U-shaped relationships between variables.

SEM analysis employs a measurement model and a structural model. A measurement model (also called the ‘outer model’) determines the relationships between observed manifesting variables and their association with latent variables, and a structural model (called the ‘inner model’) relates latent variables to other latent variables. PLS estimates loading and path parameters between latent variables and maximizes the variance explained for the dependent variables. PLS (as opposed to co-variance modelling-based SEM techniques and regression analyses) does not require normality assumption for the variable distributions. Moreover, co-variance-based SEM usually requires larger sample sizes and reflective indicators to form latent variables. PLS can, however, produce stable

path coefficients and significant p-values with samples less than 100 (Kock, 2013). Moreover, WarpPLS can be used to compare models to determine whether one model has a better fit with the original data than another by using model-fit indices (Khanlarian, 2010). In the next sub-sections, and prior to analysis of the data, the raw data need to be edited and cleaned. This process can be referred to as ‘code and value cleaning’.

8.5 Data Preparation

To interpret the results meaningfully, the data are required to be reasonably good (Sekaran & Bougie, 2003). In the early stage the data are characterised as raw data. These data could not be used to reach conclusions until they were converted into information in a format that might be ready and appropriate to enable the researcher to make a decision (Zikmund, 2003). Transformation of the raw data into useful information for this study included data editing, data coding, data entry, reversing negatively-worded items, and data analysis. In the following sections the different stages of data procedures are discussed and elaborated.

8.6 Data Editing and Coding

The first step in the data-analysis process entailed editing the raw data. According to Cooper et al., (2008) the purpose of editing is “to guarantee that data are accurate, consistent with the intent of the question and other information in the survey, uniformly entered, complete and arranged to simplify coding and tabulation” (cited in Mohamadali, 2012, p.120). In this study, the data were edited by checking for errors and omissions, ensuring legibility and consistency in order to achieve completeness, consistency, and readability of the data. To undertake these tasks the ‘frequency distribution’ in SPSS version 20 was used.

The coding process involved assigning numbers or symbols to a respondent’s answer in order to group them into categories. In this project, the coding was performed to assign

variable names to each measurement statement in the questionnaire. Each question in the questionnaire represented a measurement item for its representative construct or LV. Coding can be undertaken before the questionnaire is completed (pre-coding), or after the questionnaire has been completed (post-coding) (Cooper et. al., 2008). In this thesis, the researcher adopted the post-coding procedure as follows:

1. The raw-data file recorded the data according to the number of each question; this step used numerical values, for example LS1, LS2, LS3, LS4, LS5, etc.
2. The number for each questions was matched with the measurement items of the construct. For example the five questions above measured the individualised influence construct. Tables 8.1, 8.2, and 8.3 show the question numbers and their associated measurement items

Table 8.1: Leadership question numbers and their associated measurement items

Q No	Measurement Statement	Items	Construct
1	Stresses the importance of having a strong sense of purpose.	LS1	Idealise Influence
2	Emphasizes the importance of having a collective sense of mission	LS2	Idealise Influence
3	Is always seeking new opportunities for the unit/ department/ organization	LS3	Idealise Influence
4	Has a clear understanding of where we are going	LS4	Idealise Influence
5	Inspires others with his/her plans for the future	LS5	Idealise Influence
6	Re-examines critical assumptions to question whether they are appropriate	LS6	Intellectual Stimulation
7	Gets others to look at problems from many different angles	LS7	Intellectual Stimulation
8	Has ideas that have forced me to rethink some of my own ideas which I have never questioned before.	LS8	Intellectual Stimulation
9	Has stimulated me to think about old problems in new ways	LS9	Intellectual Stimulation
10	Considers each individual as having different needs, abilities and aspirations from others	LS10	Individualised Support
11	Acts without considering my feelings (R)	LS11	Individualised Support
12	Treats staff as individuals, supports and encourages their development	LS12	Individualised Support
13	Fosters involvement and cooperation among team members	LS13	Individualised Support
14	Personally compliments me when I do outstanding work	LS14	Individualised Support
15	Discusses in specific terms who is responsible for achieving performance targets	LS15	Contingent Reward
16	Makes clear what one can expect to receive when performance goals are achieved.	LS16	Contingent Reward
17	Always gives me positive feedback when I perform well	LS17	Contingent Reward
18	Commends me when I do a better than average job	LS18	Contingent Reward
19	Frequently does not acknowledge my good performance (R)	LS19	Contingent Reward
20	Focuses attention on irregularities, mistakes, exceptions, and deviations from standards	LS20	Management by Exception
21	Concentrates my full attention on dealing with mistakes, complaints and failures	LS21	Management by Exception
22	Keeps track of all mistakes	LS22	Management by Exception
23	Directs my attention toward failures to meet standards	LS23	Management by Exception
24	Practices what he/she preaches	LS24	Servant Leadership
25	Serves people without regard to their nationality, gender or race	LS25	Servant Leadership
26	Sees serving others as a mission of responsibility to others	LS26	Servant Leadership
27	Is genuinely interested in employees as people	LS27	Servant Leadership
28	Understands that serving others is most important	LS28	Servant Leadership
29	Is willing to make sacrifices to help others	LS29	Servant Leadership
30	Seeks to instil trust rather than fear or insecurity	LS30	Servant Leadership
31	Is always honest	LS31	Servant Leadership
32	Is driven by a sense of higher calling	LS32	Servant Leadership
33	Promotes values that transcend self-interest and material success	LS33	Servant Leadership

Table 8.2: Organisational culture question numbers and their associated measurement items

Q No	Measurement Statement	Items	Construct
1	Most employees are highly involved in their work	OC1	Empowerment Culture
2	Decisions are usually made at the level where the best information is available	OC2	Empowerment Culture
3	Information is widely shared so that everyone can get the information he or she needs when it is needed	OC3	Empowerment Culture
4	Everyone believes that he or she can have a positive impact	OC4	Empowerment Culture
5	Business planning is ongoing and involves everyone in the process to some degree	OC5	Empowerment Culture
6	Cooperation across different parts of the organization is actively encouraged	OC6	Team Orientation Culture
7	People work like they are part of a team	OC7	Team Orientation Culture
8	Teamwork is used to get work done	OC8	Team Orientation Culture
9	Teams are our primary building blocks	OC9	Team Orientation Culture
10	Work is organized so that each person can see the relationship between his or her job and the goals of the organization	OC10	Team Orientation Culture
11	Authority is delegated so that people can act on their own	OC11	Capability Development Culture
12	The “bench strength” (capability of people) is constantly improving	OC12	Capability Development Culture
13	There is continuous investment in the skills of employees	OC13	Capability Development Culture
14	The capabilities of people are viewed as an important source of competitive advantage	OC14	Capability Development Culture
15	Problems often arise because we do not have the skills necessary to do the job (R)	OC15	Capability Development Culture
16	The way to be successful in this organization is to plan ahead	OC16	Future Orientation Culture
17	In this organization, the accepted norm is to plan for the future	OC17	Future Orientation Culture
18	In this organization, meetings are usually planned well in advance (2 or more weeks in advance)	OC18	Future Orientation Culture
19	In this organization, employees are worry about current crises more than planning for the future (R)	OC19	Future Orientation Culture
20	There is a long-term purpose and direction	OC20	Strategic Direction and Intent Culture
21	Our strategy leads other organizations to change the way they compete in the industry.	OC21	Strategic Direction and Intent Culture
22	There is a clear mission that gives meaning and direction to our work	OC22	Strategic Direction and Intent Culture
23	There is a clear strategy for the future	OC23	Strategic Direction and Intent Culture
24	Our strategic direction is unclear (R)	OC24	Strategic Direction and Intent Culture
25	There is widespread agreement about goals	OC25	Goals and Objectives Culture
26	Leaders set goals that are ambitious but realistic	OC26	Goals and Objectives Culture
27	The leadership has “gone on record” about the objectives we are trying to meet	OC27	Goals and Objectives Culture
28	We continuously track our progress against our stated goals	OC28	Goals and Objectives Culture
29	People understand what needs to be done for us to succeed in the long run	OC29	Goals and Objectives Culture
30	We have a shared vision of what the organization will be like in the future	OC30	Vision Culture
31	Leaders have a long-term viewpoint	OC31	Vision Culture
32	Short-term thinking often compromises our long-term vision (R)	OC32	Vision Culture
33	Our vision creates excitement and motivation in our employees	OC33	Vision Culture
34	We are able to meet short-term demands without compromising our long-term vision	OC34	Vision Culture
35	Our management is prepared to take risks to find innovative solutions to tasks	OC35	Innovative Culture
36	In completing tasks we always have a clear view of the result we wish to achieve	OC36	Innovative Culture
37	As far as possible we take a creative approach to tasks.	OC37	Innovative Culture
38	Pressure is placed on employees to complete tasks in close conformity with the vision of the management.	OC38	Innovative Culture
39	Staff feel by and large that they are working in a stimulating environment	OC39	Innovative Culture

Table 8.2: Organisational culture question numbers and their associated measurement items (continued)

Q No	Measurement Statement	Items	Construct
40	Staff are excited by the prospect of new challenges	OC40	Innovative Culture
41	The management is forward-looking and enterprising	OC41	Innovative Culture
42	Staff feel under pressure and driven to complete tasks in exact accordance with management demands.	OC42	Innovative Culture
43	Work is perceived as being highly structured	OC43	Bureaucracy Culture
44	There is an ordered approach to everything undertaken	OC44	Bureaucracy Culture
45	Tasks are broken down analytically and dealt with step by step so that the procedures adopted are clear to everyone.	OC45	Bureaucracy Culture
46	The management style is a top-down so that those at the bottom of the pyramid have little understanding about the issues discussed at higher levels.	OC46	Bureaucracy Culture
47	All aspects of work are inflexible and imposing narrow controls	OC47	Bureaucracy Culture
48	We have achieved an established, solid operation	OC48	Bureaucracy Culture
49	Management is perceived as cautious and prone to abide closely by protocol	OC49	Bureaucracy Culture
50	There is a single source of power and the sphere of influence and control is part of its internal policy	OC50	Bureaucracy Culture
51	Work to achieve self-set goals	OC51	Bureaucracy Culture
52	Explore alternatives before acting	OC52	Task Culture
53	Take on challenging tasks	OC53	Task Culture
54	Set moderately difficult goals	OC54	Task Culture
55	Pursue a standard of excellence	OC55	Task Culture
56	Work for the sense of accomplishment	OC56	Task Culture
57	Think ahead and plan	OC57	Task Culture
58	Take moderate risks	OC58	Task Culture
59	Openly show enthusiasm	OC59	Task Culture
60	Know the business	OC60	Task Culture
61	Most employees are highly involved in their work	OC61	Task Culture

Table 8.3: National culture question numbers and their associated measurement items

Q No	Measurement Statement	Items	Construct
1	Have a boss (direct superior) you can respect	NC1	Power Distance
2	Be consulted by your boss in decisions involving your work	NC2	Power Distance
3	All in all, how would you describe your state of health these days?	NC3	Uncertainty Avoidance
4	How often do you feel nervous or tense?	NC4	Uncertainty Avoidance
5	How often, in your experience, are subordinates afraid to contradict their boss (or, in the case of students, their teacher)?	NC5	Power Distance
6	One can be a good manager without having a precise answer to every question that a subordinate may raise about his or her work	NC6	Uncertainty Avoidance
7	A company's or organization's rules should not be broken - not even when the employee thinks breaking the rule would be in the organization's best interest	NC7	Uncertainty Avoidance
8	An organizational structure in which certain subordinates having two bosses should be avoided at all cost	NC8	Power Distance

8.7 Data screening

Following editing and coding, the next stage was data screening in which screening for missing data and outliers was conducted. At this stage the data file was checked for accuracy. A review was conducted to ensure that the information had been entered correctly and to confirm that there were no missing data. While the data that had been received from the self-administered questionnaires and the mailed questionnaires were manually keyed into the computer by the researcher, another person verified that the data

had been entered correctly and accurately. Other data obtained from the web questionnaire were entered electronically into the computer.

8.8 Assessment of Missing Data

During the data-preparation process, researchers may encounter missing data for a variety of reasons. Respondents may choose to skip questions, and some fail to complete all the questions. Furthermore, they may refuse to answer personal questions or fail to give a response due to a lack of knowledge regarding a particular topic (Meyers, 2005). Therefore, the researcher's primary concern at this stage is "to identify the patterns and relationships underlying the missing data in order to maintain as close as possible the original distribution of values when any remedy is applied" (Hair et. al. 2010). The literature describes several ways of addressing missing data (Honaker & King, 2010; Meyers, 2005; Olinsky, Chen, & Harlow, 2003; Roth, 1994; Schafer & Graham, 2002). Initially, the researcher should determine the reason for the missing data so that he/she can select an appropriate remedy. There is a four-step process for identifying missing data and applying a suitable treatment (Hair et. al. 2010):

1. Step one: there are two types of missing data.

The first type can be ignored and there is no need to apply a remedy. The second type, where participants fail to complete all the questions, cannot be ignored.

2. Step two: determine the extent of missing data.

The reasonable way to assess the extent of missing data is by checking the percentage of variables of missing data and by calculating the number of cases with missing data for each variable (Hair et. al. 2010). The 'rule of thumb' suggests that rates of less than one percent of missing data are considered to be insignificant, rates of 1-5 percent are tolerable (Acuña & Rodriguez, 2004), 5-10 percent requires sophisticated methods to handle, and rates higher than 10 percent may severely impact any kind of interpretation

for an index – and perhaps the index itself is defined as missing for that participant (Bryman, 2011; Acuña & Rodriguez, 2004).

3. Step three: diagnose the randomness of the missing data.

There are three explanations for data to be missing: missing completely at random (MCAR), missing at random (MAR), or missing not at random (MNAR). Missing data are considered MCAR if the data values missing are independent of the other variables of interest or some unobserved variable (Gaskins, 2013) and are completely missing due to random chance. In other words, observations are said to be MCAR if none of the variables in the data set (including all predictor and criterion variables) contain missing values relating to the values of the variable under scrutiny (Meyers, 2005). For example, a researcher distributes and collects 300 questionnaires and 20 percent are returned completely blank. If the blank questionnaires were randomly not completed, the missing data from those blank questionnaires could be considered MCAR.

MAR is the next explanation, and according to Heitjan and Basu (1996) missing data-values are not dependent on the missing data itself. In other words, data are said to be MAR if the fact that they are missing is unrelated to actual values of the missing data. Using the aforementioned example where a researcher distributes and collects 300 questionnaires and 20 percent are returned incomplete; if the unanswered questions were randomly not completed, these missing data could be considered MAR. If we can infer that the data are missing at random (i.e., MCAR or MAR), then the non-response is deemed *ignorable* as it would not bias the results (Osborne, 2013).

The last reason for data to be missing is known as MNAR; this describes a situation where the conditions of the previous two categories (i.e., MCAR or MAR) were not extant. In this category, data-values are missing but not at random. Their absence (or ‘missingness’) was based on the nature or value of the missing figures (Gaskins, 2013). Furthermore, with MNAR, absence of data does depend on unobserved data (Graham,

2009). Using the aforementioned example, a researcher distributes and collects 300 questionnaires and 20 percent are returned incomplete. The researcher reviews the questionnaires and finds that a particular group (e.g. men under twenty) failed to answer a particular question (e.g. smoking). This commonality between the group and the unanswered question signifies that the data is MNAR. In conclusion, it could be said that ignorable ‘missingness’ applies to MCAR and MAR, whereas non-ignorable ‘missingness’ is often used with MNAR.

The data analysed in this thesis, did suffer from the first category (i.e. MCAR). Very few of the mailed questionnaires experienced missing data (less than five percent), which was considered to be insignificant and manageable. It was rectified through a feature in WarpPLS which provides an automatic correction for any missing values using the column-average method (Kock, 2013).

8.9 Assessment of Outliers

After treating for missing data, the next step was to examine for the presence of ‘outliers’ which appear with cases with unusual or extreme values on:

1. A single variable (univariate) – scores which are far from the mean on that variable.
2. An unusual combination of values of variables (multivariate). Consider a scenario in which one variable is experience in years and another is age. Twenty-five years is not an unusual value for experience, and thirty years is not an unusual value for age, but a case with values of twenty-five years for experience and thirty years for age would definitely be an unusual combination of values.

There are four explanations for the presence of outliers within a data set (Hair et al., 2010):

1. Data-entry errors or improper attribution coding, which can be discovered in the data-cleaning stage.
2. Some outliers may be a function of extraordinary events or unusual circumstances. For example, in a human-memory experiment, a participant may recall all stimulus items correctly (Meyers, 2005), but he/she may provide quite different responses when he/she returns after a week or so to finish the interview. Therefore, in such cases the safest course is to delete the data (ibid). A researcher should ask himself/herself whether this outlier represents the sample or not. If the answer is ‘yes’ then the outlier should be kept, otherwise it should be deleted.
3. Outliers occur with no explanation, which nominates them for deletion.
4. There are multivariate outliers whose uniqueness occurs in their pattern of combination of values on several variables such as those found in number 2 above.

In this study, outliers were detected using the Box and Whisker (BoxPlot) approach and 37 cases were identified and removed. The remaining 789 responses were analysed to test the hypothesized model. Figures (8.1, 8.2, 8.3, and 8.4) of Boxplot show the data for some constructs (predictors and criterions) with and without outliers.

Figure (8.1): Idealized Influence dimension after removing outliers

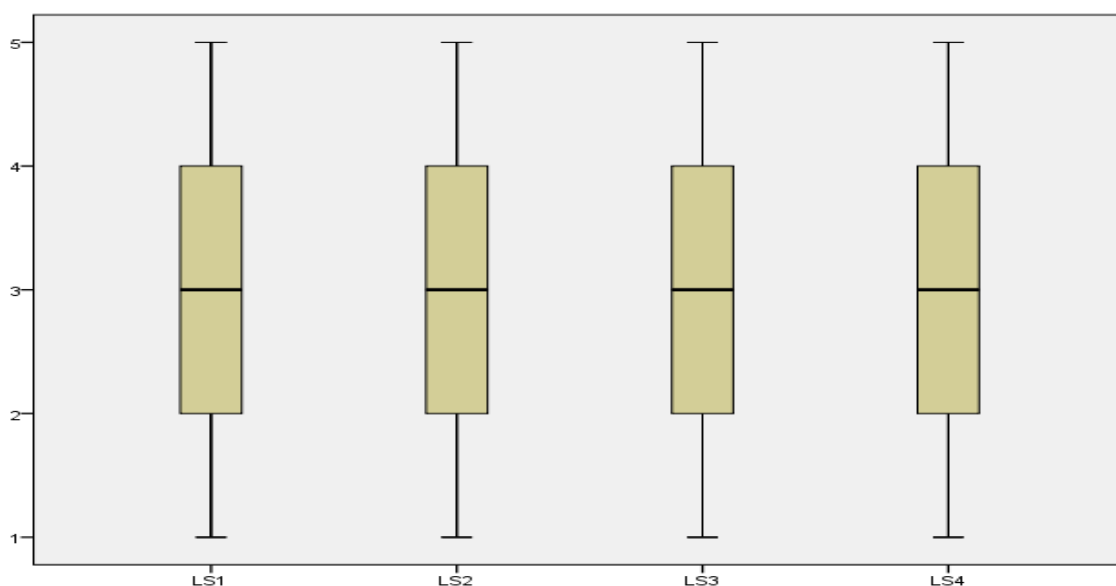


Figure (8.2): Intellectual Stimulation dimension after removing outliers

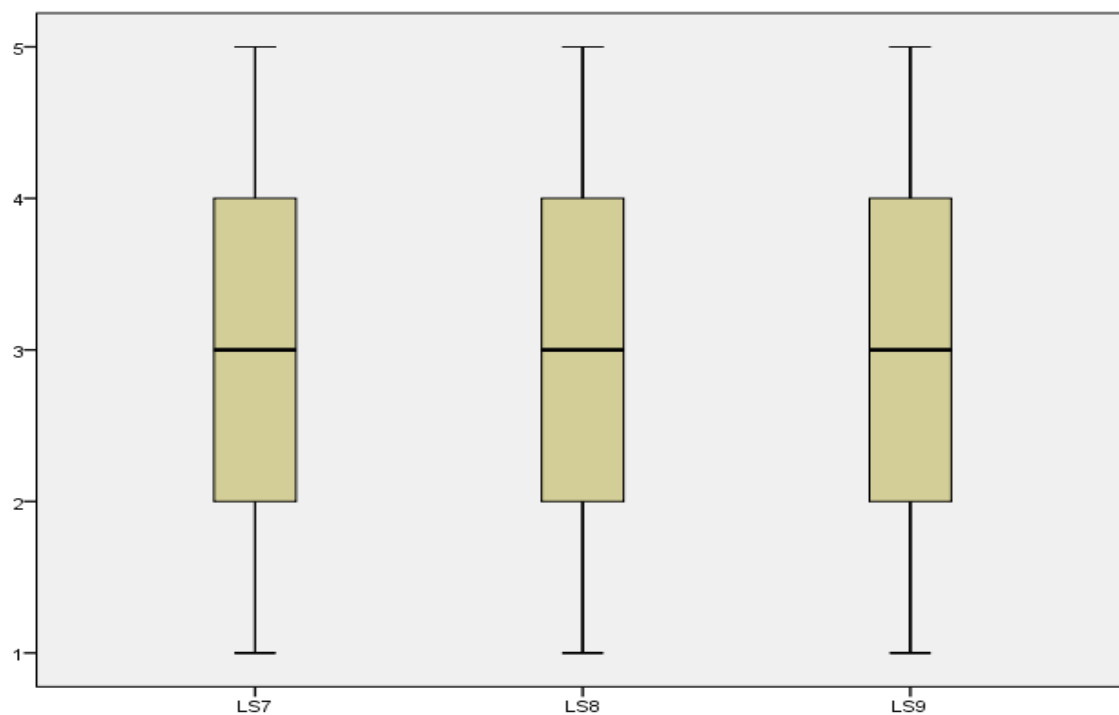


Figure (8.3): Strategic Direction and Intent Culture dimensions after removing outliers

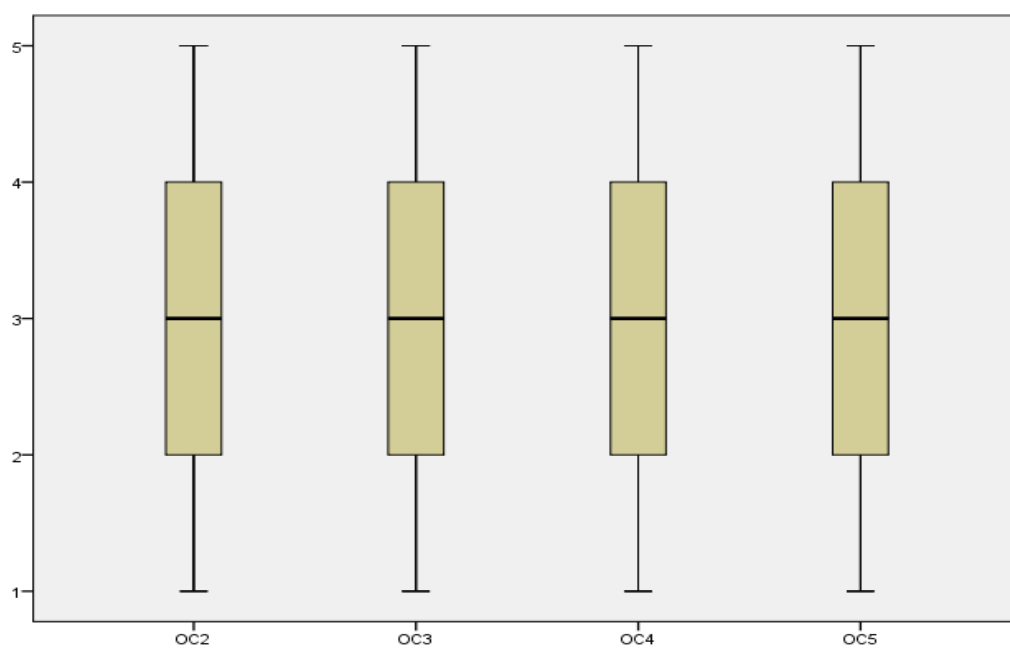
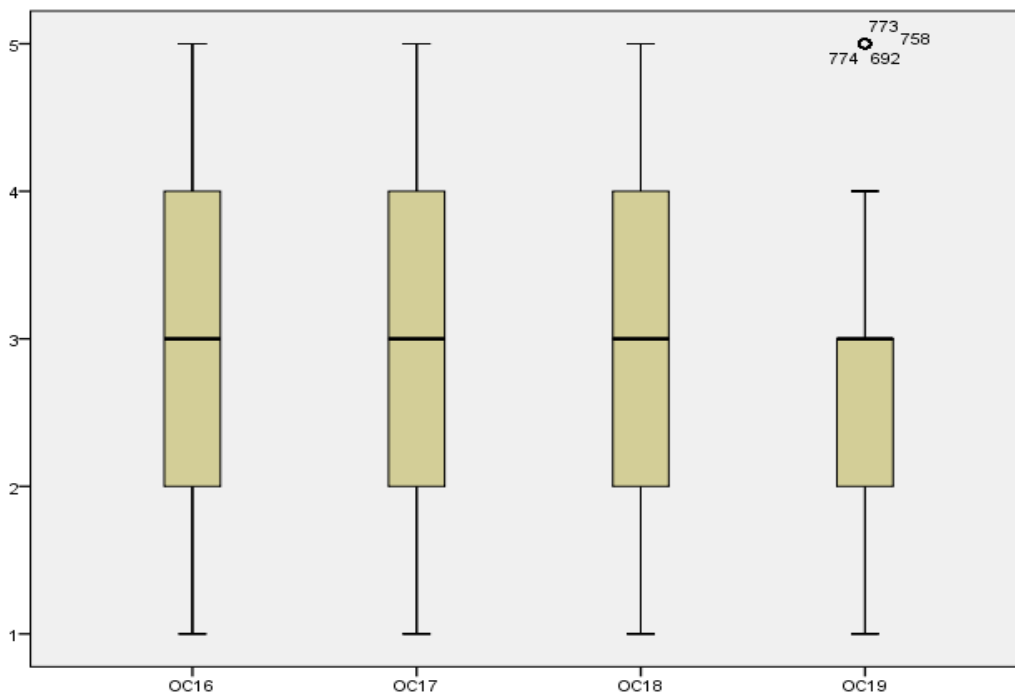


Figure (8.4): Future Culture dimension with outliers



8.10 Preliminary Data Analysis

Tables 8.4 and 8.5 represent the descriptive statistics for the measurement items used in this project. A 5-point Likert scale was used to measure each item. Scale 5 represents 'frequently, if not always', 4 represents 'fairly often', 3 represents 'sometimes', 2 represents 'once in a while', and 1 represents 'not at all'. As can be seen in the two tables, none of the styles of leadership could be described as dominant, though servant leadership appears to be predominant among Saudi leaders. At this preliminary stage of the analysis it appeared that one reason that other styles of leadership (transformational or transactional) were not common among Saudi leaders was that the data represented only the limited number of organisations being surveyed. As noted above, some servant leadership characteristics have been inherited in Saudi culture and this does not just represent a style of leadership specifically adopted by individual leaders when they assumed their positions.

Table 8.4: the probability of each measurement item (leadership)

Measurement Items	Likert Scale				
	1	2	3	4	5
LS1	18.5	25.6	24.7	17.2	13.9
LS2	17.4	26.4	25.5	21.2	9.6
LS3	14.7	24.6	28.1	19.3	13.3
LS4	14.8	24.1	27.4	20	13.7
avarage	16.35	25.18	26.43	19.43	12.63
LS7	15.3	27	28.6	19.1	9.9
LS8	12.7	25.1	31.9	16.7	13.6
LS9	9.6	23.4	32.1	26.9	8
avarage	12.53	25.17	30.87	20.9	10.5
LS10	10.1	19	50.3	12.5	8
RSL11	14.3	29.9	36.4	11.4	8
LS12	14.8	23.7	27.6	20.2	13.7
LS13	17	24.5	27.6	20.7	10.3
avarage	14.05	24.28	35.48	16.2	10
LS16	21	26.6	22.9	16.2	13.2
LS17	17.1	26.2	25.2	20.8	10.6
LS18	15.6	24.7	25.7	19.9	14.1
avarage	17.9	25.83	24.6	18.97	12.63
LS20	13.4	19.4	24.6	26.9	15.7
LS21	16.1	19.5	21.9	24.3	18.1
LS22	19.5	20.3	19.8	26.4	14.1
LS23	20.7	26.2	21.2	18.1	13.7
avarage	17.43	21.35	21.88	23.93	15.4
LS24	9.1	24.5	39.9	19.8	6.7
LS25	1.9	15.7	46.8	26.5	9.1
LS26	3.7	9.5	46	29.5	11.3
LS27	2.4	11.5	52.7	26.4	7
LS28	6.3	22.3	36	21.2	14.2
LS29	2.3	14.8	47	25.1	10.8
LS30	4.3	15.7	42	24.6	13.4
LS31	7	22.6	35.9	20.2	14.4
LS32	6.8	20.4	37.4	24.3	11
LS33	6.1	21	38.3	24.8	9.8
avarage	4.99	17.8	42.2	24.24	10.77

Table 8.5: the probability of each measurement item (organisational culture)

Measurement Items	Likert Scale				
	1	2	3	4	5
OC1	14.8	29	25.5	19	11.7
OC2	15.6	31.2	27.8	16.0	9.5
OC3	12.9	29.2	32.1	13.4	12.4
OC4	15.2	31.1	28.3	15.7	9.8
OC5	11.9	30.0	32.2	13.4	12.4
OC6	17.0	29.7	21.7	18.5	13.2
OC7	16.7	24.2	24.0	20.2	15.0
OC8	11.8	19.0	50.3	11.8	7.1
OC9	10.3	18.8	44.9	15.5	10.6
OC10	16.3	29.8	22.3	18.6	12.9
OC11	10.1	24.3	35.1	18.5	11.9
OC12	8.4	20.9	47.9	12.0	10.8
OC13	13.2	25.0	34.3	17.5	10.0
OC14	11.9	25.9	31.3	19.0	11.9
OC15	10.3	18.8	44.9	15.5	10.6
avarage	13.1	25.8	33.5	16.3	11.3
OC16	11.9	28.0	30.5	19.5	10.0
OC17	13.6	27.2	26.0	23.3	9.9
OC18	11.4	22.4	34.0	20.3	11.9
OC19	10.6	20.3	44.1	14.2	10.8
avarage	11.9	24.5	33.7	19.3	10.6
OC20	12.7	26.0	33.6	17.6	10.1
OC21	11.7	23.6	39.3	18.0	7.4
OC22	15.7	22.9	29.3	22.9	9.1
OC23	14.7	24.3	30.7	19.8	10.5
ROC24	15.8	36.4	28.5	13.6	5.7
OC27	15.0	27.6	27.4	17.6	12.4
OC28	20.2	27.8	25.0	18.3	8.9
OC29	16.9	26.5	27.1	17.4	12.2
OC30	15.5	30.5	27.9	16.6	9.5
OC31	11.5	29.0	33.0	14.1	12.4
OC33	8.0	30.7	33.1	17.5	10.8
OC34	11.9	24.0	34.1	16.0	14.1
avarage	15.0	22.9	27.6	20.3	14.2

Table 8.5: (continue) the Probability of Each Measurement Items (Organisational culture)

Measurement Items	Likert Scale				
	1	2	3	4	5
OC35	8.2	29.9	38.9	13.9	9.0
OC36	15.2	24.3	26.0	19.6	14.8
OC37	10.3	32.8	32.3	15.2	9.4
OC38	9.4	27.0	41.1	15.2	7.4
OC39	15.0	22.9	27.6	20.3	14.2
OC40	12.4	28.0	35.9	15.0	8.7
OC42	13.3	27.2	35.4	16.1	8.0
avarage	12.0	27.5	33.9	16.5	10.2
OC44	14.8	26.9	31.6	15.6	11.2
OC46	11.4	20.0	49.4	11.3	7.9
OC48	14.1	27.4	33.1	18.4	7.1
avarage	13.4	24.8	38.0	15.1	8.7
OC51	16.0	26.5	25.6	18.5	13.4
OC52	17.9	28.1	24.3	19.9	9.8
OC53	15.8	25.0	25.9	19.4	13.9
OC57	20.5	27.2	22.3	16.6	13.3
OC58	11.5	21.9	40.6	17.9	8.1
OC60	9.5	19.8	48.2	13.3	9.3
avarage	15.2	24.7	31.1	17.6	11.3
NC1	12.9	37.0	36.4	9.3	4.4
NC2	13.3	37.4	35.7	9.0	4.6
NC4	13.3	37.0	35.7	9.4	4.6
NC5	13.4	37.0	36.0	9.0	4.6
NC7	13.2	37.3	35.9	9.0	4.7
NC8	13.3	37.5	35.5	9.0	4.7
avarage	13.2	37.2	35.9	9.1	4.6

8.11 Response Rates and Sample Characteristics

As discussed in the Methodology Chapter (Chapter Seven), the 789 participants in this study were employees and lecturers from various organisations in the public and private sectors. Data collection commenced in March 2013 and ended in March 2014. A number of variables had been incorporated within the instrument to describe the sample characteristics. These variables were gender, age, educational level, respondents' experience, position in the organization's hierarchy, and name of the organization.

The respondents were asked to indicate their gender, the summary in Table 8.6 showing that 73.3 percent were male and 26.7 percent female. These results were

reasonable considering that just two organisations (out of five) employ females; these were the two universities. Statistically, however, the organizations were dominated by males and therefore it was anticipated that there would be more males than females.

Table 8.6: Information relating to the gender of the participants

	Number of Cases (N)	Percentage (%)
Male	578	73.3
Female	211	26.7
Total	789	100.0

The second demographic question concerned age. As listed in Table 8.7, the largest age group of participants was the 41 to 50 years cohort (40.6 percent), followed by the 31 to 40 year cohort (35.6 percent); these two comprised more than two-thirds of the responses. The 20-30 year group represented 12.1 percent of participants and 11.9 percent were aged 51-60. The smallest age group was those over 60 (0.3 percent). The age distribution of the sample seems to have been reasonable as government organisations are characterized as functionally stable in comparison with many private enterprises.

Table 8.7: Information relating to the age of the participants

	Number of Cases (N)	Percentage (%)
20-30 years	95	12.0
31-40 years	279	35.4
41-50 years	319	40.4
51-60 years	94	11.9
Over 60 years	2	.3
Total	789	100.0

The educational levels of the respondents formed five groups. It can be seen in Table 8.8 that the overall level of education was high; about 25 percent had a high school diploma, 22 percent were undergraduates, 13.6 percent had postgraduate degrees, 32.8 percent were at the doctorate level, and the other eight percent had technical qualifications. It can be concluded that the sample had a high level of education, enabling them to understand our aims and to answer the questionnaire appropriately.

Table 8.8: Educational levels of the participants

Education level	Number of Cases (N)	Percentage (%)
High School	120	15.2
Undergraduate	265	33.6
Postgraduate	91	11.5
Doctorate Level	278	35.2
Others	35	4.4
Total	789	100.0

Participants were also asked to provide information about their work experience in their respective organisations. The analysis indicates (Table 8.9) that more than 40 percent had between five and 15 years of experience, 34.7 percent had 16-25 years, 13.6 percent had less than five years, 10.1 percent had 26-35 years, and 0.8 percent had over 35 years experience. This is further evidence of the low rates of turnover in government organisations where about 75 percent of the participants had spent between five and 25 years working in the same organization.

Table 8.9: Work experience of the participants

	Number of Cases (N)	Percentage (%)
Less than 5 years	107	13.6
5-15 years	322	40.8
16-25 years	274	34.7
26-35 years	80	10.1
Over 35 years	6	.8
Total	789	100.0

Participants were also asked to provide information about their position within their organisation. Five options were provided: CEO/Chairman, managing director, director, senior management, lower management, and other. The analysis indicates (Table 8.10) that more than 67.4 percent were in the ‘other’ category which included lecturers, 26 percent represented lower management, six percent were senior managers, five percent were directors, and only one percent were in the category of CEO/Chairman/managing director.

Table 8.10: Employment positions of the participants

	Number of Cases (N)	Percentage (%)
CEO/Chairman/Managing Director	1	0.126
Director	4	0.5
Senior management	47	6
Lower management	205	26.0
Other	532	67.4
Total	789	100.0

Our target was five of the largest organizations in KSA: Umm Alqura University (Makkah), King Abdulaziz University (Jeddah), Makkah Municipality, the Ministry of Commerce and Industry (Makkah), and Saudi Airlines. As illustrated in Table 8.11, 21 percent of participants were from Umm Al Qura University, 25.4 percent from King Abdulaziz University, 19.1 percent from Makkah Municipality, 12.9 percent from the Ministry of Commerce and Industry, and 21.5 percent from Saudi Airlines.

Table 8.11: Employers of the participants

	Number of Cases (N)	Percentage (%)
Umm Al Qura University	165	21
King Abdulaziz University	201	25.4
Makkah Municipality	151	19.1
Ministry of Commerce and Industry	102	12.9
Saudi Airlines	170	21.5
Total	789	100.0

8.12 Descriptive Statistics

Tables 8.12 and 8.13 show the means and standard deviations of the variables in the five organisations. Calculated means indicated that the dimensions of all transformational and transactional leadership styles (idealized influence, intellectual stimulation, individualized support, contingent reward, and management by exception) in B and E (mean>3) were widely adopted and used more than in A, C and D where means<3. Interestingly, the servant leadership variable in all organisations was similar (means>3), except for D. With regard to organisational culture, the means for organisations B and E

were higher than for A, C and D for all organisational dimensions. The moderator variable (national culture) was higher in C and D (means>3) than other organisations in this study.

Table 8.12: Descriptive statistics for the dimensions of leadership styles

Variable	A		B		C		D		E	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
IINF	2.4344	.74296	3.7227	.76716	2.0248	.43756	1.8480	.49272	3.7779	.76703
ISTIM	2.2732	.72923	3.7377	.48713	2.3841	.62981	2.1895	.49754	3.6314	.77183
ISUP	2.6475	.59711	3.1872	.52363	2.1672	.46433	2.1838	.59069	3.6529	.55416
CR	2.0055	.56178	3.7796	.64099	2.0905	.57727	1.8824	.50877	3.9000	.57318
MbE	2.4986	.71651	3.1366	.68324	2.3990	.63782	3.3333	.70915	3.6618	.68609
SL	3.1186	.42230	3.5328	.50396	2.7238	.43676	2.4980	.54245	3.6800	.79134

Table 8.13: Descriptive statistics for the dimensions of organisational culture

Variable	A		B		C		B		E	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
InvC	2.3048	.39583	3.3199	.51827	2.4987	.42973	2.1824	.29024	3.4829	.41525
MC	2.2633	.39441	3.5506	.63385	2.2487	.38032	1.9989	.30014	3.6588	.49256
InC	2.2106	.43385	3.4328	.65276	2.2053	.41542	2.0980	.38078	3.6721	.53380
BC	2.2646	.44857	3.5788	.69002	2.2362	.49230	2.0948	.45083	3.7529	.55269
TC	2.6015	.56302	3.3333	.65447	2.1093	.41087	2.0637	.35822	3.7735	.61853
NC	2.3788	.60692	2.4262	.55623	3.4459	.78800	3.2696	.38825	2.2157	.38660

Note1: IINF = Individualized Influence; ISTIM= Intellectual Stimulation; ISUP= Individualized Support; CR= Contingent Reward; MbE= Management by Exception; SL= Servant Leadership; MC= Mission Culture, INC= Innovative Culture; INVC= Involvement Culture, BC= Bureaucratic Culture; TC=Task Culture; FC= Future Culture.

Note 2: Letters A, B, C, D and E were used throughout the remaining thesis instead of organisations' real names for their privacy.

8.13 Validation of the Model

The process of model-validation was defined by Urbach and Ahlemann (2010, p.18) as “systematically evaluating whether the hypotheses expressed by the structural model are supported by the data or not”. However, before determining whether the structural model would fulfil the quality criteria of the empirical work, the measurement model needed to be tested to examine if its constructs had sufficient reliability and validity. Consequently, this study adopted the two-stage approach suggested by Anderson and Gerbing (1988). In the first stage, the quality of the measurement model was assessed by determining its overall fit, and by testing its reliability and factorial validity in the form of convergent and discriminant validity (Gefen & Straub 2005). In the second stage, path effects and significance levels in the hypothesized structural model were examined to test the hypotheses. Results from each stage are presented in the next section.

8.14 Stage one: Assessing the measurement model

In this stage the measurement model was assessed. Four steps were taken in this regard; model fitness, reliability, validity, and collinearity.

Model Fit Indices: WarpPLS 4.0 conducts a model fitness test as part of structural model analysis. The output ‘model fit’ is assessed by three indices: average path coefficient (APC), average R-squared (ARS), and average variance inflation factor (AVIF). The APC is the average of the absolute values of the model’s path coefficients. The ARS index is the absolute value of the R^2 coefficients for the model, and the AVIF index is the overall measure of multi-collinearity.

The reason WarpPLS includes APC and ARS is to enable an acceptable comparison between different models (Kock, 2013), which is why these measures are of lower importance in studies like this, where each path is independently important. As long as the first and second indices are significantly under the five percent level and the third is lower than five, it can be concluded that there is a good fit of the model with data (Hair et al., 2010; Kline, 2010; Kock, 2013). In this study, all measures (i.e. APC, ARS, and AVIF) were statistically significant, indicating that there was a good fit of the model, as seen in Table 8.14.

Table 8.14: Model fit and quality indices

Indices	Value
Average path coefficient (APC)	0.191, $P < 0.001$
Average R-squared (ARS)	0.365, $P < 0.001$
Average block variance inflation factor (AVIF)	1.897, acceptable if ≤ 5 , ideally ≤ 3.3
Algorithm used in the analysis:	Warp4 PLS regression
Resampling method used in the analysis:	Stable
Number of cases (rows) in model data:	789

8.15 Assessing measurement reliability

Reliability is a measure of the quality of a measurement instrument (Kock, 2012) which means that when it is achieved, each question-statement associated with each latent variable is understood in the same way by different respondents. According to Kerlinger

and Lee (2000) it refers to dependability, stability, consistency, reproducibility, predictability, and lack of distortion (see section 7.13.2 for more details).

Cronbach's alpha and composite reliability are the two measurements typically used to assess reliability (Fornell & Larcker, 1981; Nunnally, 1978). Therefore, they are provided for all latent variables. Although many researchers (Fornell & Larcker, 1981; Nunnally, 1978; Nunnally & Bernstein, 1994) have suggested that both the composite reliability and Cronbach's alpha coefficients should be equal to, or greater than, 0.7, Hair et al. (2006) argued that the value of 0.6 is marginally acceptable. Furthermore, Kock (2013) suggested that a widely relaxed criterion should be used where one of the two coefficients could be equal to, or greater than, 0.7. According to Fornell and Larcker (1981) this typically applies to the composite reliability coefficient, which is usually the higher of the two. Results show that both Cronbach's alpha and composite reliability measurements were above the required levels. The minimum reliability measurement of Cronbach's alpha was 0.604 which is the value of individualized support, and the highest value was 0.945 which is the value of the product of national culture and servant leadership (NC*SL). The minimum composite reliability measurement was 0.771 for individualized support and the maximum value was 0.949 for the product of national culture and servant leadership (NC*SL). Since the values for Cronbach's alpha and composite reliability (Table 8.15 and 8.16) were above the recommended threshold of 0.7 (or in some cases 0.6), the reliability of the measurements was considered valid.

Table 8.15: Reliability coefficients for Leadership and Organisational Culture

Counstruct	Cronbach's alpha coefficients	Composite reliability coefficients
IInf	0.861	0.906
IStim	0.737	0.851
ISup	0.604	0.771
CR	0.802	0.883
MbE	0.6.7	0.726
SL	0.887	0.908
EC	0.789	0.864
ToC	0.631	0.783
CDC	0.75	0.857
FC	0.697	0.816
SDIC	0.801	0.883
GOC	0.823	0.894
VC	0.752	0.859
InC	0.803	0.872
BC	0.698	0.833
TC	0.724	0.829
NC	0.828	0.876

Table 8.16: Reliability coefficients for National Culture

Counstruct	Cronbach's alpha coefficients	Composite reliability coefficients
NC*IInf	0.912	0.923
NC*ISti	0.873	0.893
NC*ISup	0.866	0.885
NC*CR	0.892	0.908
NC*MbE	0.822	0.849
NC*SL	0.945	0.948
NC*SDIC	0.878	0.897
NC*GOC	0.903	0.916
NC*VC	0.877	0.896
NC*InC	0.904	0.916
NC*ToC	0.867	0.886
NC*CDC	0.878	0.897
NC*EC	0.896	0.91
NC*TC	0.887	0.902
NC*BC	0.859	0.883
NC*FC	0.879	0.896

Note 1:LV=Latent Variable; CRC= Composite Reliability Coefficients; CAC= Cronbach's Alpha Coefficients

Note 2: IInf = Individualized Influence; IStim= Intellectual Stimulation; ISup= Individualized Support; CR= Contingent Reward; MbE= Management by Exception; SL= Servant Leadership; EC= Empowerment Culture; ToC= Team Orientation Culture; CDC= Capability and development; FC= Future Culture; SDIC=Strategic Direction and Intent Culture; GOC= Goals and Objective Culture; VC= Vision Culture; InC= Innovative Culture; BC= Bureaucratic Culture; TC=Task Culture; NC= National Culture. Moderating effect latent variable names are displayed on the table as product latent variables (e.g. NC*IInf).

8.16 Assessing Measurement Validity

After assessing the reliability of the instrument, validation of all constructs defined in the model is required. Validity can be defined as the degree to which an instrument measures what it is supposed to measure (Key, 1997). Two basic approaches were used to check instrument validity in this study. These were content validity (see Section 7.13.1 for details) and construct validity.

1. Construct validity

Construct validity is concerned with what the measurement instrument is actually measuring. Both convergent and discriminant validity are considered sub-categories of construct validity, where convergent validity refers to the ability of an instrument purporting to measure the same thing to be highly correlated, whereas discriminant validity refers to the ability of instruments that measure differently to show low correlation (Kerlinger & Lee, 2000).

1.1 Convergent Validity

Convergent validity is the measure of the internal consistency of the instrument where its items which measure the same construct are in agreement (Straub et al., 2004). A measurement instrument, according to Kock (2013), has good convergent validity if the question-statements (or other measures) associated with each latent variable are understood by the respondents in the same way as they were intended by the designers of the question-statements (p.88). In order to show that the model has acceptable convergent validity, the loadings of items should be higher than 0.5, and p-values associated with loadings should be lower than 0.05 (Hair et al., 2010). Consequently, indicators that do not load higher than 0.5 on the respective latent variable were deleted from the pilot study (see Section 7.12.1 for more details). The factor loadings of the remaining indicators were higher than 0.5 and significantly under 0.001 (Table 8.17). It can therefore be concluded that the model has acceptable convergent validity.

Table 8.17: Combined Loadings and Cross-loadings

	IINF	ISTIM	ISUP	CR	MBE	SL	EC	TOC	CDC	FC	SDIC	GOC	VC	INC	BC	TC
LS1	0.822	-0.055	0.131	0	-0.014	-0.006	0.108	-0.027	-0.067	-0.033	0.15	-0.157	0.117	-0.045	-0.18	0.112
LS2	0.824	0.004	-0.021	0.081	0.034	-0.056	-0.118	0.025	-0.073	0.003	-0.109	0.06	0.033	0.045	-0.09	-0.206
LS3	0.799	0.042	-0.135	-0.174	-0.044	0.073	-0.084	0.025	0.023	-0.125	-0.138	0.066	-0.132	0.063	0.518	-0.024
LS4	0.802	0.01	0.023	0.09	0.023	-0.009	0.094	-0.023	0.12	0.155	0.095	0.032	-0.021	-0.063	-0.239	0.12
LS7	0.129	0.665	-0.12	0.035	-0.149	0.18	-0.122	0.432	-0.088	-0.195	-0.123	0.099	-0.092	-0.012	-0.093	0.282
LS8	-0.059	0.759	0.014	0.055	-0.026	-0.197	-0.062	-0.123	-0.01	0.088	-0.029	-0.053	0.267	-0.058	0.209	-0.315
LS9	-0.058	0.719	0.097	-0.09	0.164	0.041	0.178	-0.27	0.092	0.088	0.145	-0.036	-0.197	0.073	-0.135	0.071
LS10	-0.072	0.003	0.675	-0.042	-0.015	0.036	0.055	0.519	-0.006	0.071	0.054	0.006	-0.106	0.059	0.119	-0.082
RLS11	0.148	0.081	0.668	-0.096	0.038	0.008	0.042	-0.013	0.007	0.203	-0.049	0.054	0.021	-0.283	-0.173	-0.002
LS12	0.078	-0.004	0.797	0.083	-0.056	-0.008	-0.029	-0.19	0.01	-0.118	-0.032	-0.057	0.011	0.188	0.037	0.06
LS13	-0.145	-0.068	0.772	0.034	0.038	-0.03	-0.054	-0.247	-0.011	-0.115	0.029	0.007	0.064	0	0.007	0.011
LS16	0.178	0.211	-0.022	0.759	-0.094	-0.086	-0.059	0.003	0.157	0.046	-0.161	0.201	-0.104	0.066	0.01	-0.238
LS17	-0.1	-0.174	-0.004	0.839	0.031	0.032	-0.016	0.017	-0.017	0.025	0.082	-0.1	0.197	-0.041	-0.14	0.182
LS18	-0.062	-0.017	0.025	0.83	0.054	0.046	0.071	-0.019	-0.126	-0.067	0.064	-0.083	-0.104	-0.019	0.132	0.034
LS20	-0.016	-0.087	-0.136	-0.016	0.723	-0.049	-0.031	0.034	-0.072	0.06	-0.092	0.178	0.052	0.041	-0.18	0.109
LS21	0.233	-0.204	0	-0.114	0.507	0.177	0.016	-0.007	0.108	-0.021	0.084	-0.022	0.157	0.058	0.277	0.068
LS22	-0.384	0.164	0.225	0.09	0.651	0.121	0.023	0.021	-0.088	-0.17	0.109	-0.162	-0.075	-0.154	0.306	-0.057
LS23	0.235	0.097	-0.078	0.018	0.611	-0.217	-0.001	-0.057	0.089	0.127	-0.078	-0.02	-0.112	0.068	-0.343	-0.124
LS24	0.146	0.14	0.008	0.085	0.076	0.649	-0.065	-0.01	0.036	-0.131	0.157	0.04	0.161	-0.046	-0.283	-0.287
LS25	0.111	0.016	0.228	0.024	0.133	0.589	-0.016	-0.045	0.153	-0.041	0.113	0.073	0.151	0.141	-0.124	-0.044
LS26	0.242	0.003	-0.118	0.213	0.005	0.617	0.03	0.108	-0.02	-0.138	-0.166	0.098	-0.196	0.096	-0.02	-0.193
LS27	0.132	0.173	-0.066	-0.085	0.228	0.683	0.085	-0.041	0.088	-0.069	-0.055	0.18	-0.109	0.089	-0.15	-0.122
LS28	-0.116	-0.063	-0.118	-0.013	-0.257	0.504	-0.067	-0.05	-0.431	0.013	0.099	-0.124	0.375	-0.198	0.205	0.023
LS29	0.223	0.15	0.082	0.015	0.158	0.697	-0.151	0.014	0.12	0.012	-0.106	0.143	-0.118	0.167	-0.06	-0.251
LS30	-0.034	-0.082	-0.119	-0.072	-0.154	0.636	0.169	-0.007	-0.08	0.083	-0.088	-0.209	0.101	-0.065	0.223	0.128
LS31	-0.202	-0.022	-0.008	-0.06	-0.271	0.551	-0.021	-0.102	-0.354	0.054	-0.082	-0.225	0.236	-0.253	0.117	0.164
LS32	-0.289	-0.12	0.028	-0.125	-0.009	0.701	-0.006	0.025	0.16	0.063	0.022	-0.014	-0.259	-0.024	0.058	0.259
LS33	-0.219	-0.197	0.057	0.028	-0.017	0.734	0.031	0.071	0.145	0.135	0.111	-0.032	-0.16	0.012	0.086	0.305

Table 8.17: Combined Loadings and Cross-loadings (Continued)

	IINF	ISTIM	ISUP	CR	MBE	SL	EC	TOC	CDC	FC	SDIC	GOC	VC	INC	BC	TC	NC
OC1	0.081	-0.034	-0.033	0.014	-0.02	0.013	0.647	0.061	0.001	-0.018	0.051	0.016	0.089	0.043	-0.141	0.044	0.087
OC2	-0.13	-0.154	0.389	-0.181	0.056	-0.118	0.638	-0.072	-0.105	-0.074	0.258	0.24	-0.09	-0.333	0.064	0.247	-0.133
OC3	0.083	-0.134	-0.18	-0.015	0.051	0.111	0.66	0.138	0.001	0.053	-0.039	-0.202	-0.04	0.139	0.069	-0.093	-0.041
OC4	-0.211	0.008	0.193	0.273	0.098	-0.079	0.663	0.085	-0.072	0.037	-0.222	-0.092	-0.018	-0.096	0.075	-0.042	-0.001
OC5	0.181	0.321	-0.371	-0.102	-0.192	0.073	0.636	-0.223	0.178	0	-0.039	0.049	0.061	0.245	-0.07	-0.151	0.089
OC6	0.091	0.087	-0.157	0.107	-0.09	-0.049	0.077	0.709	-0.107	0.068	0.087	0.072	-0.059	0.182	0.016	-0.315	0.038
OC7	0.027	-0.185	0.327	-0.128	-0.085	-0.05	0.013	0.629	-0.204	0.01	-0.246	0.137	-0.068	-0.032	0.005	0.155	-0.05
OC8	0.088	0.136	-0.077	-0.01	-0.009	-0.131	-0.032	0.681	-0.065	0.128	-0.071	-0.086	0.02	-0.047	-0.079	-0.212	0.072
OC9	-0.173	0.053	0.03	-0.034	0.088	0.09	-0.061	0.768	0.007	-0.064	-0.009	-0.023	-0.006	-0.064	0.072	0.245	-0.011
OC10	-0.014	-0.121	-0.099	0.056	0.085	0.132	0.009	0.655	0.371	-0.142	0.226	-0.093	0.115	-0.043	-0.025	0.126	-0.055
OC11	0.16	0.12	-0.161	-0.241	0.101	0.049	0.149	-0.005	0.689	-0.103	-0.097	0.134	-0.127	0.325	0.097	-0.216	-0.06
OC12	-0.032	0.129	-0.215	0.14	-0.031	0.011	-0.103	0.129	0.772	0.051	0.045	0.101	-0.123	0.119	0.034	-0.101	0.076
OC13	-0.099	-0.057	0.197	-0.203	-0.004	-0.053	-0.058	-0.01	0.678	0.123	-0.169	0.077	-0.015	-0.185	-0.044	0.381	-0.069
OC14	-0.036	-0.175	0.304	0.04	-0.087	-0.04	-0.026	-0.204	0.64	0.097	0.071	-0.195	0.253	-0.223	-0.129	0.061	0.053
OC15	0.007	-0.048	-0.079	0.261	0.02	0.03	0.05	0.063	0.651	-0.174	0.155	-0.15	0.046	-0.073	0.03	-0.109	-0.006
OC16	-0.112	-0.091	0.094	0.082	-0.056	0.03	0.05	-0.135	0.161	0.713	-0.036	-0.036	0.11	0.016	0.039	0.148	0.045
OC17	0.194	-0.163	-0.02	0.222	-0.156	0.015	-0.024	0.058	-0.008	0.729	-0.104	-0.063	0.152	0.077	0.061	-0.226	-0.164
OC18	-0.061	0.064	0.098	-0.143	0.052	-0.12	-0.013	0.024	0.029	0.749	0.099	0.104	-0.213	-0.007	-0.114	0.077	0.116
OC19	-0.025	0.221	-0.203	-0.183	0.187	0.093	-0.015	0.059	-0.211	0.617	0.044	-0.01	-0.049	-0.102	0.022	0.002	0.001
OC20	-0.06	0.186	-0.166	0.145	-0.067	-0.061	0.015	-0.073	-0.129	0.219	0.732	0.002	-0.157	0.042	0.084	0.133	0.186
OC21	0.102	0.128	-0.096	-0.103	0.136	0.027	-0.099	0.164	-0.054	-0.1	0.621	0.017	0.008	0.268	-0.139	-0.298	0.121
OC22	-0.02	-0.41	0.35	0.003	-0.16	0.018	0.026	-0.01	0.086	0.054	0.598	-0.13	0.173	-0.113	0.015	0.179	-0.079
OC23	-0.024	0.12	-0.009	-0.096	-0.059	0.047	0.098	-0.179	0.156	-0.207	0.673	0.114	0.033	-0.058	-0.032	-0.075	-0.083
ROC24	0.016	-0.098	-0.043	0.041	0.193	-0.026	-0.06	0.151	-0.055	0.017	0.516	-0.022	-0.031	-0.177	0.073	0.061	-0.21
OC27	-0.091	0.152	-0.086	-0.016	0.021	0.079	-0.078	-0.102	0.087	-0.023	-0.132	0.839	0.098	0.06	0.056	-0.051	-0.033
OC28	0.083	-0.247	0.067	0.121	0.023	-0.03	0.128	0.007	0.006	0.017	0.021	0.826	-0.079	-0.173	-0.069	0.13	-0.002
OC29	0.01	0.089	0.02	-0.1	-0.043	-0.048	-0.047	0.093	-0.09	0.005	0.108	0.863	-0.019	0.107	0.011	-0.074	0.034
OC30	-0.044	-0.015	0.185	0.077	-0.041	-0.004	-0.029	-0.01	-0.014	0.09	0.012	0.315	0.7	-0.382	-0.02	-0.162	0.078
OC31	0.04	-0.023	0.29	-0.288	-0.095	-0.11	0.028	-0.1	0.049	-0.062	0.013	-0.02	0.641	-0.417	-0.107	0.046	-0.041
OC33	0.023	-0.094	-0.162	0.05	0.183	0.043	-0.009	0.094	-0.142	0.009	0.001	-0.168	0.791	0.299	0.09	0.019	-0.03
OC34	-0.018	0.132	-0.249	0.121	-0.073	0.052	0.013	-0.005	0.12	-0.04	-0.023	-0.099	0.754	0.396	0.015	0.092	-0.006
OC35	0.226	-0.088	-0.246	0.087	-0.014	0.185	-0.008	0.189	-0.136	-0.164	0.109	0.065	-0.018	0.709	-0.068	-0.064	-0.037
OC36	-0.036	-0.369	0.616	-0.095	-0.121	-0.158	0.044	-0.123	0.015	0.024	-0.009	0.009	-0.169	0.583	0.015	-0.016	0
OC37	0.04	-0.16	-0.169	0.261	0	0.003	-0.105	0.146	0.057	-0.009	-0.085	0.018	0.026	0.753	-0.039	0.008	0.125
OC38	-0.166	0.223	-0.083	-0.296	0.167	0.136	-0.044	0.077	-0.011	0.023	-0.035	0.007	0.018	0.696	-0.06	0.305	-0.042
OC39	-0.047	-0.228	0.592	-0.082	-0.173	-0.175	0.15	-0.18	0	-0.007	0.118	-0.106	-0.068	0.571	0.065	-0.159	0.012
OC40	-0.016	0.207	-0.228	-0.049	0.123	-0.066	-0.05	-0.041	0.028	0.002	-0.046	0.031	0.118	0.814	0.055	0.01	0.04
OC42	-0.02	0.287	-0.215	0.127	-0.052	0.026	0.063	-0.127	0.043	0.133	-0.019	-0.047	0.031	0.711	0.04	-0.114	-0.109
OC44	-0.091	0.271	-0.335	0.206	-0.01	-0.113	-0.142	0.18	-0.164	-0.174	0.183	0.003	-0.017	-0.007	0.576	-0.397	0.082
OC46	-0.066	-0.071	0.311	-0.061	-0.037	0.063	0.084	-0.095	0.182	0.123	-0.085	-0.085	-0.036	-0.15	0.516	0.334	0.024
OC48	0.108	-0.149	0.041	-0.109	0.031	0.04	0.048	-0.068	0.001	0.046	-0.077	0.053	0.035	0.102	0.801	0.07	-0.075
OC51	0.357	-0.027	-0.398	0.078	0.096	-0.005	-0.165	0.123	-0.032	-0.037	0.076	0.092	-0.152	0.017	-0.067	0.76	0.043
OC52	0.529	-0.132	-0.126	-0.115	-0.257	-0.037	0.103	-0.042	0.022	0.106	0.021	-0.112	-0.115	0.165	-0.01	0.614	-0.045
OC53	-0.181	0.151	0.099	-0.359	0.05	0.104	-0.035	-0.064	0.105	-0.054	0.043	0.072	-0.06	-0.046	-0.098	0.675	-0.065
OC57	-0.183	-0.27	-0.074	0.681	0.222	0.023	0.09	-0.086	-0.011	-0.105	-0.113	-0.021	-0.023	-0.128	0.114	0.58	0.271
OC58	-0.217	-0.088	0.165	0.221	-0.159	-0.024	-0.105	0.075	0.084	-0.136	-0.057	-0.124	0.548	0.136	0.023	0.502	-0.106
OC60	-0.38	0.293	0.4	-0.369	0.003	-0.065	0.127	-0.017	-0.14	0.188	-0.008	0.036	-0.052	-0.113	0.066	0.682	-0.095
NC1	0.164	0.067	-0.17	-0.007	0.073	-0.02	0.018	0.012	0.026	0.021	-0.034	0.05	-0.282	0.257	0.031	-0.184	0.622
NC2	0.221	-0.274	0.187	0.006	-0.102	0.028	0.105	-0.346	0.312	-0.045	-0.174	0.028	0.1	0.035	0.034	-0.069	0.758
NC4	-0.185	0.102	-0.095	0.1	0.075	-0.057	-0.063	0.143	-0.186	0.057	0.211	-0.093	0.063	-0.25	0.014	0.128	0.821
NC5	-0.282	0.214	0.083	-0.201	-0.075	0.059	-0.06	0.136	-0.128	0.078	0.005	0.011	0.111	0.031	-0.088	0.092	0.735
NC7	-0.199	0.18	-0.14	0.101	0.122	-0.056	-0.135	0.19	-0.173	0.012	0.11	-0.125	0.07	-0.159	0.007	0.064	0.832
NC8	0.339	-0.298	0.128	-0.025	-0.1	0.056	0.156	-0.161	0.183	-0.123	-0.153	0.159	-0.123	0.17	0.003	-0.078	0.755

Note: IINF= Individualized Influence; ISTIM= Intellectual Stimulation; ISUP= Individualized Support; CR= Contingent Reward; MBE= Management by Exception; SL= Servant Leadership; EC= Empowerment Culture; TOC= Team Orientation Culture; CDC= Capability and development; FC= Future Culture; SDIC=Strategic Direction and Intent Culture; GOC= Goals and Objective Culture; VC= Vision Culture; INC= Innovative Culture; BC= Bureaucratic Culture; TC=Task Culture; NC= National Culture

1.2 Average Variances Extracted (AVE)

AVEs provide additional support for convergent validity assessment. While AVEs are used in conjunction with latent variable correlations in the assessment of a measurement instrument's discriminant validity (Kock, 2013), the AVE measures the variance captured by the indicators relative to measurement error, which is used to measure convergent validity. For convergent validity assessment, the AVE threshold frequently recommended for acceptable validity is 0.5 (Fornell & Larcker, 1981), and applies only to reflective latent variables. The average variances extracted in this study (Table 8.18) were in the range of 0.500 and 0.744, except MbE, EC, and ToC constructs, where the AVEs were 0.482, 0.495 and 0.478 respectively. These constructs, however, had gained very high loadings (Table 8.17). Hence, they could be considered as valid measures (Mohamadali, 2012). Overall, the results show that all 17 constructs (Individualized Influence (IInf); Intellectual Stimulation (IStim); Individualized Support (ISup); Contingent Reward (CR); Management by Exception (MbE); Servant Leadership (SL); Empowerment Culture (EC); Team Orientation Culture (ToC); Capability and development (CDC); Future Culture (FC); Strategic Direction and Intent Culture (SDIC); Goals and Objective Culture (GOC); Vision Culture (VC); Innovative Culture (InC); Bureaucratic Culture (BC); Task Culture (TC); and National Culture (NC)) were all valid measures of their respective constructs based on their parameter estimates, and they exhibited reasonable convergent validity of the measurement models proposed in this project (Hair et al., 2010; Nunnally, 1994).

Table 8.18: Average Variances Extracted for all latent variables

IInf	IStim	ISup	CR	MbE	SL	EC	ToC	CDC	FC	SDIC	GOC	VC	InC	BC	TC	NC
0.706	0.656	0.477	0.716	0.489	0.497	0.613	0.485	0.667	0.53	0.715	0.738	0.672	0.629	0.624	0.547	0.548

Note: IInf = Individualized Influence; IStim= Intellectual Stimulation; ISup= Individualized Support; CR= Contingent Reward; MbE= Management by Exception; SL= Servant Leadership; EC= Empowerment Culture; ToC= Team Orientation Culture; CDC= Capability and development; FC= Future Culture; SDIC=Strategic Direction and Intent Culture; GOC= Goals and Objective Culture; VC= Vision Culture; InC= Innovative Culture; BC= Bureaucratic Culture; TC=Task Culture; NC= National Culture

2. Discriminant Validity

In addition to convergent validity, it is necessary to assess the discriminant validity of all constructs. In the convergent validity test the items were checked to ensure that they reflected one underlying construct. In discriminant validity the items were checked to ensure that they measured only the construct of interest and not other constructs. Kock (2013, p. 88) stated that “A measurement instrument has good discriminant validity if the question-statements (or other measures) associated with each latent variable are not confused by the respondents, in terms of their meaning, with the question-statements associated with other latent variables”. Using the AVE coefficients, the discriminant validity of the latent variables can be shown (Kock, 2013). Table 8.19 shows the square roots of average variance extracted of latent variables as well as latent variable correlations. Square roots of AVEs are given on the diagonal. The criterion for discriminant validity assessment is as follows: for each latent variable, the square root of the average variance extracted should be higher than any of the correlations involving that latent variable (Fornell & Larcker, 1981). As square roots of AVEs were greater than any other bivariate correlations, it was concluded that measurements had good discriminant validity (values are presented in Table 8.13). This indicates that all the instrument’s questions were understood and answered correctly. Furthermore, participants directly associated every question in the questionnaire with the underlying latent variables and thereby were not confused by answering the questions with respect to other latent variables.

Table 8.19: Correlations among latent variables with square roots of AVEs

	IINF	ISTIM	ISUP	CR	MBE	SL	EC	TOC	CDC	FC	SDIC	GOC	VC	INC	BC	TC	NC
IINF	0.812																
ISTIM	0.548	0.715															
ISUP	0.595	0.583	0.73														
CR	0.673	0.584	0.567	0.81													
MBE	0.468	0.4	0.427	0.447	0.628												
SL	0.482	0.496	0.504	0.503	0.374	0.64											
EC	0.33	0.358	0.362	0.415	0.037	0.32	0.742										
TOC	0.326	0.511	0.458	0.27	0.183	0.277	0.177	0.651									
CDC	0.507	0.459	0.578	0.594	0.37	0.466	0.314	0.222	0.759								
FC	0.488	0.516	0.515	0.495	0.352	0.506	0.228	0.401	0.428	0.641							
SDIC	0.579	0.556	0.591	0.588	0.378	0.489	0.374	0.337	0.524	0.551	0.785						
GOC	0.375	0.398	0.425	0.443	0.098	0.366	0.655	0.179	0.334	0.261	0.453	0.867					
VC	0.561	0.55	0.559	0.598	0.378	0.526	0.457	0.262	0.544	0.439	0.563	0.473	0.763				
INC	0.596	0.584	0.603	0.604	0.449	0.586	0.337	0.317	0.521	0.582	0.66	0.434	0.634	0.8			
BC	0.765	0.633	0.63	0.675	0.504	0.527	0.359	0.379	0.571	0.549	0.665	0.442	0.676	0.654	0.786		
TC	0.742	0.632	0.605	0.681	0.457	0.546	0.417	0.343	0.534	0.544	0.608	0.482	0.601	0.647	0.712	0.732	
NC	-0.44	-0.408	-0.508	-0.446	-0.5	-0.39	-0.208	-0.118	-0.433	-0.4	-0.407	-0.186	-0.447	-0.531	-0.483	-0.466	0.782

Note: IINF= Individualized Influence; ISTIM= Intellectual Stimulation; ISUP= Individualized Support; CR= Contingent Reward; MbE= Management by Exception; SL= Servant Leadership; EC= Empowerment Culture; ToC= Team Orientation Culture; CDC= Capability and development; FC= Future Culture; SDIC=Strategic Direction and Intent Culture; GOC= Goals and Objective Culture; VC= Vision Culture; INC= Innovative Culture; BC= Bureaucratic Culture; TC=Task Culture; NC= National Culture

Note: Square roots of average variances extracted are shown diagonally.

3. Variance Inflation Factor (VIF)

Variance inflation factor (VIF) measures the degree of multi-collinearity among variables, including both indicators and latent variables. Therefore, a full collinearity test was run to examine if there was multi-collinearity among constructs. With latent variables, collinearity can either run vertically and/or laterally (Kock & Lynn, 2012). The vertical collinearity refers to predictor-predictor latent variable collinearity whereas lateral collinearity refers to predictor-criterion latent variable collinearity, which might lead to misleading results (Kock, 2013). Full collinearity VIFs allow for the simultaneous assessment of both vertical and lateral collinearity in an SEM model (Kock & Lynn, 2012). When two or more variables are highly correlated it may indicate that variables which are supposed to measure different constructs actually measure the same construct (Kline, 2010). VIF should be lower than five although a more relaxed criterion is that they should be lower than 10 (Hair et al., 1987; Kline, 1998). Testing found that the VIF values for all latent variables were less than the threshold of five as suggested by Hair et al. (2010). The highest VIF value was 4.646 for bureaucratic culture (as shown in Table 8.20) which indicated the low degree of redundancy of each measurement item.

Therefore, considering that the highest VIF score was 4.646 in the current model, there was no multi-collinearity.

Table 8.20: Full collinearity VIFs (Latent Variables)

IInf	IStim	ISup	CR	MbE	SL	EC	ToC	CDC	FC	SDIC	GOC	VC	InC	BC	TC	NC
3.309	3.659	2.208	3.153	1.501	1.725	2.187	1.949	2.721	3.403	3.668	2.144	3.176	3.342	4.646	3.517	1.737

Note: IInf = Individualized Influence; IStim= Intellectual Stimulation; ISup= Individualized Support; CR= Contingent Reward; MbE= Management by Exception; SL= Servant Leadership; EC= Empowerment Culture; ToC= Team Orientation Culture; CDC= Capability and development; FC= Future Culture; SDIC=Strategic Direction and Intent Culture; GOC= Goals and Objective Culture; VC= Vision Culture; InC= Innovative Culture; BC= Bureaucratic Culture; TC=Task Culture; NC= National Culture

In summary, the measurement model was assessed by four steps; model fitness, reliability, validity (convergent validity and discriminant validity), and collinearity. The output model fit was assessed by using three indices: average path coefficient (APC), average R-squared (ARS), and average variance inflation factor (AVIF). All measures (i.e. APC, ARS, and AVIF) were statistically significant, indicating that there was a good fit of the model. Measurement reliability was assessed by both Cronbach's alpha and composite reliability. Since the values for Cronbach's alpha and composite reliability were above the recommended threshold of 0.7 (or in some cases 0.6), the reliability of the measurements was considered valid. Furthermore, measurement validity was assessed in the form of convergent validity and discriminant validity. Convergent validity was assessed using factor loading. As shown in Tables 8.17 and 8.18, loading of the measurement item and AVE exceeded the recommended value of 0.50 indicating the acceptable level. The fourth property, discriminant validity, was examined through the square root of AVE, and the results shown in Table 8.19 demonstrate that each factor in the measurement model was empirically distinguishable. Consequently, these results show that the model met widely-accepted data validation criteria, suggesting that the results of the SEM can generally be trusted as free from data-measurement problems (Kline, 2005; Schumacker & Lomax, 2004). The next step in the data analysis involved examining the structural models in order to test the research hypotheses of this study.

8.17 Stage Two: Assessing the Structural Model

Since the measurements indicated good reliability and validity, it was necessary to perform a structural equation modelling analysis for hypotheses-testing. Thus, the next stage of data analysis involved examining the structural models in order to test the hypotheses. As has been seen, all the values of measurements were within acceptable standard limits. Therefore, the measurement model in this study demonstrated sufficient robustness to examine the relationships between the predictor and criterion variables. Assessing the structural model with the aim of determining the explanatory power of the model and testing the proposed research hypotheses in Chapter 6 will be explored and presented in the next section.

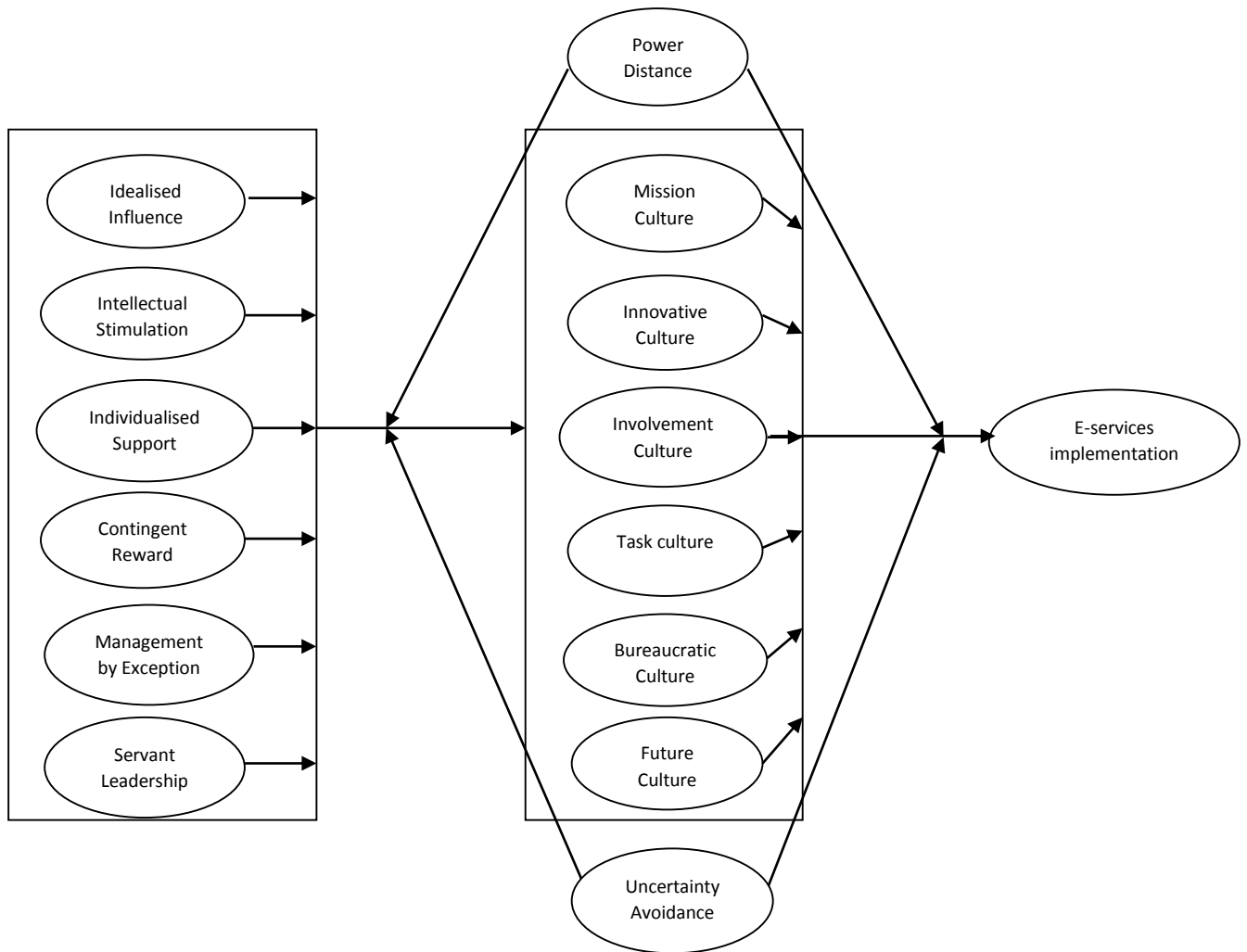
The aim of this stage was to test the hypotheses in order to answer the research questions outlined in Chapter 1. The causal structure of the model was assessed to examine the effects among the constructs defined in the proposed models through the estimation of the coefficient of determination (R^2), path coefficient, significance and loadings (p and β), effect size (f^2) and predictive relevance where, according to Chin (1998), R^2 and β explain how well the data support the hypothesis model. Consequently, it is necessary to look at the sign, size, and statistical significance of the path coefficient (β) that relates latent variables and its dependent variables so as to support or reject each hypothesis. The higher the path coefficient, the stronger the effect of the latent variable on the dependent one.

The model in Figure 8.1 presents all the variables as well as the links representing the hypothesized effects of this study. Each link between two variables represents a hypothesized effect. As shown in Table 8.21, the proposed hypotheses were presented in 27 casual paths to determine the relationships for all constructs.

Table 8.21: Hypotheses testing

	Hypothesis
	1.General hypothesis
H1	There is a positive relationship between leadership and organisational culture
H2	There is a positive relationship between organisational culture and electronic services
H3	There is a positive relationship between leadership and e-services implementation
H4	There is a positive relationship between transformational leadership and organisational culture.
H5	There is a positive relationship between transactional leadership and organisational culture
H6	There is a positive relationship between servant leadership and organisational culture
H7	National culture has an effect on the relationship between leadership and organisational culture
H8	National culture has an effect on the relationship between organisational culture and the use of electronic services
	2.Transformational leadership hypothesis
	2.1 idealized influence
H9a	There is a positive relationship between charisma (idealized influence) and mission culture
H9b	There is a positive relationship between mission culture and e-services implementation
H9c	There is a positive effect of Idealized influence and e-services implementation through the mediation of mission culture
	2.2 Intellectual stimulation
H10a	There is a positive relationship between intellectual stimulation and innovation culture.
H10b	There is a positive relationship between innovation culture and e-services implementation
H10c	There is a positive effect on intellectual stimulation and e-services implementation through the mediation of innovation culture
	2.1 Individualized support
H11a	There is a positive relationship between individualized support and involvement culture
H11b	There is a positive relationship between involvement culture and e-services implementation
H11c	There is a positive effect on individualized support and e-services implementation through the mediation of involvement culture
	3. Transactional leadership
	3.1 contingent reward
H12a	There is a positive relationship between contingent reward and task-oriented culture
H12b	There is a positive relationship between task-oriented culture and e-services implementation
H12c	There is a positive effect on contingent reward and e-services implementation through the mediation of task-oriented culture
	3.2 Management-by-exception
H13a	There is a relationship between management-by-exception and bureaucratic culture
H13b	There is a negative relationship between bureaucratic culture and e-services implementation.
H13c	There is a positive effect on management-by-exception and e-services implementation through the mediation of bureaucratic culture.
	4. Servant leadership
H14a	There is a positive relationship between servant leadership and future culture.
H14b	There is a positive relationship between future culture and e-services implementation.
H14c	There is a positive effect of servant leadership and e-services implementation through the mediation of future culture.

Figure 8.5: Research Model Hypotheses

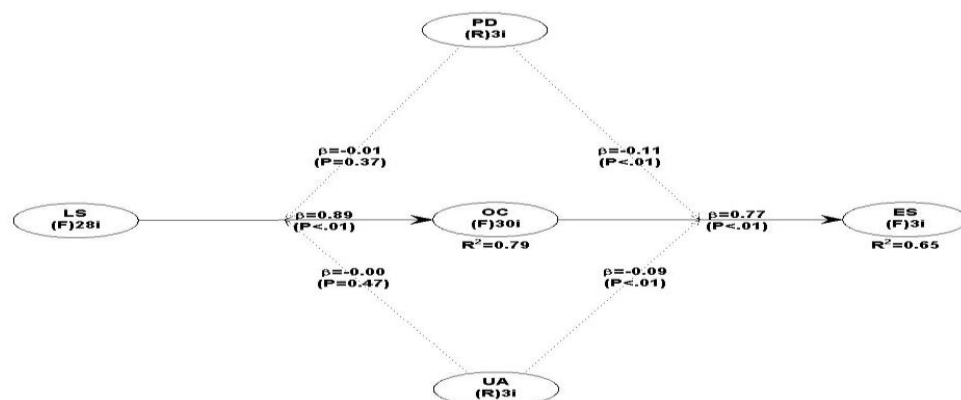


8.18 Assessment of Coefficient of Determination, R^2

R^2 determines the prediction power of the model. R^2 is a measure calculated only for endogenous (criterion) latent variables. It reflects the percentage of explained variance for each of those latent variables. R^2 is a measure of the goodness of fit of the model and takes values between 0 (no explanation) and 1 (perfect fit) (Judge, 2011). The higher the R^2 , the more useful the model (Kock, 2013; Chin, 1998). Figures 8.2, 8.3, 8.4, and 8.5 show the R^2 for each of the endogenous variables defined in the proposed model. Figure 8.2 shows the relationships between the three variables of leadership, organisational culture, national culture, and e-services. Figure 8.3 shows the main leadership styles – transformational, transactional, and servant, and organisational culture in three

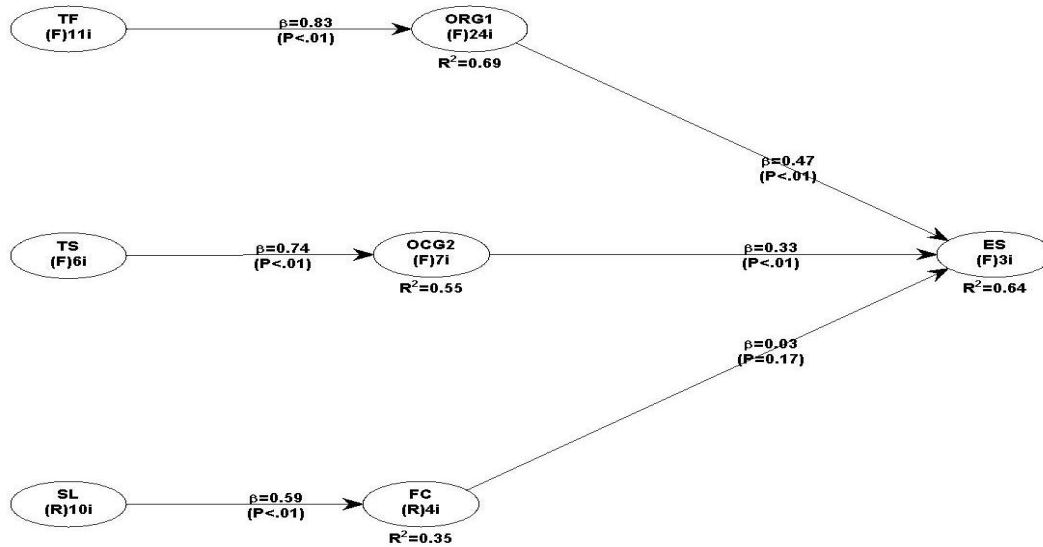
dimensions; group one includes mission, innovation, and involvement culture; group two includes task and bureaucratic culture and future culture. Figure 8.4 shows the sub-dimensions of transformational (idealised influence, intellectual stimulation, and individualised support), transactional (contingent reward and management by exception) as well as servant leadership. Organisational culture is detailed in six dimensions: mission, innovative, involvement, task, bureaucratic, and future culture. Figure 8.5 gives more details about organisational culture dimensions where mission culture includes three other sub-dimensions: strategic direction and intent, goals and objectives, and vision. Involvement culture includes empowerment, team orientation, and capability development.

Figure 8.6: Research Model Hypotheses



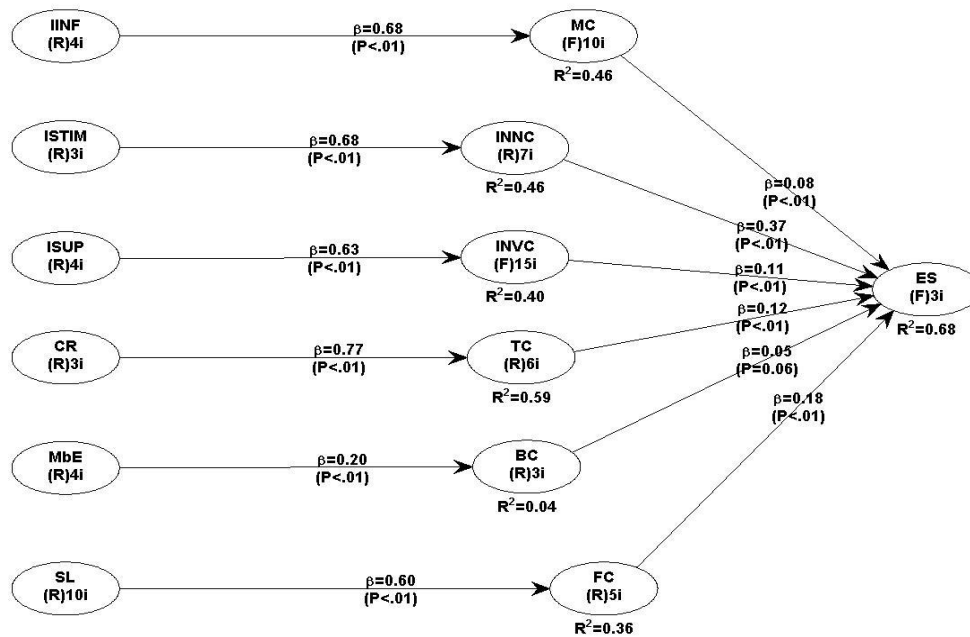
Note: LS= Leadership Style, OC= Organisational Culture, PD= Power Distance, UA=Uncertainty Avoidance, and ES=Electronic Services.

Figure¹⁰ 8.7: Research Model Hypotheses



Note: TL= Transformational Leadership, TS= Transactional Leadership, SL= Servant Leadership, OCG1= Mission, Innovative, and Involvement Culture, OCG2= Task and Bureaucratic Culture, FC= Future Culture, EU= Electronic Use

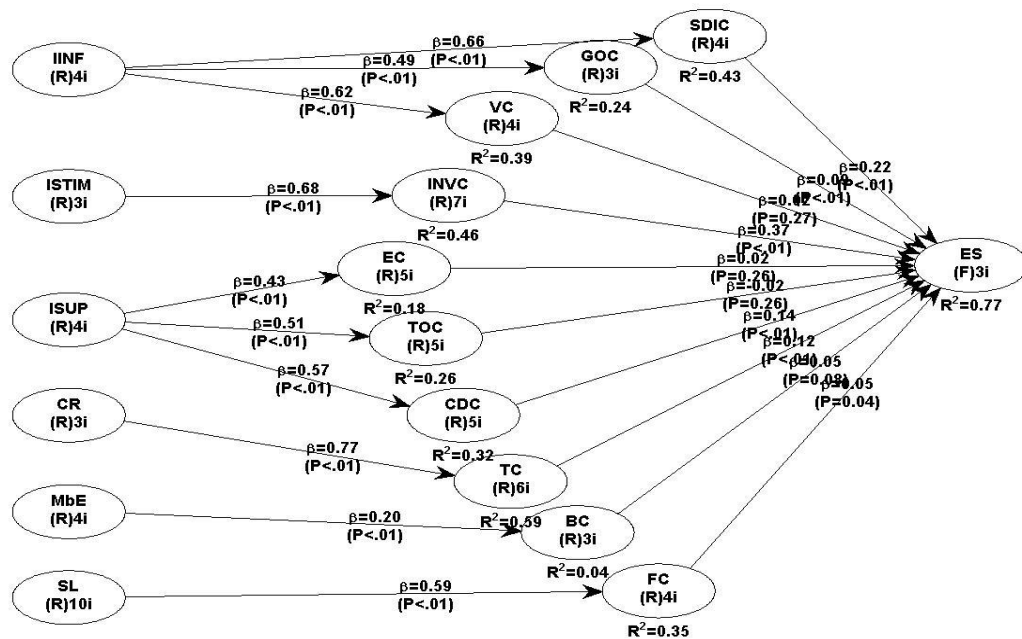
Figure 8.8: Research Model Hypotheses



Note: IINF = Individualized Influence; ISTIM= Intellectual Stimulation; ISUP= Individualized Support; CR= Contingent Reward; MbE= Management by Exception; SL= Servant Leadership; MC= Mission Culture, INC= Innovative Culture; INVC= Involvement Culture, BC= Bureaucratic Culture; TC=Task Culture; FC= Future Culture.

¹⁰ For clarity, national culture dimensions have not been included in the three figures (8.3, 8.4, and 8.5)

Figure 8.9: Research Model Hypotheses



Note: IInf = Individualized Influence; IStim= Intellectual Stimulation; ISup= Individualized Support; CR= Contingent Reward; MbE= Management by Exception; SL= Servant Leadership; EC= Empowerment Culture; ToC= Team Orientation Culture; CDC= Capability and development; FC= Future Culture; SDIC=Strategic Direction and Intent Culture; GOC= Goals and Objective Culture; VC= Vision Culture; InC= Innovative Culture; BC= Bureaucratic Culture; TC=Task Culture

8.19 Assessment of Effect Size, f^2

Effect size investigates the relationships between independent latent variables and dependent variables (Chin, 1998; Cohen, 1992). Effect size is the magnitude of the impact of the independent variable on the dependent variable (Kline, 2009, p. 153). It is rarely reported in studies and constitutes ‘a defect’ as described by Kline (2009, pp. 154). “For the reader to appreciate the magnitude or importance of a study’s findings, effect size needs to be included in the study” (APA¹¹, 2009, p. 34). Furthermore, JAE¹² (2010, p.1) requires that “Authors must report effect sizes when reporting statistical significance for quantitative data analyses”.

¹¹The Publication Manual of the American Psychological Association

¹²American Association for Agricultural Education

‘Effect size’ focuses on the meaning of the results and enables comparisons between or among studies, which further enables researchers to judge the practical significance of quantitative research results (Kotrlik et al, 2011). Effect sizes are calculated as the absolute values of the individual contributions of the corresponding predictor latent variables to the R^2 coefficients of the criterion latent variable in each latent variable block (Kock, 2013). Values of effect size between 0.02 and 0.15 indicate that the effect by path coefficient is small; between 0.15 and 0.35 it is considered to be medium; and exceeding 0.35 indicates a large effect (Cohen, 1998). Values below 0.02 suggest that the effects are too weak to be considered relevant from a practical point of view, even when the corresponding P values are statistically significant (Kock, 2013, p.53). This, however, may occur with large sample sizes (ibid).

The model proposed in this study consists of six exogenous variables (leadership variables) and six endogenous variables (organisational culture variables). All constructs had between small, medium and large impacts on the related dependant variable, except bureaucratic culture which had a weak impact on e-services implementation. Tables 8.22 and 8.123 present the effect size of the endogenous variables defined in the theoretical model.

Table 8.22: the Effect Size, f^2 for the Total Effects

Endogenous Variables	f^2	Inferences
MC	0.464	IINF has a large effect on MC
INNC	0.464	ISTIM has a large effect on INNC
INVC	0.400	ISUP has a large effect on INVC
TC	0.589	CR has a large effect on TC
BC	0.041	MbE has a small effect on BC
FC	0.357	SL has a large effect on FC

Note: IINF = Individualized Influence; ISTIM= Intellectual Stimulation; ISUP= Individualized Support; CR= Contingent Reward; MbE= Management by Exception; SL= Servant Leadership; EC MC= Mission Culture, INC= Innovative Culture; INVC= Involvement Culture, BC= Bureaucratic Culture; TC=Task Culture; FC= Future Culture; ES=Electronic Services.

Table 8.23: The Effect Size, f^2 , of the Exogenous LVs on Endogenous LVs

Endogenous Variable	f^2	Inferences
ES	0.034	IINF has a small effect on ES
ES	0.145	ISTIM has a small effect on ES
ES	0.043	ISUP has a small effect on ES
ES	0.065	CR has a small effect on ES
ES	0.003	MbE has a small effect on ES
ES	0.053	SL has a small effect on ES

Note: IINF = Individualized Influence; ISTIM= Intellectual Stimulation; ISUP= Individualized Support; CR= Contingent Reward; MbE= Management by Exception; SL= Servant Leadership; EC MC= Mission Culture, INC= Innovative Culture; INVC= Involvement Culture, BC= Bureaucratic Culture; TC=Task Culture; FC= Future Culture; ES=Electronic Services.

8.20 Predictive Validity (or relevance), Q^2

Q-squared is a non-parametric measure (Henseler et al., 2009). It is used for the assessment of the predictive validity (or relevance) associated with each latent variable block in the model through the endogenous latent variable that is the criterion variable in the block (Kock, 2013). Stone-Geisser's Q^2 (Stone, 1974; Geisser, 1975) is the predominant measure of predictive validity, which can be measured using blindfolding procedures (Tenenhaus et al., 2005). Acceptable predictive validity for endogenous latent variables suggested by a Q^2 coefficient is > 0 (Urbach & Ahlemann, 2010; Kock, 2013). Table 8.24 shows that all endogenous latent variables had an acceptable level of predictive validity.

Table 8.24: Results on Predictive Validity of the Proposed Model

INVC	FC	MC	INNC	BC	TC	ES
0.398	0.355	0.46	0.46	0.044	0.586	0.679

Note: EC= Empowerment Culture; ToC= Team Orientation Culture; CDC= Capability and development; FC= Future Culture; SDIC=Strategic Direction and Intent Culture; GOC= Goals and Objective Culture; VC= Vision Culture; InC= Innovative Culture; BC= Bureaucratic Culture; TC=Task Culture.

8.21 Assessment of Hypotheses

Assessing the path of the proposed structural model was the next step in data analysis as the structural model had been confirmed. Figure 8.19 shows the related SEM analysis results together with the hypotheses. The theoretical model for this study, as shown in Figure 8.19, was constructed based on the hypotheses which were developed in Chapter 6. This theoretical model is a path model that formalized the hypothesized relationships

between the leadership, organisational culture, national culture, and electronic use as listed in Table 8.15. Each path corresponds to each proposed hypothesis. Examination of each hypothesis was based on three criteria: sign, size, and statistical significance of path coefficient (β) between predictor-criterion latent variables. In this study, the stable function of WarpPLS4.0 was used to assess the significance of the path coefficients. The higher the path coefficient the stronger the effect of the predictor variable on the criterion. In this study, most of the proposed relationships showed significance at $p < 0.001$. Based on the SEM analysis results, Table 8.25 and tables 8.26, 8.27, 8.28, 8.29, and 8.30 show the results of the hypotheses-testing and the results of path coefficients, significance, and loadings (p and β), and indirect effects for paths with two segments respectively. The hypotheses are supported empirically if the estimated path coefficient is in the hypothesized direction and significant. If an estimated path coefficient is not significant or if it is in the opposite direction and significant, the hypothesis is not supported (i.e. rejected). The column on the right side of the table indicates whether each hypothesis was supported or rejected.

Table 8.25: Summary of Hypotheses Testing Results

	Hypothesis	Status
	1. General hypothesis	
H1	There is a positive relationship between leadership and organisational culture	Supported
H2	There is a positive relationship between organisational culture and electronic services	Supported
H3	There is a positive relationship between leadership and e-services implementation	Supported
H4	There is a positive relationship between transformational leadership and organisational culture.	Supported
H5	There is a positive relationship between transactional leadership and organisational culture	Supported
H6	There is a positive relationship between servant leadership and organisational culture	Supported
H7	National culture has an effect on the relationship between leadership and organisational culture	Rejected
H8	National culture has an effect on the relationship between organisational culture and the use of electronic services	Supported
	2. Transformational leadership hypothesis	
	2.1 idealized influence	
H9a	There is a positive relationship between charisma (idealized influence) and mission culture	Supported
H9b	There is a positive relationship between mission culture and e-services implementation	Supported
H9c	There is a positive effect of Idealized influence and e-services implementation through the mediation of mission culture	Supported
	2.2 Intellectual stimulation	
H10a	There is a positive relationship between intellectual stimulation and innovation culture.	Supported
H10b	There is a positive relationship between innovation culture and e-services implementation	Supported
H10c	There is a positive effect on intellectual stimulation and e-services implementation through the mediation of innovation culture	Supported
	a. Individualized support	
H11a	There is a positive relationship between individualized support and involvement culture	Supported
H11b	There is a positive relationship between involvement culture and e-services implementation	Supported
H11c	There is a positive effect on individualized support and e-services implementation through the mediation of involvement culture	Supported
	3. Transactional leadership	
	3.1 contingent reward	
H12a	There is a positive relationship between contingent reward and task-oriented culture	Supported
H12b	There is a positive relationship between task-oriented culture and e-services implementation	Supported
H12c	There is a positive effect on contingent reward and e-services implementation through the mediation of task-oriented culture	Supported
	3.2 Management-by-exception	
H13a	There is a relationship between management-by-exception and bureaucratic culture	Supported
H13b	There is a negative relationship between bureaucratic culture and e-services implementation.	Rejected
H13c	There is a positive effect on management-by-exception and e-services implementation through the mediation of bureaucratic culture.	Supported
	4. Servant leadership	
H14a	There is a positive relationship between servant leadership and future culture.	Supported
H14b	There is a positive relationship between future culture and e-services implementation.	Supported
H14c	There is a positive effect of servant leadership and e-services implementation through the mediation of future culture.	Supported

Table 8.26: Path coefficient; significance and loadings (p and β) between leadership dimensions and organisational culture dimensions

	INVC	MC	INNC	BC	TC	FC	P values
IINF		0.681					0.001
ISTIM			0.681				0.001
ISUP	0.632						0.001
CR					0.8		0.001
MbE				0.202			0.001
SL						0.597	0.001

Table 8.27: Path coefficient: significance and loadings (p and β) between organizational culture dimensions and electronic services

	ES	P values
INVC	0.11	0.001
MC	0.08	0.006
INNC	0.366	0.001
BC	0.05	0.061
TC	0.12	0.001
FC	0.182	0.001

Table 8.28: Path coefficient: significance and loadings (p and β) between leadership dimensions and national culture

	LS	P values
PD	-0.011	0.34
UA	-0.003	0.467

Table 8.29: Path coefficient: significance and loadings (p and β) between organisational culture dimensions and national culture

	OC	P values
PD	-0.107	<0.001
UA	-0.089	<0.003

Table 8.30: Indirect effects for paths with two segments

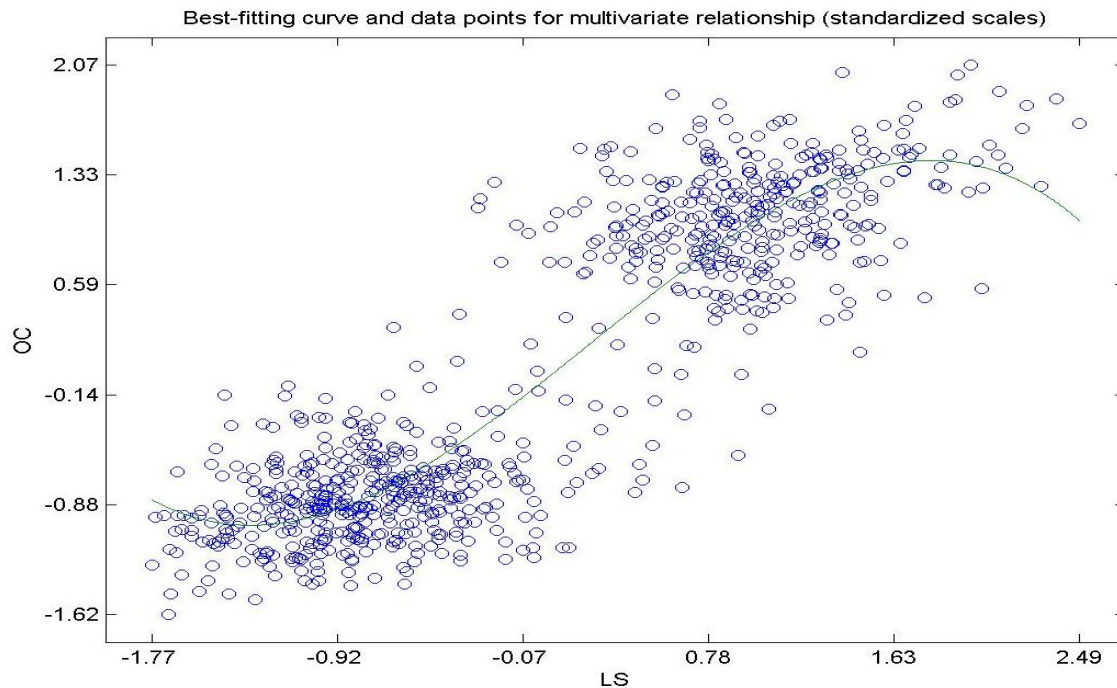
Leadership Dimensions	Indirect Effects on ES	P values
IINF	0.055	0.001
ISTIM	0.249	0.001
ISUP	0.069	0.001
CR	0.092	0.001
MbE	0.01	0.001
SL	0.109	0.001

8.22 General hypothesis

Hypothesis 1 proposed a positive association between leadership and organisational culture. The results showed that leadership has a significant ($p < 0.001$) and positive effect ($\beta = 0.897$) on organisational culture. Thus, hypothesis 1 was supported.

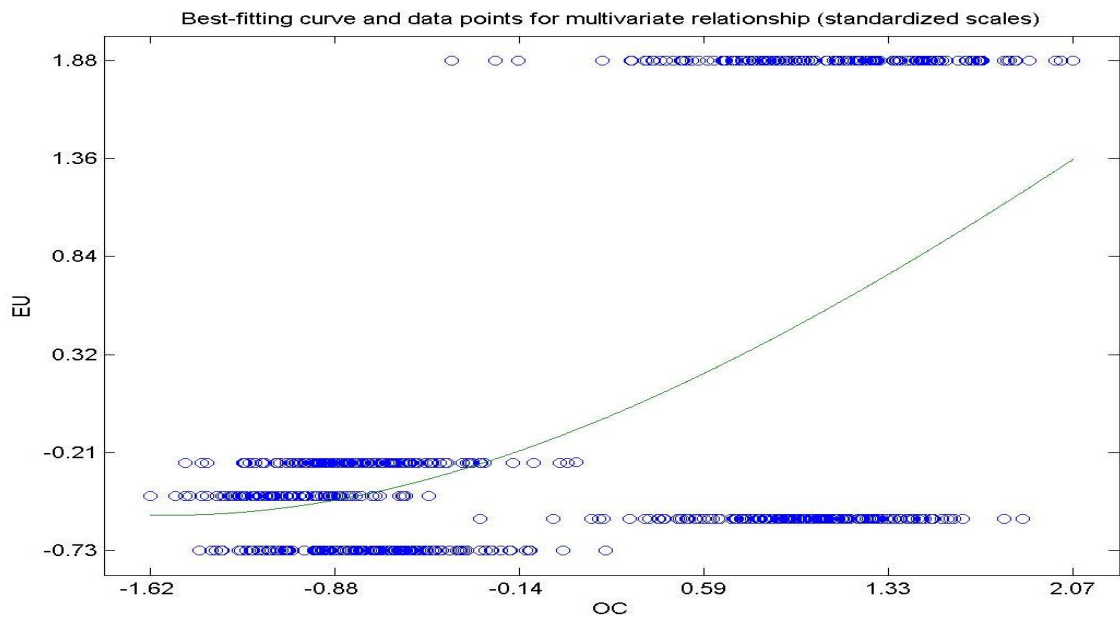
The relationships between latent variables can be visualized with the help of plots provided by WarpPLS 4.0. Figure 8.10 illustrates the relationships between leadership and organisational culture in the data. It shows the standardized values of the latent variables; the interpretation of these relationships is therefore based on the changes in standard deviations. The relationships between leadership and organisational culture was strong and nonlinear or ‘warp’ in a positive direction. Such relationships are known as U-, J- or Kuznet-curves depending on the direction of the curve and the amount of non-linearity (Selden & Song, 1995). Also, considering the estimated coefficient ($\beta = 0.897, p < 0.001$), one standard deviation increase in leadership leads to 0.897 standard deviation increase in organisational culture. In practical terms, this result means that for every one percent increase in leadership role in the organization there is an expected 8.97 percent increase in organisational culture effectiveness.

Figure 8.10: The relationship between leadership and organisational culture



Hypothesis 2 stated that there is a positive relationship between organisational culture and electronic services. As expected, organisational culture had a significant positive association with electronic services ($\beta = 0.53$), $p < 0.001$), indicating that organisational culture is considered as a good mean to be used as a mediating effect on some organisational issues such as e-services within the organisations. However, this effect is more than the effect of leadership on e-services implementation ($\beta = 0.47$), $p < 0.001$). Thus, Hypothesis 2 was supported. Figure 8.11 depicts the relationship between organisational culture and electronic services, showing a positive relationship between them. Also, considering the estimated coefficient ($\beta = 0.53$, $p < 0.001$), one standard deviation increase in organisational culture leads to a standard deviation increase in e-services implementation of 0.53. In practical terms, this result means that for every one percent increase in the proposed organisational culture within the organization, there is an expected 5.3 percent increase in e-services implementation.

Figure 8.11: The relationship between organisational culture and electronic services

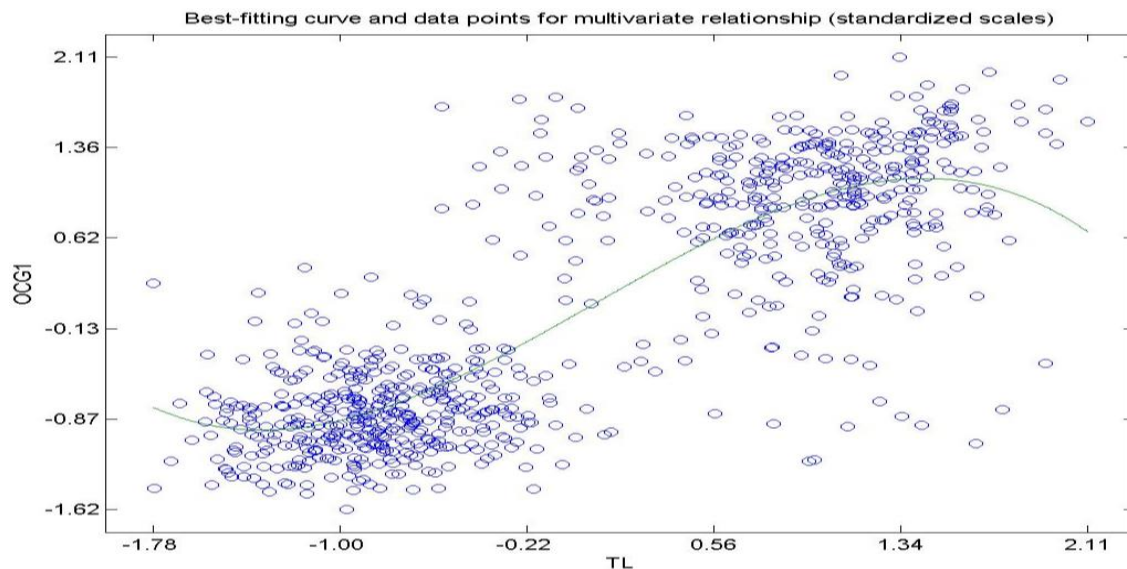


In Hypothesis 3, transformational leadership was anticipated to be positively associated with organisational culture¹³. As expected, transformational leadership ($\beta = 0.83$), $p < 0.01$) had a significant positive association with organisational culture, suggesting that the transformational style creates (or manipulates) the appropriate organisational culture that lead to e-services implementation. Therefore, this hypothesis was supported. Figure 8.12 shows that the relationships between transformational leadership and the appropriate dimensions of organisational culture were similar to the relationships between leadership and organisational culture. It demonstrates that this relationship was a positive relationship and it started to enhance organisational culture at a certain threshold. This threshold appears to be at approximately -0.61 standard deviation to the right of the mean of the standardized data. It can be identified in terms of the seven-point Likert scale as equalling 2.04 after adding the mean ($M=2.83$) to - 0.61 of one standard deviation ($SD=1.30$). In other words, this graph shows a non-linear relationship

¹³ Mission, involvement, and innovative culture

in which transformational leadership begins to affect organizational culture at a 2.04 point Likert-scale threshold.

Figure 8.12: The relationship between transformational leadership and organisational culture

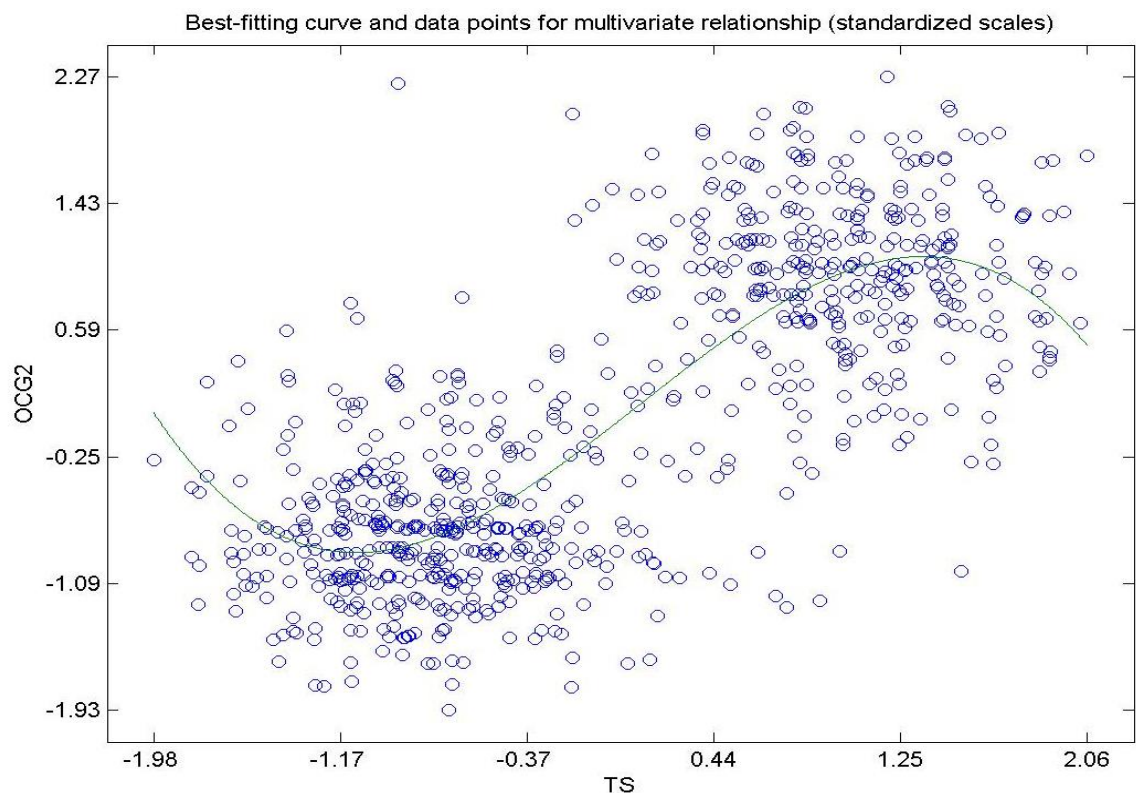


Hypothesis 4 proposed that transactional leadership is positively associated with organisational culture. Consistent with the hypothesis, the transactional style had a significant positive association with organisational culture ($\beta=0.74$, $P<0.01$), denoting that transactional style works well for creating the required cultural typology within the organization. Although this style has been criticized because it is characterized as a management style more than a leadership style, the magnitude of its coefficient ($\beta=0.74$) was the second strongest coefficient among all relationships (between LS and OC, and between OC and ES). Thus this hypothesis was supported. Figure 8.13 shows that the relationships between transactional leadership and the appropriate dimensions of organisational culture were similar to the relationship between leadership (and also TF) and organisational culture¹⁴. It demonstrates that this relationship was a positive relationship. The relationship started to enhance organisational culture at a certain

¹⁴ Task and bureaucratic culture

threshold; that is, at approximately -1.20 standard deviation to the right of the mean of the standardized data. The threshold can also be identified in terms of the seven-point Likert scale as equalling 1.38 after adding the mean ($M=2.92$) to -1.20 of one standard deviation ($SD=1.28$). This graph shows a non-linear relationship in which transactional leadership begins to affect organizational culture at a 1.38 point Likert-scale threshold.

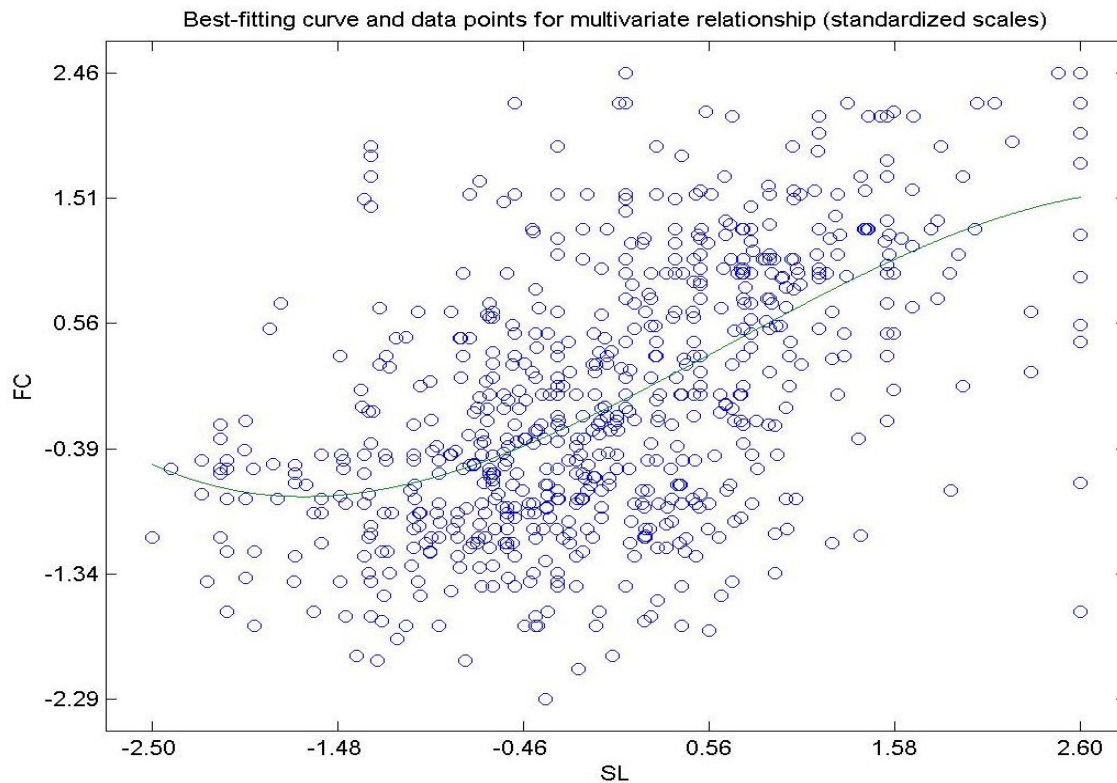
Figure 8.13: The relationship between Transactional Leadership and Future Culture



Hypothesis 5 stated that servant leadership has a positive effect on future culture. As expected, the relationship between these two constructs was positive ($\beta = 0.581$), with a significance level of (< 0.001), indicating that H4 was supported. Figure 8.14 shows that the relationship between servant leadership and future culture was a positive relationship. This result can be interpreted practically by saying that for every one percent increase in servant leadership behaviour there was a 5.81 percent increase in future culture within the organisation. Furthermore, the influence of servant leadership started to affect future culture at a threshold of approximately -1.48 standard deviation to the right of the mean

of the standardized data. This threshold can also be identified, in terms of the seven-point Likert scale, as equalling 1.9 after adding the mean ($M=3.27$) to -1.48 of one standard deviation ($SD=0.92$). This graph shows a non-linear relationship in which transactional leadership begins to affect organizational culture at a 1.9 Likert scale point threshold.

Figure 8.14 The relationship between Servant Leadership and Organisational Culture



Hypotheses 7 and 8 address the association between national culture and the relationship between leadership styles and organisational culture and between national culture and relationship between organisational culture and e-services implementation. National culture did not have a significant positive or negative effect on the relationship between leadership style and organisational culture. Therefore Hypothesis 7 was rejected. However, it had a negative relationship between organisational culture and e-services implementation which means that Hypothesis 8 was supported.

8.23 Transformational leadership hypothesis

This section examines the hypotheses regarding the transformational leadership sub-dimensions of idealized influence, intellectual stimulation, and individualized consideration. Hypothesis 9a anticipated a positive relationship between charisma (idealized influence) and mission culture. Empirical findings show that there was a significant association between idealized influence and mission culture where ($\beta = 0.671$) with a significance level of (< 0.001), indicating that H9a was supported.

Hypothesis 9b, in the same category, suggested that mission culture has a positive impact on e-services implementation. The results showed that mission culture had a significant ($P < 0.001$) and positive ($\beta = 0.114$) effect on e-services implementation. Thus, Hypothesis 10b was supported.

Hypothesis 9c suggested that idealized influence has a positive effect on e-services implementation through the mediation of mission culture. This hypothesis was confirmed statistically with ($\beta = 0.076$) and a significance level of (< 0.001). Therefore, this hypothesis was supported.

Hypothesis 10a associates intellectual stimulation with innovation culture positively. The result shows that the path coefficient between intellectual stimulation and innovation culture has a magnitude of ($\beta = 0.669$) and a significance level of (< 0.001) which leads to an acceptance of this hypothesis.

Hypothesis 10b, in the same category, suggested that innovative culture has a positive impact on e-services implementation. The results showed that innovative culture has a significant ($P < 0.001$) and positive ($\beta = 0.312$) effect on e-services implementation. Thus, Hypothesis 10b was supported.

Hypothesis 10c proposed that intellectual stimulation has a positive effect on e-services implementation through the mediation of innovation culture. As expected, intellectual stimulation ($\beta = 0.208$, $p < 0.001$) had a significant positive association with e-services implementation through the mediation of innovation culture. Therefore, this hypothesis was supported.

Hypothesis 11a stated that there is a positive relationship between individualized support and involvement culture. The test for ($\beta = 0.618$) indicates that there is a positive relationship between individualized support and involvement culture with a significance level of ($p < 0.001$), hence there is sufficient statistical evidence to accept Hypothesis 11a and to conclude that individualized support contributes to the creation or manipulation of the culture of involvement within organisations.

Hypothesis 11b proposed that there is a positive relationship between involvement culture and e-services implementation. It was found that involvement culture have a significant positive association with e-services implementation ($\beta = 0.11$, $p < 0.01$), implying that greater involvement by employees does translate into a higher level of e-services implementation. The hypothesis was supported.

Hypothesis 11c associates individualized support and e-services implementation through the positive mediation of involvement culture. As expected, individualized support had a positive association ($\beta = 0.004$, $p < 0.01$) on e-services implementation, hence there is sufficient statistical evidence to accept Hypothesis 12c and conclude that individualized support contributes to e-services implementation within organisations.

8.24 Transactional leadership hypotheses

This category examines hypotheses regarding the transactional leadership sub-dimensions of contingent reward (CR), and management by exception (MbE). Hypothesis

12a anticipated that there would be a positive relationship between contingent reward and task-oriented culture. The findings show that there was a significant association between contingent reward and task-oriented culture where ($\beta=0.77$) with a significance level of (<0.001), indicating that H12a was supported.

In Hypothesis 12b, task-oriented culture was anticipated to be positively associated with e-services implementation. The results confirm that the association between task-oriented culture and e-services implementation was significant ($\beta=0.12$, $p<0.01$), implying that task-oriented culture related to the implementation of the e-services in the workplace. The hypothesized effect in 12b was supported.

Hypothesis 12c associates contingent reward and e-services implementation through the positive mediation of task-oriented culture. As expected, contingent reward had a positive association ($\beta = 0.23$, $p < 0.01$) on e-services implementation, hence there was sufficient statistical evidence to accept Hypothesis 12c and conclude that contingent reward contributes to e-services implementation within organisations.

Hypothesis 13a proposed that there is a positive relationship between management-by-exception and bureaucratic culture. The results confirm that the association between management-by-exception and bureaucratic culture was positive ($\beta=0.20$, $p<0.01$). Therefore, Hypothesis 14a was supported.

In Hypothesis 13b, bureaucratic culture was anticipated to be positively associated with e-services implementation. Surprisingly, the results show that the association between bureaucratic culture and e-services implementation was positively significant ($\beta=0.05$, $p<0.06$), implying that bureaucratic culture related positively to the implementation of e-services in the workplace. This means that the more bureaucratic the culture within organisations the more e-services are implemented. The hypothesized effect was supported (13b).

Hypothesis 13c associated management-by-exception and e-services implementation through a mediation of bureaucratic culture. The results confirm that management-by-exception did have an association ($\beta=0.202$, $p<0.01$) with e-services implementation, hence there is sufficient statistical evidence to accept Hypothesis 13c and conclude that management-by-exception could be an important factor to e-services implementation within organisations.

8.25 Servant leadership hypotheses

This is the third and last category of leadership styles. Hypothesis 14a suggested that there is a positive relationship between servant leadership and future culture. As expected, empirical findings showed that there was a significant association between servant leadership and future culture with ($\beta=0.597$) and a significance level of (< 0.001), indicating that H15a was supported.

In Hypothesis 14b, future culture was anticipated to be positively associated with e-services implementation. The results show that the association between future culture and e-services implementation was negatively significant ($\beta=0.182$, $p<0.01$), implying that future culture related positively to the implementation of e-services in the workplace. This means that an organisation which has a high future-orientated culture will achieve a higher degree of e-services implementation. The effect hypothesized in 15b was supported.

Hypothesis 14c associates servant leadership and e-services implementation through the positive mediation of future culture. No significant association was reported between servant leadership ($\beta = 0.026$, $p > 0.05$) on e-services implementation, hence there is sufficient statistical evidence to reject Hypothesis 15c and conclude that servant leadership does not contribute to e-services implementation within organisations.

8.26 Summary

The analysis and results were presented and discussed in this chapter. The technique that was used was introduced and explained. The use of the partial least square (PLS) technique as a method of analysis was justified. This study used SPSS version 20 and WarpPLS 4.0 to analyse the data, and SPSS software was utilised to analyse the demographic details of participants. The first step in the process of analysis entailed preparing the data by editing the data through the questionnaire and by coding the questions. The second step required screening which was performed to identify any missing data and outliers as well as sample size.

After cleaning the data, the second part of the analysis entailed use of PLS. This analysis was performed in two stages. In the first stage, the measurement model was assessed for model fitness, construct reliability, and validity. In testing for model fitness, all measures (i.e. APC, ARS, and AVIF) were found to be statistically significant, indicating that there was a good fit for the model. Also, in testing for the reliability of individual items, factor loading was assessed. Results indicated that all constructs were reliable (after removing some items). In order to confirm the validity of each construct, convergent, composite reliability and AVE were also assessed. Further, discriminant validity was examined for each of the constructs. Once all these measures had been performed and all the constructs were confirmed as valid and reliable, the constructs in this thesis were eligible for testing the hypotheses.

The hypothesized structural model was examined in the second stage, including 24 paths representing the hypotheses (H1, H2, H3, H4, H5, H6, H7, H8, H9a, H9b, H9c, H10a, H10b, H10c, H11a, H11b, H11c, H12a, H12b, H12c, H13a, H213b, H13c, H14a, H14b and H14c). 23 hypotheses were found to be significant on the proposed path. The

next chapter discusses the results obtained in this chapter, in order to answer the research questions outlined in Chapter One.

CHAPTER NINE

DISCUSSION

9.1. Introduction

Chapter Eight reported the results of testing the hypotheses identified in Chapter Six. This chapter interprets those results in order to fulfil the aims of this thesis (Section 1.5) by answering the eight research questions outlined in Chapter One. These are:

1. Which styles of leadership are best suited to e-services implementation?
2. Which styles of leadership are best suited to fostering an organisational culture which supports the implementation of e-services?
3. Which dimensions of organisational culture affect e-services implementation?
4. Which dimensions of national culture affect e-services implementation?
5. What are the appropriate measures for ensuring the implementation of e-services?
6. How can a new model be created that will help achieve the implementation of e-services, taking particular account of leadership style and organisational culture?
7. How can the proposed model be evaluated using public and private agencies in KSA?

This chapter is presented in eight sections. Following the introduction, the results obtained from testing the hypotheses are summarized in Section 9.2. The next four sections discuss the results which answer the above research questions. Section 9.3 considers the effect of LS on constructs defined by the OC in the first part of the model. Section 9.4 reviews the effect of OC on e-services implementation. This is followed by Section 9.5, which discusses the indirect effect of LS on e-services implementation.

9.2 Summary of the results

This project contributes to the proposition that different leadership styles can create (or manipulate) an organisational culture which achieves organisational goals and objectives. Review of the literature suggested that leadership style and organisational culture have major effects on organisational features such as overall performance, job satisfaction, product development, organizational commitment, responsiveness, and readiness. The current research sought to examine the two concepts in a different manner by investigating the impacts of leadership styles on the implementation of e-services in five Saudi organisations. Furthermore, it utilized the organisational culture variable as a mediator between leadership style and implementation of e-services. Within the complicated model national culture was included as a moderator variable. This dimension might have an external influence on both leadership style and organisational culture within Saudi organisations.

The theoretical point of view expressed in this research is that specific leadership styles can have direct and positive impacts on e-services implementation and an indirect impact through a mediating means (organisational culture in this study), and empirical findings bring new evidence in support of this proposition. Empirical support for most of the hypotheses in the current research suggests that specific leadership styles are crucial factors for influencing processes and outcomes within organizations.

Leadership is a factor of utmost importance to organisational structure, and its role was acknowledged in the findings of this research. Organisational culture is deemed to be a central contributor to organizational success. It is one of the key elements in a highly interdependent organizational environment, serving to facilitate the acceptance or rejection of new ideas (such as e-services) and enhance the general effectiveness of organisations.

In order to answer the research questions listed in Chapter One, the proposed theoretical model was examined empirically in five organisations. The suggested model, incorporating leadership styles and different types of organizational culture as a mediator, together with national culture as a moderator variable, had not been tested elsewhere. As discussed in Chapter Six, the underlying variables used to examine the proposed model were conceptualized following a review of literature in three areas (leadership, organisational culture, and national culture) by providing reliable and valid ways of measuring these variables.

The results detailed in Chapter Eight support the hypothesized relationships proposed in the theoretical model, which was tested among employees and lecturers within the five organisations. In particular, the results suggested that all constructs under study, except for the mediating effect of National Culture (NC) on the relationship between leadership styles and organisational culture, positively affect e-services implementation, including Individualized Influence (IINF), Intellectual Stimulation (ISTIM), Individualized Support (ISUP), Contingent Reward (CR), Management by Exception (MbE), Servant Leadership (SL), Bureaucratic Culture (BC), Involvement Culture (INVC), Mission Culture (MC), Innovative Culture (INC), Task Culture (TC) and Future Culture (FC) and the mediating effect (negative) of National Culture (NC) on the relationship between organisational culture and e-services implementation. The results shown in Chapter Eight are discussed in more detail in the following sections.

9.3 The Effect of Leadership Styles (LS) on Organisational Culture (OC) and E-services Implementation

This section considers the results of the hypotheses relating to the linkage between LS and OC and between LS and e-services (ES) implementation. The main objectives of this work were to determine the appropriate leadership styles that might affect

organisational culture, and the styles that might best contribute to e-services implementation. This thesis has suggested that there are two gaps in previous research about the relationship between leadership style(s) and organisational culture. This project focused on whether there are specific leadership styles and organisational cultures that can be considered as benchmarks for the implementation of e-services. Furthermore, the study investigated a predictive relationship between combinations of these leadership styles, organisational cultures, and rates of e-services implementation. Thus, this research project has filled the gap that existed in the literature.

The hypothesized relationships were developed to answer the first and second research questions as follows:

Question 1. *Which styles of leadership are best suited to e- services implementation?*

The success (or failure) of implementing e-services depends on many factors, but leadership and organisational culture are perhaps the main forces that hinder or facilitate it. The lack of available knowledge regarding how leadership style(s) and organisational culture can contribute positively (or negatively) to e-services implementation motivated the writer to investigate this further. Consequently, many leadership styles and organisational culture dimensions have been reviewed in the literature to identify the appropriate style(s) that work well in an e-government environment to achieve the target (e-services implementation) directly or indirectly (i.e. through the means of organizational culture as a mediator).

Three leadership styles were chosen as being appropriate to the implementation of e-services: transformational, transactional, and servant leadership (see Chapter Two for more details). Furthermore, six organisational cultural dimensions were judged to be appropriate supporters of e-services implementation; they are, involvement, mission, innovation, task-orientation, bureaucracy, and future-orientation (see Chapter Three for

more details). Accordingly, in the proposed model it was hypothesized that leadership would have positive and significant effects on organisational culture on the one hand and an indirect positive effect on e-services implementation on the other. Therefore, nineteen hypotheses (H1, H3, H4, H5, H6, H8 H9a, H9b, H9c, H10a, H10b, H10c, H11a, H11c, H12a, H12c, H13a, H13c, H14a and H14c) were proposed, representing the influence of LS on OC, and LS on ES respectively.

Leadership can impact organisational outcomes directly and indirectly. Many studies have confirmed that leadership and its antecedents and consequences have great influence on organizational outcomes and performance. Furthermore, leadership is among the most important factors that researchers and practitioners have cited as having a considerable impact on modern organisational performance (Bass & Avolio, 1990; Bass, 2008; Yukl, 2010). Leadership should therefore be studied and deciphered in order to gain a better understanding of how it influences organisational outcomes and performance. Consequently, part of this study has examined the relationships between leadership and organisational culture and between leadership and e-services. In summary, the main part of the research examined the nature of the relationships between leadership and the two constructs (organisational culture and e-services) within the Saudi Arabian environment.

Based on the literature review, transformational leadership style, transactional leadership style, and servant leadership style were identified as influencing the implementation of e-services through organisational culture as a mediator. In the following subsections these three styles are examined in the light of the results described in Chapter Eight.

9.3.1 Leadership Styles

Although there has been extensive research on the relationship between leadership and organisational culture, until now there has been little research or related literature on

the relationships between specific styles of leadership and organizational culture. Furthermore, there has been little literature concerning the relationships between organisational culture and e-services, or between leadership and e-services implementation. However, there is considerable literature on each of them considered independently. Consequently, part of this research was conducted to examine the relationships between specific styles of leadership and specific dimensions of organizational culture. The relationships between leadership styles and e-services implementation are also examined below.

In this research, an analysis of the collected data shows that the three leadership styles are prevalent among the Saudi leaders in the five organisations that were studied. It must be noted, however, that there were variations in the extent to which these styles were used. The results also show that the use of each constituent dimension of the three leadership styles (idealized influence, intellectual stimulation, individualized consideration, contingent reward, management by exception, and servant leadership) are prevalent among the leaders in the five organisations. However, the same observations can be made regarding the level of the existence of these categories.

There were 789 participants in this study. UAU¹⁵= 165, KAU= 201, MM= 151, MCI=102 and SA= 170. According to the results, the leaders in KAU and SA received the highest means of all the leadership styles (transformational, transactional, and servant styles) (see Table 9.1). Also, similar results remain with the categories of idealized influence, intellectual stimulation, individualized consideration, contingent reward, management by exception, and servant leadership (see Table 9.2 below). These results indicate that the leaders in KAU and SA were, on average, transformational,

¹⁵ UAU=Umm Alqura University; KAU= King Abdulaziz University; MM= Makkah municipality; MCI= Ministry of Commerce and Industry; and SA= Saudi Airlines

transactional, and servant leaders. They are more transformational, transactional, and servant than those in the other organizations under this study. Leaders who use these styles, however, combine ‘the motivating of followers to achieve organisational goals’ with ‘transforming a desired vision of the future to their followers’. What is more, ‘intellectually stimulating followers’ and ‘paying high attention to followers’ differences’ are two additional components that distinguish transformational leaders. According to the results, the leaders in KAU and SA offer a ‘swapping’ or ‘trading’ motive in an exchange process with their followers. They articulate the job requirements to their followers and announce what they should receive if they achieve their goals. Controlling the behaviour of followers, and eliminating performance problems using corrective transactions with their followers, are other behaviours exercised by leaders within KAU and SA.

Table 9.1: the means and standard deviations of leadership styles in all organisations under study

Variable	UAU		KAU		MM		MCI		SA	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
TF	2.4393	.53224	3.5344	.36580	2.1914	.29050	2.0471	.32265	3.6824	.49809
TS	2.2873	.50207	3.4122	.47269	2.2668	.44651	2.7115	.45130	3.7639	.48208
SL	3.1186	.42230	3.5328	.50396	2.7238	.43676	2.4980	.54245	3.6800	.79134

Note: TF= Transformational Leadership; TS= Transactional Leadership; SL= Servant Leadership; UAU=Umm Alqura University; KAU= King Abdulaziz University; MM= Makkah municipality; MCI= Ministry of Commerce and Industry; and SA= Saudi Airlines.

Table 9.2: the means and standard deviations of leadership categories in all organisations under study

Variable	UAU		KAU		MM		MCI		SA	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
IINF	2.4344	.74296	3.7227	.76716	2.0248	.43756	1.8480	.49272	3.7779	.76703
ISTIM	2.2732	.72923	3.7377	.48713	2.3841	.62981	2.1895	.49754	3.6314	.77183
ISUP	2.6475	.59711	3.1872	.52363	2.1672	.46433	2.1838	.59069	3.6529	.55416
CR	2.0055	.56178	3.7796	.64099	2.0905	.57727	1.8824	.50877	3.9000	.57318
MbE	2.4986	.71651	3.1366	.68324	2.3990	.63782	3.3333	.70915	3.6618	.68609
SL	3.1186	.42230	3.5328	.50396	2.7238	.43676	2.4980	.54245	3.6800	.79134

Note1: IINF = Individualized Influence; ISTIM= Intellectual Stimulation; ISUP= Individualized Support; CR= Contingent Reward; Management by Exception; SL= Servant Leadership.

Note 2: UAU=Umm Alqura University; KAU= King Abdulaziz University; MM= Makkah municipality; MCI= Ministry of Commerce and Industry; and SA= Saudi Airlines.

These results were expected. Although selecting the most suitable people for leadership positions is a difficult and crucial decision, KAU, particularly the female

section, and SA have succeeded in applying effective selection processes. According to the Dean of the Women's Campuses at King Abdulaziz University¹⁶, the female campuses at KAU have established a set of criteria and standards for leadership positions. Also, they have online voting and personal nominations for all leadership posts (deans, vice-dean, departmental heads etc.), and the application of these criteria and procedures has reduced - or terminated - the culture of nepotism within the female campuses at the university. The main criteria, according to the Dean of Women's Campuses, are competencies, qualifications, and the candidate's true ability to handle the position.

In addition to appointing people to leadership positions, the Dean of Women's Campuses nominates leaders to workshops and to continuous training on leadership and managerial skills, never concentrating on the same people that have been accustomed to having these privileges. Finally, the female section has a committee for vice-deans (currently there are 49 vice-deans in the female section) in which mistakes are discussed and challenges set; in this way, participants learn leadership skills from each other. Furthermore, the university established the 'Centre for Teaching & Learning Development' in 1987 as one of its specialist facilities. The centre provides services to faculty members and students alike. It offers advice and skills-development programs that help them perform their functions successfully, particularly leadership and managerial skills, as well as ensuring the development of educational processes and the achievement of its objectives¹⁷.

The most recent research suggests that leadership-training and workshops deliver high levels of performance and produce long-term results. Leadership workshops and

¹⁶ **Dr. Hana Abdullah Al-Nuaim**, Associate Professor, Dean of Women's Campus, King Abdulaziz University

¹⁷ KAU official Website

training, according to many researchers, provide the opportunity for leaders to sharpen their skills and share their experiences with other leaders to increase their effectiveness, and they produce leaders who are able to lead with confidence and ease. In-service leadership-training is important and yields many benefits:

1. It can directly impact the bottom line and increase performance.
2. It positively affect leadership growth and an organization's performance.
3. It enhances organizational change and leadership effectiveness.
4. It promotes self-awareness and improves problem-solving skills among participants.
5. It increases a leader's ability to activate team cohesion and team performance

Consequently, KAU and SA would be expected to have better e-services implementation because their main criteria for job selection are qualifications, skills, and merit rather than nepotism, favouritism, or any other cultural elements.

In other organisations in Saudi Arabia, the absence of criteria and procedures for the selection of leaders, and the lack of effective leadership-development and training program commonly results in a failure to achieve full organisational potential. Managerial shortcomings and a lack of strategic thinking hold them back. Furthermore, evidence suggests that one of the fundamental problems hindering the growth of organisations is the lack of leadership and of management capability to drive performance to the degree necessary for success (Hayes, 2012).

The absence of defined competence-based criteria and procedures for the selection of candidates to leadership positions opens the door to chaos in the workplace environment. Selections are often made according to who knows who, and employment

decisions frequently stem from attempts to obtain the services of acquiescent juniors rather than considering the organization's interests. Furthermore, in this environment, 'wasta' (which means using personal connections for personal interests) is a factor in every significant decision, which some studies deem to be the main source of corruption (Albugamy, 2010; Aldraehim et al, 2012). These issues represent some of the main influences that negatively affect the implementation of e-services in other organisations where, according the results of this project, e-services were being less aggressively implemented.

As has been presented in previous chapters (chapters two and five), many studies show that leadership increases commitment, motivation, loyalty of followers, project quality, innovation, sales performance, organizational commitment, job satisfaction, effectiveness, job success, and career satisfaction, and is positively related to innovative behavior. This study, however, adds new insights to the role of leadership, particularly transformational, transactional, and servant leadership styles, in regard to e-services implementation.

Although very few studies have investigated the effects of leadership styles on an e-government environment, various studies have examined leadership and its effects, roles, and contributions to e-government adoption. Moon and Norris (2005) claimed that leadership innovation is one of the most compelling determinants in e-government adoption. Kifle (2008) found that the greatest barrier to implementing e-government in Brunei was poor leadership. Furthermore, Greenberg et al. (2006), and Bjørn and Fathul (2008) identified several critical factors that influence the success of e-government programs, of which strong leadership with long-term commitment and vision were particularly significant. Kim and Kim (2003) concluded that leaders who develop strategic plans and who recognize synaptic connections among e-government values,

evaluation criteria, and effectiveness would lead a successful e-government. Ke and Wei (2004) explored the success of e-government in Singapore and claimed that the main factor in overcoming the obstacles inherent in its implementation and development was strong leadership that set out a strategic plan of action, provided strong support, took a centralized approach to funding and infrastructure, and made efforts to bridge the digital divide. InfoDev/World Bank (2009) asserted that a successful e-government project needed effective and sustained leadership and drive, careful planning, effective implementation and performance reporting. Some of these leadership traits and characteristics have been included in the hybrid style adopted in this study.

In summary, results indicate that leaders in organisations A and B employed a hybrid of transformational, transactional, and servant leadership styles. There are more transformational, transactional, and servant leaders in organisations A and B than in other organizations that have been studied. There are two possible explanations for this outcome; 1) the selection processes in organisations A and B, and 2) the presence of continuous leadership-training in those organisations. This highlights the fact that leadership is available to everyone, not just to the ‘born leader’, which means that good leadership can be attained through training. Furthermore, as a result, these two organisations have received the highest percentages in e-services implementation, which reflects the importance of the role of leadership,

9.3.1.1 Leadership styles and organizational culture

Much interest from academics and practitioners has been directed towards leadership and organizational culture as it has been claimed that both leadership and culture are linked to organizational success. However, while the links between leadership and organizational culture have been examined in the literature, very few studies have investigated the association between specific leadership styles - such as transformational,

transactional, and servant leadership - and specific types of organizational culture such as bureaucratic, involvement, mission, innovative, task, and future cultures. The transformational style might be an exception to these styles where, according to the literature, the culture can be manipulated based on transformational leaders' skills and abilities.

Research into the interaction between leadership and organisational culture has attracted the attention of some of the more prominent names in this area of enquiry (Bass, 1990, 1991, 2008; Bass & Avolio, 1994; Bennis & Nanus, 1985; Avolio, 2011; Schein, 1985, 1992, 2010; Hofstede, 1980, 1983, 1991; Hofstede et al. 2010; House et al, 2004). According to Bass and Avolio (1993) "Organisational culture affects leadership as much as leadership affects organisational culture" (p. 113. The importance of leadership in relation to organisational culture stems from the fact that leaders can become sources of values within an organisational culture and therefore have an impact on followers' behaviour (Bennis & Nanus, 1985).

Leaders' behaviour can have far-reaching influences on organisational culture and how employees react to change and innovation (Fishman & Kavanaugh, 1989). This makes leadership an important factor in work interactions and in shaping organisational culture to support change and innovation. After closely examining culture and leadership, Schein (2004) suggested that culture and leadership are two sides of the same coin; neither can be understood by itself.

This research provides evidence that there are strong relationships between specific leadership styles and specific organisational culture typologies. The basic model suggested here has connected leadership with organisational culture. The results show that leadership has a significant positive correlation with organisational culture. The rank correlation coefficient amounts to $\beta=0.89$, which is statistically significant at a

significance level of $P < .01$. Also the R^2 coefficient, which reflects the percentage of explained variance of organizational culture by leadership, was 0.79. Consequently, this study supports the view that there is a direct effect between leadership style and organizational culture, which aligns with the conclusions of most previous studies.

Most studies in this field support the concept that leadership is considered to be the main factor that affects organizational culture. Buble (2012) studied the interdependence between organizational culture and leadership styles in large firms in Croatia, finding a significant positive correlation between leadership styles and organizational culture with correlation coefficients of $\beta = 0.465$, which is statistically significant at the significance level of $p = 0.01$ (Buble, 2012). Mozaffari (2008), in his investigation into the relationship between organizational culture and leadership, found that the more congruence there is between organizational culture and leadership styles the more effective managerial skills will be. Niemann and Kotzé (2006) studied the relationship between leadership practices and organizational culture in educational institutions in different environments, their findings providing a sound basis for the proposal that leaders (principles) are able to cultivate a positive school culture. In a worldwide study, the Hay-group¹⁸ identified the fact that leadership style has a 70 percent influence on organizational culture.

While the above studies concentrated on the direct effect of leadership on organizational culture, there have been a few studies investigating the effect of leadership on organizational issues (e.g. performance, commitment, creativity) using organizational culture as a mediator. Rasid et al (2013) investigated the relationship between leadership and organizational commitment in Islamic banks. They used organizational culture as a mediator and concluded that leadership style significantly affects organizational culture

¹⁸ The Hay Group is a global management-consulting firm with over 2,600 employees working in 85 offices in 47 countries (<http://www.haygroup.com>).

($\beta = 0.453$, $p < .05$). Also Jung et al (2003) studied the effect of leadership on employee creativity, using organizational culture as a mediator. They found a positive link between leadership and organizational innovation and reported a significant and positive relationship between leadership and organizational culture.

To sum up, the relationship between leadership and organizational culture has been examined in the literature in different contexts and different countries. While most studies indicate that there is a positive relationship between the two phenomena, it has been claimed that cultural manipulation was based on leaders' skills and abilities. Consequently, leaders are considered to be the main influence on organizational culture and can manipulate employees' attitudes and motivations by shaping the nature of the work environment and organisational culture. This study suggests that leadership styles have a major effect on organisational culture and that effective leaders foster, support, and sustain the required organizational cultures that facilitate and support an organization's goals and objectives.

In the next sections each constituent dimension of leadership styles will be discussed (i.e. idealized influence, intellectual stimulation, individualized support, contingent reward, management by exception, and servant leadership) and will be associated with appropriate organizational dimensions based on the model proposed in Chapter Six.

9.3.1.2 Transformational Style

In line with prior studies (e.g. Bass & Avolio 1993; Bass 2008; Schein 2010; Smircich, 1983; Ogbonna & Harris, 2000; Gumusluoglu & Lisev, 2009; Jung et al., 2003; Jung, et al. 2008; Amabile, 1998), this study found that transformational leadership had a significantly positive relationship with organizational culture. In the model implemented in this study, transformational leadership style explained 0.69 of the total variance of organizational culture. Furthermore, the path coefficient (β) between

transformational leadership style and organizational culture was highest (0.671) among the other two leadership styles (i.e. transactional, and servant styles). These results were expected because many researchers have claimed that organisational culture arises from leaders and is manipulated based on leaders' skills and abilities. In the next sections transformational leadership categories and the related types of organisational culture will be discussed in more detail.

9.3.1.2.1 Idealized Influence and Mission Culture

In this study, idealized influence has been linked to mission culture. Idealized-influence leaders behave as role models for their followers and colleagues, have high moral and ethical values, are able to provide their followers with a sense of vision and mission, and are willing to share risks with them. Consequently, this leadership characteristic has definite links with mission culture, which defines the future of the organization, and for the benefit of employees the leader presents clear directions for the organization.

According to the results presented in Chapter Eight, idealized influence explained 0.46 of the total variance of the mission culture within the participating organizations. Furthermore, the path coefficient (β) between idealized influence and mission culture was the second highest path (0.68) among all pairs of leadership dimensions and organizational culture dimensions. Although the means of idealized influence were varied (as seen in Table 9.3), the mean for the whole sample was relatively low (2.87) (as seen in Table 9.4).

Table 9.3: the mean and standard deviation of Idealised Influence for all the organizations being studied

	A		B		C		D		E	
Variable	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
IINF	2.434	0.74296	3.7227	.76716	2.0248	.43756	1.8480	.49272	3.7779	.76703

Table 9.4: the mean and standard deviation of Idealised Influence of the entire sample

	N	Mean	Std. Deviation
IINF	789	2.8685	1.05829
Valid N	789		

These results relate to previous studies. Shurbagi and Bin Zahari (2012) have studied the impact of transformational leadership on organizational culture in oil companies of Libya. They found a positive and strong relationship between the idealized influence dimension and all organizational culture dimensions such as clan, adhocracy, hierarchy, and market culture. Sarros et al. (2001) have also studied the relationship between transformational leadership and organizational culture, reporting a positive relationship between the idealized influence dimension and different dimensions of organizational culture such as competitiveness, innovation, performance-orientation, emphasis on rewards, social responsibility, stability, and supportiveness.

Although, many studies have examined the relationship between idealized influence and other dimensions of transformational leadership and organizational culture, it appears that no single study has examined the direct or indirect impact of this dimension on a specific type of organizational cultural dimension such as mission culture or e-services implementation. Consequently, it can be concluded that, based on the previous studies, the literature has supported the proposal that there is a strong and positive relationship between idealized influence and some organizational culture dimensions. Therefore, idealized influence could positively affect a specific organizational culture dimension. Unfortunately, there is no evidence in previous studies that idealized influence could manipulate or create a mission cultural dimension within organizations in the way claimed in this current study. Accordingly, this study contributes to the literature by adding evidence that the idealized influence dimension can have a positive influence on a mission culture. Furthermore, according to the results specified in Table 9.5, the more

idealized influence a leader has, the more explicable the variance of the mission culture within the organization becomes.

Table 9.5: The Path Coefficient (β) and Explained Variance of Idealized Influence in each organization.

Organization	Path coefficient (β)	Explained variance
A	0.18	0.03
B	0.11	0.01
C	0.23	0.05
D	0.04	0
E	0.33	0.11
All organizations	0.69	0.47

Accordingly, all that can be said about this dimension, based on previous studies, is that there is a positive relationship between this dimension and some organizational culture dimensions such as clan, adhocracy, hierarchy, market, competitiveness, innovation, and performance-orientation. However, this study has added to the literary record the fact that idealized influence has a direct positive effect on e-services implementation through the organizational dimension, with mission culture as a mediator. Furthermore, it has an indirect effect on e-services implementation, carrying a significance level of $P=0.001$.

9.3.1.2.2 Intellectual Stimulation and Innovative Culture

In this study, intellectual stimulation has been linked to innovative culture. Intellectual leaders are those who behave in ways that encourage others to be innovative and creative. They also increase followers' awareness of problems and solutions, encourage creativity, and promote the development of innovative strategies. Such a leader encourages the introduction of new products, processes, and systems into an organisation. Therefore, this leadership characteristic has been connected to innovative culture, which has been defined as a style of organizational behavior that is in agreement with new ideas, change, risk and failure.

According to the results that have been presented in Chapter Eight, intellectual stimulation is similar to the dimension of idealized influence given that it has explained 0.46 of the total variance of the innovative culture within the Saudi organizations that have been surveyed. Furthermore, the path coefficient (β) between intellectual stimulation and innovative culture was 0.68. Although the means for intellectual stimulation were varied among all the Saudi organizations under study (as seen in Table 9.6), the mean in the overall sample is similar to the mean of idealized influence (2.92), as seen in Table 9.7.

Table 9.6: The Mean and Standard Deviation of Intellectual Stimulation in all the organizations being studied

	A		B		C		D		E	
Variable	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std.	Mean	Std.
ISTIM	2.2732	.72923	3.7377	.48713	2.3841	0.62981	2.1895	.49754	3.6314	.77183

Table 9.7: the Mean and Standard Deviation of Idealised Influence of the entire sample

	N	Mean	Std. Deviation
ISTIM	789	2.9159	.94779
Valid N (listwise)	789		

Although there is no empirical evidence in the literature to support or reject the relationship between intellectual stimulation and specific types of organizational culture, such as innovative culture or e-services implementation, some studies have suggested that there is a positive relationship between intellectual stimulation and an organization's innovation performance (Chin & Lin, 2012) and organizational commitment (Kara, 2012). Also, Schepers and Wetzels (2005) found that intellectual stimulation positively influences the perceived usefulness of the technology. However, a study by Sarros et al. (2008) ran contrary to the findings of these studies, claiming that intellectual stimulation did not have a positive relationship with organizational innovation. But it can be concluded that, overall, literature has supported the proposition that there is a positive relationship between intellectual stimulation and some organizational issues (i.e.

performance, commitment and innovation). It could therefore positively affect a specific organizational culture dimension. As has been explained, there is no evidence from previous studies that intellectual stimulation could manipulate or create an innovative culture within organizations as the current study claims. Accordingly, this study contributes to the literature by adding evidence that the intellectual stimulation dimension can have a positive influence on an innovative culture. Furthermore, according to the results that have been obtained (see Table 9.8), leadership which fosters high levels of intellectual stimulation helps explain the variance of the innovative culture within organizations.

Table 9.8: The Path Coefficient (β) and Explained Variance of Intellectual Stimulation in each organization

Organization	Path coefficient (β)	Explained variance
A	0.11	0.01
B	0.28	0.08
C	0.17	0.03
D	0.18	0.03
E	0.36	0.13
All organizations	0.68	0.46

In summary, previous studies have recorded positive relationships between the intellectual stimulation dimension and some organizational features such as innovation and organizational commitment. The results reported here contribute to the literature by confirming that intellectual stimulation has a direct positive effect on e-services implementation through the organizational dimension, with innovative culture as a mediator. The study also clarifies that intellectual stimulation has an indirect effect on e-services implementation at a significance level of $P = 0.001$.

9.3.1.2.3 Individualized Consideration and Involvement Culture

An ‘individualized consideration’ leadership dimension was connected to ‘involvement culture’ in this study. Leaders who have this characteristic are aware of their followers’ concerns and developmental needs, as well as their intellectual requirements through teaching, coaching, and the generation of new learning

opportunities. Furthermore, individualized leaders assist followers' development by promoting growth opportunities and by providing followers with encouragement and support. Therefore, they have been connected to involvement culture, which builds employee capability, ownership, and responsibility, given that employees are closely involved in their organization's activities.

According to the results presented in the analysis, individualized consideration explained 0.40 of the total variance of the involvement culture within the Saudi organizations. Furthermore, the path coefficient (β) between individualized consideration and the involvement culture was 0.63. Although the means of idealized influence were varied (as seen in Table 9.9), the mean for the overall sample was relatively low (2.83), as seen in Table 9.10.

Table 9.9: The Mean and Standard Deviation of Individualized Consideration for all organizations

	A		B		C		D		E	
Variable	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std.	Mean	Std. Deviation
ICON	2.6475	.59711	3.1872	.52363	2.1672	.46433	2.1838	.59069	3.6529	.55416

Table 9.10: the Mean and Standard Deviation of Idealised Influence for the entire sample

	N	Mean	Std. Deviation
ICON	789	2.8375	.78672
Valid N (listwise)	789		

This leadership characteristic explains how leaders look after their followers and the extent to which they deal with them according to their individual abilities. The variations in the means for individualized consideration among the five organisations reflect the level of care that leaders show towards their followers, both in terms of their professional development and to them as individuals. In some organisations, leaders are alert to the needs of followers, provide challenges and learning opportunities, and delegate tasks to raise their skills and confidence. Furthermore, they assist followers' development by promoting growth opportunities and providing followers with encouragement and

support. Moreover, they improve followers by assigning them tasks, observing their progress, and by providing additional support or direction as needed. This leadership behavior reflects an organization's concern for developing, informing, and involving employees, and getting them engaged in the organisation's activities.

When employees have high involvement, the organization is more effective because the resultant elevated levels of interaction by employees raises a strong sense of ownership and commitment to the organization and its objectives and goals. Many studies (e.g. Altameem et al. 2007; Wood-Harper et al., 2004) claimed that e-services implementation requires employee involvement by inspiring them to originate higher contributions and increased levels of production. In this study, organizations B and E had the highest means for individualized consideration as well as the highest path coefficients (Table 9.11) that connect this category with the involvement culture dimension. The higher the path coefficient, the higher the explained variance. As has been explained, there is no evidence in previous studies that individualized consideration could manipulate or create an involvement cultural dimension within organizations as the current study claims. Accordingly, this study contributes to the literature by providing evidence that the individualized consideration dimension can have a positive influence on an involvement culture.

Table 9.11: The Path Coefficient (β) and Explained Variance of Intellectual Stimulation for each organization

Organization	Path coefficient (β)	Explained variance
A	0.12	0.01
B	0.22	0.05
C	0.18	0.03
D	0.08	0.01
E	0.28	0.08
All organizations	0.62	0.38

In summary, the findings provide evidence that individualized consideration contributed to the creation or manipulation of the involvement culture within the

organisations being studied. Individualized consideration has a direct and indirect effect on e-services implementation. These results provide some evidence to suggest that it is appropriate to consider individualized consideration as an important sub-dimension of transformational leadership. It also provides appropriate resources and opportunities to inspire people to want to do the things that enable the organisation to attain its vision.

9.3.1.3 Transactional Style

The results of the effectiveness of transactional leadership have been inconsistent across previous studies (e.g. Bass & Avolio 1993; Bass 2008; Schein 2010; Smircich, 1983; Ogbonna & Harris, 2000; Gumusluoglu & Lisev, 2009; Jung et al., 2003; Jung, et al. 2008; Amabile, 1998). However, there have been exceptions for two dimensions, contingent reward, and management by exception, both of which have been adopted in this study. This research found that transactional leadership had a significantly positive relationship with organizational culture. In the model implemented in this study, transactional leadership style explained 0.55 of the total variance of organizational culture. Furthermore, the path coefficient (β) between transactional leadership and organizational culture was the second highest (0.74) of the other two leadership styles (i.e. transformational and servant). In the next sections transformational leadership categories and the related organisational culture types will be discussed in more detail.

9.3.1.3.1 Contingent Reward and Task-Oriented Culture

Contingent reward has been connected with a task-oriented culture in this study. It has been considered as “constructive transactions or exchanges” between leaders and followers, such as clarification of the expectations and the work required to be done, and establishes psychological rewards. It focuses on tasks to be achieved within a limited period. Therefore, it has been connected to a task-oriented culture, which refers to a focus on the work and on the achievement of the goals of the organization.

According to the results presented in Chapter Eight, contingent reward explained 0.59 of the total variance of the task culture within the five organizations; of all the variables this is the highest variance that has been explained. Furthermore, the path coefficient (β) between contingent reward and task culture was the highest path (0.77) among all pairs of leadership dimensions and organizational culture dimensions. Although the means for contingent reward varied between the five organizations (as seen in Table 9.12), the mean for the entire sample was relatively low (2.82, as seen in Table 9.13).

Table 9.12: The Mean and Standard Deviation of Contingent Reward in all organizations

	A		B		C		D		E	
Variable	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std.	Mean	Std.
CR	2.0055	.56178	3.7796	.64099	2.0905	.57727	1.8824	.50877	3.9	0.5732

Table 9.13: the Mean and Standard Deviation of Idealised Influence of the entire sample

	N	Mean	Std. Deviation
CR	789	2.8255	1.08174
Valid N (listwise)	789		

This leadership characteristic places emphasis on an exchange of resources between followers. It is a conditional reward for achievement based on what has been agreed between leaders and followers. This leadership characteristic explains how leaders seek to achieve their goals through a conditional exchange with their followers. The high variation in means between organisations in regard to contingent reward reflects the level of importance that leaders place on achieving their vision. In organisations B and E the leaders establish goals, employee tasks are defined, and action will then be taken to ensure e-services implementation is successful. This approach can at times create a profound effect on an employee's performance. The implementation of e-services must therefore be accompanied by a reward system in order to overcome any resistance to change on the part of employees. This, in turn, will increase employees' commitment to e-services

implementation. This leadership behavior reflects an organization's concern for achieving its objectives. As a result, employees focus on the achievement of the best possible results, even if this demands the sacrifice of personal relationships.

The findings of this study are consistent with previous studies that assert that a reward system can have a strong effect on the effort to achieve organisational goals. Acar (2012) claimed that contingent reward can have an influence on the level of an employee's commitment to the organisation. Similarly, Yammarino et al. (1998) suggested that contingent reward has a positive influence on performance. Derue et al. (2011) also claimed that contingent reward behaviour is positively related to group performance, and Webb (2007) indicated that there was an optimistic association between contingent rewards and organizational results. Podsakoff et al., (1984) suggested a generally positive relationship between contingent rewards and subordinate performance and satisfaction. In a recent study, Podsakoff et al., (2010), in their study "Dispelling misconceptions and providing guidelines for leader reward and punishment behavior", asserted that reward behavior can have substantial effects on a variety of important employee attitudes, perceptions, and measures of job performance. Finally, a study by Eisenberger et al. (1999) found a positive relationship between contingent reward and intrinsic motivation.

Many researchers have said that an e-government project should be associated with a reward system in order to increase employee commitment to its implementation. Al-Azri et al. (2010) suggested that a reward system is a critical success factor in e-services implementation; Nandan (2007) found that reward behavior had a positive impact on employees' use of ICT; Aldhabaan (2012) reported that one of the main barriers to successful implementation of e-services in Saudi Arabia was the lack of reward systems;

and Heek (1999) suggested that reward systems can influence adoption of new projects such as e-services.

In this project, organizations B and E had the highest means in contingent reward, also having the highest path coefficients (Table 9.14) that connect this category with the task-culture dimension. It was evident that the higher the path coefficient the higher the explained variance. As has been noted, there has been no empirical evidence in previous studies that contingent reward could manipulate or create the task-culture dimension within organizations, as the current study claims. Accordingly, this study contributes to contemporary literature by adding evidence that the contingent reward dimension can have a positive influence on task culture.

Table 9.14: The Path Coefficient (β) and Explained Variance of Contingent Reward in each organization

Organization	Path coefficient (β)	Explained variance
A	0.04	0
B	0.19	0.04
C	0.11	0.01
D	0.1	0.01
E	0.17	0.03
All organizations	0.7	0.49

All that can be said about this dimension, based on the previous studies, is that there is a theoretical relationship between this dimension and some organizational issues such as performance, satisfaction, and intrinsic motivation. However, the results of this study reveal empirically that contingent reward has a direct positive effect on e-services implementation through the organizational dimension, with task culture as a mediator, and that it has an indirect effect on e-services implementation at a significance level of $P= 0.001$.

9.3.1.3.2 Management by Exception and Bureaucratic Culture

In management by exception, leaders monitor the performance of followers and take any appropriate corrective action. They focus on criteria and problem-solving, perfect performance, caring about rules and regulations, the use of authority, and progress. This style according to some studies, however, will not stimulate or encourage employees to be innovative and creative enough. It is common in public organisations and has been connected to the bureaucratic culture, which contains explicit rules, procedures, and regulations.

According to the results in Chapter Eight, the management by exception dimension has explained 0.04 of the total variance of the bureaucratic culture within the five participating organizations. Furthermore, the path coefficient (β) between management by exception and the bureaucratic culture was 0.20. Although the means of management by exception were varied among all the organizations (as seen in Table 9.15), the mean for the full sample was quite high (3), as can be seen in Table 9.16.

Table 9.15: The Mean and Standard Deviation of Management by Exception in all participating organizations

	A		B		C		D		E	
Variable	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std.	Mean	Std. Deviation
MbE	3.607	0.70388	2.448	0.62407	3.083	0.65429	3.3333	.70915	2.484	0.72219

Table 9.16: The Mean and Standard Deviation of Management by Exception for the entire sample

	N	Mean	Std. Deviation
MbE	789	2.9861	.84251
Valid N (listwise)	789		

This leadership (or management) characteristic places emphasis on rules and regulations to be followed and obeyed. Consequently, such a style of management needs to be not adopted to the implementation of a new technological project such as e-services. The high variations in the means for management by exception among the five

organisations reflect the level of importance that leaders place on rules and regulations. In organisations A, C and D the leaders have higher means for management by exception than do the other two organisations. Consequently, bureaucratic culture was found to be widespread within these organisations, and this finding is incongruent with the hypothesis that this type of culture has a negative relationship to e-services implementation.

This result, however, was contradict to some studies in the literature. According to InfoDev (2002), bureaucratic culture considers citizens as neither customers of government nor participants in decision making. Furthermore, in a bureaucratic culture procedures are highly stable (inflexible) and may not match the requirements of the external environment (Getao & Wausi, 2009). Studies confirm that the public sector is regarded by many as particularly bureaucratic (Aldhabaan, 2012). However, the adoption of modern e-services contrasts with the image of bureaucratic inertia (Ho, 2002), even though some researchers still argue that bureaucracies are unable to adapt to today's fast-changing circumstances (Pearce, 2000, p.120). Therefore, these studies claim that the management by exception style (which creates this type of culture) will not contribute positively in organisational outcomes.

According to the results, management by exception style explained 0.08 of the total variance of bureaucratic culture (Table 9.17). Furthermore, this leadership style has a positive impact on e-services implementation directly through a mediation of bureaucratic culture, or indirectly.

Table 9.17: The Path Coefficient (β) and Explained Variance of Management by Exception for each organization

Organization	Path coefficient (β)	Explained variance
A	0.09	0
B	0.04	0.03
C	0.17	0.01
D	0.1	0.01
E	0.11	0.01
All organizations	0.28	0.08

To summarise, the style of management by exception focuses on immediate achievement, on progress, on rules and regulations, and on authority, and it will create a bureaucratic culture within organisations. Empirically, both management by exception had a positive impact on the bureaucratic culture and also had a direct influence on e-service implementation.

9.3.1.4 Servant Leadership Style and Future Culture

The relationship between servant leadership and organizational culture has not been sufficiently examined, and neither has the relationship between this style of leadership and e-services implementation. This study therefore aimed to contribute to our understanding of servant leadership and e-services implementation by exploring this relationship through the medium of future culture or as a direct effect on e-services implementation. The results have provided support for the prediction that servant leadership can promote (or create) the future culture that enables successful implementation of e-services in developing countries, especially Saudi Arabia.

Servant leadership has explained 0.36 of the total variance of future culture in this study. Furthermore, the path coefficient (β) between servant leadership and the future culture was 0.60. Although the means for servant leadership varied between the five organizations (as seen in Table 9.18), the mean for the overall sample was relatively high (2.82), as can be seen in Table 9.19.

Table 9.18: The Mean and Standard Deviation of Servant Leadership in all five organizations

	A		B		C		D		E	
Variable	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std.	Mean	Std.
SL	3.1186	.42230	3.5328	.50396	2.7238	.43676	2.4980	.54245	3.6800	.79134

Table 9.19: The Mean and Standard Deviation of Servant Leadership for the entire sample

	N	Mean	Std. Deviation
SL	789	3.1798	.70140
Valid N (listwise)	789		

While servant leadership and future culture had a significant path coefficient for the whole sample, the relationship between servant leadership and future culture was not significant in organization A, and quite low in the other organizations (see Table 9.20). Furthermore, its indirect effect on e-services was significant for the entire sample (see Chapter Eight for more details).

Table 9.20: The Path Coefficient (β) and Explained Variance of Servant Leadership in each organization

Organization	Path coefficient (β)	Explained variance
A	0.06 (p=0.14)	0
B	0.31	0.1
C	0.16	0.02
D	0.28	0.08
E	0.56	0.31
All organizations	0.6	0.36

To some extent this result was expected. Servant leadership is preferred by most Arab countries (including Saudi Arabia) because the culture is focused on the ‘hereafter’ in preference to the ‘here and now’. Furthermore, followers from cultures with even higher levels of future orientation would have a tendency to positively embrace and respond to servant leader behavior (Liden et al., 2008). Consequently, this style of leadership is widely accepted and preferred by employees, and its adoption by Saudi leaders enhances and promotes e-services implementation. This method of leadership means that leaders plan to serve their followers first, but according to servant leadership theory any successful leaders go unrecognized because they are behind the rest of the team, leading by example, with integrity. Moreover, they stay out of the spotlight and allow the team to accept all the recognition. This leadership style leads to high levels of

employee morale and ethics and presents advantages in terms of promoting team building, achievement, positive change, and employee satisfaction.

In summary, the three leadership styles that have been chosen for the implementation of e-service (transformational, transactional and servant leadership) were found to be empirically appropriate to the adoption of e-services. Moreover, six organisational cultural dimensions were judged to be appropriate supporters of e-services implementation; specifically, involvement, mission, innovation, task-orientation, bureaucracy, and future-orientation.

As the current research has suggested, the specific leadership styles described here have direct and positive effects on e-services implementation and an indirect impact through the mediation of organisational culture, the empirical findings bringing new evidence in support of this notion. Consequently, leadership is a factor of utmost importance to organisational structure, and its role was acknowledged in the findings of this research. Moreover, organisational culture is deemed to be a central contributor to organizational success. It is one of the prominent factors in a highly interdependent organizational environment, serving to facilitate the acceptance or rejection of e-services within organisations. Consequently, the first part of this study, which examined the relationship between leadership and organisational culture and between leadership and e-services, answered the two main questions in the research regarding the styles of leadership that contribute positively in e-services implementation, and the form of organisational culture that could enhance e-services implementation within Saudi Arabia.

9.4 Organizational Culture and E-services Implementation

This section elaborates on the links between organizational culture (OC) and e-services (ES) implementation. The second main objective of this thesis was to determine the most suitable organisational culture that might contribute to e-services

implementation. The hypothesized relationships were developed to answer the third research question: Which dimensions of organisational culture affect e-services implementation?

All organisational cultural dimensions (see Chapter Six) had significant path coefficients with e-services implementation. While the impact of management by exception was positive for bureaucratic culture, the relationship between bureaucratic culture and e-services implementation had the weakest effect on e-services implementation.

In this research, an analysis of the data shows that the dimension of organisational culture which have been suggested in this study were present in all organisations under study. It must be noted, however, that the levels of these cultural dimensions varied between the participating organizations. According to the results, organisations B and E received the highest means for all cultural dimensions (involvement, mission, innovation, task-orientation, and future-orientation) (see Table 9.1). These results indicate that organisations B and E provide employees with clear directions for their respective organisations to ensure that their goals and missions can be accomplished. Moreover, these two organisations were in agreement with regard to new ideas, change, risk, and failure. Also, these two organisations build employees' capability, sense of ownership, and responsibility because the employees are closely involved in their organisations' activities. This means that they concern themselves with developing, informing, and involving employees, and ensuring that they are engaged and focused on the work and on achieving the goals of the organisation.

9.4.1 Mission Culture and E-services Implementation

According to the results in Chapter Eight, the path coefficient (β) between mission culture and e-services was the third highest path (0.08) of all pairs of organizational

culture dimensions and e-services implementation, which means that leaders have defined and clear organisational goals, giving a shared sense of purpose, meaning, direction, and strategy to their employees. As this cultural trait emphasises stability and direction within the organisation, (some) organizations under this study were well defined and well understood by their members. Furthermore, organisations which have a high score in a mission culture will ensure that their members understand the reasons their organisations exists, their role in the organisation, and the benefits of being a member. As can be seen in Tables 9.21 and 9.22, while the mean for mission culture was, on average, quite moderate (2.85), the mean for mission culture in organisations B and E were relatively high, an indication that these two were higher than the other organisations in their adoption of e-services. Although many studies have examined the relationship between mission culture and organizational issues such as performance, effectiveness, and quality-improvement, few studies have examined the effects of this dimension on information technology or e-government adoption. Dasgupta and Gupta (2005) empirically studied the role of organizational culture in internet technology adoption, finding that a mission culture had a significant impact on the perceived ease of using the internet. Nurdin et al. (2012) examined the theoretical role of the culture on adoption and use of e-government services, reporting that mission culture had a major impact on e-services implementation. Their claim, however, has not been supported empirically. Consequently, it can be concluded that, based on the two studies and on existing literature, there is firm support for the concept that there is a positive relationship between mission culture and e-services implementation. Accordingly, this study contributes to the literature by adding new empirical evidence that a mission culture can have a positive influence on e-services implementation.

Table 9.21: The Mean and Standard Deviation of Mission Culture in each organization

	A		B		C		D		E	
Variable	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
MC	2.329	0.38611	3.4093	0.38106	2.5262	.43289	2.2237	.28018	3.4759	.42781

Table 9.22: The Mean and Standard Deviation of Mission Culture of the entire sample

	N	Mean	Std. Deviation
MC	789	2.8509	.66630
Valid N (listwise)	789		

9.4.2 Innovative Culture and E-services Implementation

In this study, the culture of innovation was connected to e-services implementation. According to the results, the path coefficient (β) between innovative culture and e-services was the highest path (0.37) between all the pairs of organizational culture dimensions and e-services implementation. This was expected because many studies have confirmed that an innovative culture was the key for facilitating and supporting the adoption of ICT. Kanungo et al. (2001) studied the relationship between organisational cultural dimensions and IT in units of the public sector, recording a positive correlation between innovative culture and IT strategies. Similarly, Kanungo and Jain (2011) found that innovative culture is positively related to e-government implementation in India. In Saudi Arabia, according to the CEO of the Yesser project, “to implement e-government successfully the state needs to promote innovation culture” (Arabnews, 2012). Moon and Norris (2005) noted that a strong innovation culture ensures the success of e-government, this being similar to the work of Kanungo (2011) who said that innovative dimensions of organizational culture were positively related to improvements in e-government projects. In this cultural dimension, the same observation regarding mission culture occurred for the mean of the entire sample, as seen in Table 9.23 below. The trait of innovative culture was moderate (2.82) (Table 9.24) and the means for innovative culture in organisations B and E were higher than in the other three organisations. Therefore, these two

organisations were in agreement in respect of being open to change and experimentation, to taking risks, and to accepting new ideas. Consequently, they were flexible and adaptable to e-services implementation. This might be another reason that these two organisations (B and E) were higher than the other participating organisations in regard to implementing of e-services.

Table 9.23: The Mean and Standard Deviation of Innovative Culture in each organization

	A		B		C		D		E	
Variable	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
INNC	2.2158	0.42241	3.5478	.55788	2.2053	.41542	2.0980	.38078	3.6721	.53380

Table 9.24: The Mean and Standard Deviation of Innovative Culture of the entire sample

	N	Mean	Std. Deviation
INVC	789	2.8213	.85435
Valid N (listwise)	789		

To summarise, based on previous studies, the literature has supported the notion that there is a strong and positive relationship between innovative culture and e-services implementation. This study is consistent with previous studies and likewise asserts that there is a positive relationship between innovative culture and e-services implementation. The study contributes to the literature by adding new evidence that a cultural trait can have a positive influence on e-services implementation.

9.4.3 Involvement Culture and E-services Implementation

This study has proposed that the involvement of employees can enhance e-services implementation, and the adoption of e-services has been included in the theoretical model. According to the results, there was a significant relationship between involvement culture and e-services ($\beta=0.11$), with a significance level of $p<0.01$. This cultural trait helps members of an organization to gain a sense of responsibility and commitment through their involvement in its activities, resulting in a strong identification with the

organisation and encouragement of employees to go beyond their job descriptions to contribute to the organisational goals. Consequently, organisations that have high scores for an involvement culture will elevate participation, build partnerships, improve commitment, and take maximum responsibility for implementing e-services. While the overall mean (Tables 9.25 and 9.26 below) for involvement culture is moderate (2.85) the means for organisations B and E were higher than the other three. Consequently, organisations B and E were higher than the other organisations in regard to the implementation of e-services.

Table 9.25: The Mean and Standard Deviation of Involvement Culture in each organization

	A		B		C		D		E	
Variable	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
INVC	2.264	0.39437	3.6770	.49673	2.2487	.38032	1.9989	.30014	3.6588	.49256

Table 9.26: The Mean and Standard Deviation of Involvement Culture for the entire sample

	N	Mean	Std. Deviation
INVC	789	2.8550	.85257
Valid N (listwise)	789		

Many studies have claimed that involvement helps to foster employee satisfaction and can be considered as a central issue in employee participation in achieving the organisation's vision (e.g. Linares et al., 2012 and Kwantes & Boglarsky, 2007). Altameem et al., (2007) said that e-government implementation requires employee involvement by inspiring them to contribute more. Unfortunately, despite the results of this project there is no evidence from previous studies that involvement culture can contribute to e-services implementation. Accordingly, this study contributes to the literature by adding evidence that the involvement culture dimension can have a positive influence on e-services implementation in Saudi's organizations.

9.4.4 Task Culture and E-services Implementation

Task culture is about focusing on the work and on achieving the goals of the organisation, and is critical to e-services implementation. Consequently it has been connected to e-services implementation in our model. Interestingly, task culture had the most significant relationship with e-services implementation ($\beta=0.12$) with a significance level of $p < 0.01$. This reflects Saudi culture which gives priority to task-oriented activities over people-oriented ones (Al Omiri & Elbeltagi, 2014). Arab organisations are managed and conducted along strongly hierarchical lines, and subordinates consider managers as bosses who must be obeyed. Because of this practice managers and supervisors have to make all the decisions and impose them on more-junior employees.

A few studies have examined task culture and its effect on organisational issues. A study by Knowles et al. (2002) entitled “An analysis of different kinds of organisational culture” concluded that technical projects need a task culture. According to Pretorius (2004), a task culture is adaptable and flexible and the group achieves synergy to harness creativity, problem solving, and efficiency. There is no evidence from the previous studies that task culture could influence e-services implementation within organizations as the current study claims. Accordingly, this study contributes to the literature by adding evidence that the task culture dimension can have a positive influence on e-services implementation within organizations. Furthermore, while the mean for the task cultural trait (Tables 9.27 and 9.28 below) is moderate (2.89), the means for task culture in organisations B and E were higher than for other organisations. Consequently, organisations B and E were higher than the other organisations in regard to the implementation of e-services.

Table 9.27: The Mean and Standard Deviation of Task Culture in each organization

	A		B		C		D		E	
Variable	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
TC	2.25	0.45186	3.7231	.51814	2.2362	.49230	2.0948	.45083	3.7529	.55269

Table 9.28: The Mean and Standard Deviation of Task Culture for the entire sample

	N	Mean	Std. Deviation
TC	789	2.8927	.90979
Valid N (listwise)	789		

9.4.5 Bureaucratic Culture and E-services Implementation

Bureaucratic culture, according to the data from this study, could positively affect e-services implementation. Furthermore, bureaucratic culture is widespread within governmental organisations and it was hypothesised here to be a barrier to e-services implementation. According to the results of this project the effect of bureaucratic culture on e-services implementation was positive ($\beta=0.05$) under a significance level of $p=0.06$. This means that the effect of a bureaucratic culture on e-services implementation, in this study, was empirically supported in Saudi organisations.

Table 9.29: The Mean and Standard Deviation of Bureaucratic Culture in each organization

	A		B		C		D		E	
Variable	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
BC	2.2495	0.45186	2.0948	.45083	3.7529	.55269	3.7231	.51814	2.2362	.49230

Table 9.30: The Mean and Standard Deviation of Bureaucratic Culture for the entire sample

	N	Mean	Std. Deviation
BC	789	2.8927	.90979
Valid N (listwise)	789		

The interpretation of this inconsistency with the previous studies could be because employees in Saudi organisations understand a bureaucratic approach which contains explicit rules, procedures, and regulations and, therefore, should be adopted. Furthermore, these norms are to be written and understood by employees so that both parties (i.e. senior managers and staff) have a clear direction of where they are going and

how to get there. One of the positive sides of the bureaucratic culture is that it influences employee performance in accomplishing their tasks as planned and ensures that tasks are accomplished on time and to the correct standard. Furthermore, responsibility and authority, based on control and power, are significant factors in a bureaucratic organisation, some participants stating that this culture encourages hierarchies in organizations.

Other participants indicated that rigid hierarchies make it legitimate for senior managers to provide the required directions to employees, thus encouraging them to follow orders when performing organisational tasks. Others said that coordination between employees in different units in horizontal levels is performed and implemented thoroughly in bureaucratic organisations. Therefore, these organisations are considered to be solid and well-structured, given that employees have clear responsibilities, roles, and authorities.

According to some participants, in the implementation of e-services a culture of this kind will be beneficial because the clear rules, regulations, and hierarchies support senior management by maintaining employee obedience and avoiding negative behaviours. Consequently, according to some participants, a bureaucratic culture reinforces government agencies and their employees to accomplish the goal to implement e-government by enforcing conformity to regulations.

In Saudi Arabia, the absence of policies and regulations for the use of e-services (such as e-payments, e-mail, copyright rules, e-crimes, e-commerce, etc.) in governmental agencies has proven to be a significant obstacle to e-services implementation (Alshehri & Drew, 2010, p. 1056). Therefore, it is likely that the greater use of a bureaucratic culture within both governmental and privatised agencies would

contribute to the development of enforceable policies about how e-services should be used, and such policies would, in turn, give citizens confidence in the system.

9.4.6 Future Culture and E-services Implementation

Future culture is preferred by Arab countries because the culture are characterized as ‘hereafter’ in preference to the ‘here and now’, a philosophy which has relevance to this study. According to the results in this study, future culture has the second highest impact on e-services implementation (Tables 9.31 and 9.32). However, this contradicts Alrashed’s (2001) study, which claimed that organizations in the Arab world are characterized as low in the ‘future orientation’ dimension. Therefore, this study adopted the notion that Saudi society is future-oriented society. Consequently, this study, according to the results obtained, claims that, to some extent, there is a harmony between the nature of Saudi society and organizational society in (some) Saudi organizations. Therefore, leaders need to exploit this cultural feature’s dimension in Saudi society and to cultivate it more and more in their organizational society.

Table 9.31: The Mean and Standard Deviation of Future Culture in each organization

	A		B		C		D		E	
Variable	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
FC	2.421	0.44921	3.6311	.50940	2.3394	.49526	2.1863	.39125	3.6647	.66289

Table 9.32: The Mean and Standard Deviation of Future Culture for the entire sample

	N	Mean	Std. Deviation
FC	789	2.9236	.83447
Valid N (listwise)	789		

This cultural trait communicates optimism about future goal attainment by enabling employees to visualise their organisation in the future. As ‘future orientation’ includes each person’s plans, goals, aspirations, hopes, predictions, and expectations, these characteristics are very important if e-services projects are to be adopted and implemented.

Although, many studies have examined the relationships between some organizational culture dimensions and e-services, to the best of this researcher's knowledge no single study has examined the impact of this dimension on e-services implementation. Therefore, it can be concluded that there is no evidence from previous enquiries that future culture could impact e-services implementation within organizations as the current study claims. Accordingly, this study contributes to the contemporary literature by adding evidence that the future culture dimension can have a positive influence on e-services implementation.

9.5. Moderating Effects of National Culture on Leadership Style, Organisational Culture and E-services Implementation

The literature review revealed that national culture has a major impact on leaders' behaviour and on organisational cultures in different environments. Consequently, it was suggested in the theoretical model that national culture has a relationship with leadership styles in regard to the implementation of e-services. Also national culture has an impact on the cultures of those organisations which accept or reject the implementation of e-services. The relationship was created as a link between leadership style and e-services, organisational culture being the mediator and national culture the moderator. Therefore, the suggestion in this study is that national culture moderates the effect between leadership style and organisational culture, and it also moderates the effect between organisational culture and e-services implementation. This means that national culture would affect leaders' behaviour. Moreover, organisational culture will be subjected, to some extent, to employees' national culture. Accordingly, the sixth and seventh hypotheses proposed that national culture moderates the influence of leadership styles on organisational culture, and also that it moderates the influence of organisational culture on e-services implementation.

Referring to the data, the moderating role of national culture in the relationship between leadership styles and organisational culture did not have any level of statistical significance (as presented in Table 8.28 in Chapter 8). Moreover, the results show that national culture has a negative impact on organisational culture (as presented in Table 8.29 in Chapter 8). These results indicate that, regardless of the national culture (power distance or uncertainty avoidance), the effect of leadership style on organisational culture appeared to be quite consistent.

To the writer's knowledge there has not been any research which explored the influence of national culture on the relationship between leadership style and organisational culture. The cross-cultural literature has generally claimed a strong relationship between culture and leadership styles (House et al., 2002) but has not proceeded to explore the ramifications of national culture in terms of leadership and organizational culture. Therefore, this relationship needs to be studied in different environments and different cultures. Interestingly, the results of this survey show that there is a negative relationship between national culture and leadership styles, as presented in Table 9.33 below. Uncertainty avoidance and power distance cultures influence the behavior of leaders and subordinates in the leadership process. If uncertainty and power distance are high, subordinates expect a leader to take all the responsibility and all the risks by making the important decisions alone and unaided. As The Hofstede Centre reported, Saudi Arabia is characterized as high in both dimensions of national culture; power distance and uncertainty avoidance. In such a culture leaders are expected to act strongly, implying that the ideal leader would be a benevolent autocrat. Consequently, the more engaging styles of transformational leadership may not be favored in such a country.

This raises the question: is the Saudi national culture still high in the dimensions of power distance and uncertainty avoidance? Although the results show a negative association between the two national culture dimensions and leadership styles, the variance explained by the two dimensions on the leadership styles (transformational, transactional, and servant) were very weak (0.07, 0.06 and 0.04). According to El Kahtany (2010), employees respond positively to transformational leaders by developing strong attitudes to their jobs and their organization. Although previous studies claimed that there is a relationship between national culture and leadership styles, those same studies have not specified the nature of this relationship.

These findings partially support previous literature that has suggested that different types of leadership behavior are interpreted according to their cultural environment and are due to variations in people's ideas of the ideal leader. It is believed that variations exist because the understanding of the concept of leadership appears to vary across cultures (Jogulu, 2010). Dušan (2010) found that leaders behave according to their national culture, and House et al. (1997) also said that societal values affect how leaders behave. De Vader and Alliger (1986) claimed that leadership styles are consistent within a culture, which implies that they may also vary across cultures. Such studies conclude that leaders can have different approaches to communicating with their followers based on many cultural factors.

Table 9.33 Path coefficient; Significance and Loadings (p and β) between Leadership Dimensions and National Culture

Variable	NC	P values
TF	-0.266	<0.001
TS	-0.243	<0.001
SL	-0.197	<0.001

Aligned to the above results, national culture has an impact on the relationship between organisational culture and e-services implementation. Many studies (House et

al., 2002; Lord & Maher, 1991; House et al., 1997) have argued that national culture has a direct impact on organisational culture and that the cultural values and beliefs of employees were in accordance with the principles and philosophies of their organisation. Organizational values and beliefs are specific to a mission statement that guides employees' behaviour. Although organizational values are identified and supported by senior leaders in order to develop a shared understanding of expected behaviour, according to this study, the organisational values will also be affected by the national culture espoused by employees. Adler (2007) questioned whether or not an organisational culture erases or at least diminishes national culture, and claimed that the evidence was in fact contrary of this notion. She referred to André Laurent's findings that "cultural differences were significantly greater among managers working within the same multinational corporation than they were among managers working for companies in their own native country" (p. 65). The reason for this appears to be that employees may resist organisational culture if it is counter to the beliefs of their own national one. Therefore, based on this study and Laurent's findings, it cannot be assumed that even a very powerful organisational culture will render national influences insignificant.

To summarise, it has been suggested that some leadership styles can create or manipulate specific types of organisational culture that directly or indirectly accept and support e-services implementation. It was found that the suggested leadership styles (i.e. transformational, transactional, and servant styles) had direct and indirect effects on e-services implementation within Saudi organisations. Therefore, the current research contributes to the proposition that different leadership styles might have a major influence on organisational culture in achieving the organisational goals and objectives.

The current research investigated the influence of leadership style on the implementation of e-services in five Saudi organisations using the organisational culture

variable as a mediator between leadership style and implementation of e-services, and national culture was included as a moderator variable in this model. This last dimension had been proposed to have an external influence on both leadership style and organisational culture, and the findings have brought new evidence supporting this notion. Empirical evidence for most of the hypotheses in the current research suggests that specific leadership styles play a crucial role in influencing processes and outcomes within organizations; indeed, they are deemed to be a central contributor to organizational success. Therefore, on the basis of this analysis, some leadership styles and some types of organisational culture may be useful for implementing e-services. Consequently, the main role of leaders might be to promote specific types of culture that support e-services implementation; namely, mission culture, innovative culture, task culture, bureaucratic culture and future culture.

CHAPTER TEN

CONCLUSION

10.1 Introduction

This chapter commences with a summary and discussion of the research findings, and the following seven sections relate to the respective research questions specified in Chapter One. The limitations of the study are discussed, and in the final section areas for future research are identified and described.

10.2 Summary

The research hypotheses were divided into three groups. The first group focused on the leadership styles that affect e-government implementation and create (or manipulate) organisational cultures to implement e-government. The second group related to organisational cultures that might affect e-government implementation. The final group targeted the dimensions of national culture that might influence the relationship between leadership style and organisational culture and the relationship between organisational culture and e-services implementation.

The following results have been presented and discussed in Chapter Eight and Chapter Nine:

1. There was a strong positive association between leadership and organizational culture ($\beta = 0.897$) and a significance level of ($p < 0.001$).
2. There was a positive relationship between organizational culture and electronic services ($\beta = 0.53$) with a significance level of $p < 0.001$.
3. Transformational leadership was anticipated to be positively associated with organisational culture (mission, involvement, and innovative culture). It was

found that transformational leadership ($\beta = 0.83$), $p < 0.01$) had a significant positive association with organisational culture, suggesting that the transformational style creates (or manipulates) the organisational cultures that lead to e-services implementation.

4. Transactional leadership was positively associated with organizational culture (task and bureaucratic culture). It was found that the transactional style had a significant positive association with organizational culture ($\beta = 0.78$), $p < 0.01$), demonstrating that the transactional style works well for creating the required culture within the organization.
5. Servant leadership was suggested to have a positive effect on future culture, the data confirming that the relationship between these two constructs was positive ($\beta = 0.581$), with a significance level of (< 0.001).
6. The effects of national culture on the relationship between leadership style and organizational culture were examined. This relationship was not significant, although the direct effect of national culture and leadership styles was significant.
7. The effects of national culture on the relationship between organizational culture and e-services implementation were also examined. National culture was found to have a negative effect on this relationship.
8. Organisational cultures (mission, innovative, task, future, bureaucratic, and involvement culture) were examined in relation to e-services implementation, all recording a positive influence.

Leadership styles (transformational, transactional, and servant styles) were likewise analysed against e-services implementation and were found to have significant positive relationships.

10.3 Discussion of research findings

The study has explored the relationships between leadership styles, organizational culture, national culture, and e-services implementation in five Saudi organizations. The theorised model proposed that leadership style forms the desired organisational culture for implementing e-services, organisational culture being the mediator and the national culture the moderator. The research was conducted through sampling of employees and lecturers in private and public sectors. The data were collected through the use of questionnaires designed for both employees and lecturers and were processed and analysed using computer software (WarPPLS). The results indicated that specific leadership styles have direct and positive impacts on e-services implementation and indirect influences through a mediating organisational culture and a moderating national culture; the empirical findings bring new evidence in support of this proposal. Empirical evidence for most of the hypotheses indicates that specific leadership styles play crucial roles in influencing processes and outcomes within organizations. According to these results, e-services differ from one organization to another, and this variation was correlated to leadership styles and organizational culture.

It was found that there were positive and significant correlations between total leadership styles (hybrid) and total organizational cultures (hybrid) in the full sample and in e-services implementation. E-services implementation increases when the mean for leadership styles rise, but types of organizational culture were also crucial factors for achieving better e-services. Therefore, leadership must be considered as a factor of utmost importance to organisational structure, and its role was acknowledged in the findings of this research. Moreover, organisational culture is deemed to be a central contributor to organizational success, being one of the prominent factors in a highly interdependent

organizational environment, serving to facilitate the acceptance or rejection of e-services within organisations.

The national culture variable, which was used as a moderator, did not have a significant influence on the relationship between leadership style and organisational culture. Therefore, the moderating role of national culture in the relationship between leadership styles and organisational culture did not have any level of statistical significance, which means that regardless of the national culture (power distance or uncertainty avoidance) the effect of leadership style on organisational culture in the model adopted in this study appeared to be quite consistent. Furthermore, although the direct effect of national culture on leadership styles was beyond the scope of this study, a quick analysis showed that there was a negative relationship between national culture and leadership styles, which means that uncertainty avoidance and power distance cultures influence the behaviour of leaders and subordinates in the leadership process.

Moreover, national culture has an impact on the relationship between organisational culture and e-services implementation. Although organizational values are identified and supported by senior leaders in order to develop a shared understanding of expected behaviour, they were, according to this study, affected by the national culture espoused by leaders.

10.4 Revisiting the Research Questions

It is important here to review the research objectives and research questions prior to summarising the findings. The primary objective of this study was to explore the relationship between leadership styles and e-services implementation, and to determine if organisational culture mediates such a relationship and if national culture moderates it. In order to achieve the research objective the following seven research questions were developed:

Question 1. Which styles of leadership are best suited to e- services implementation?

Many styles of leadership have been examined in the literature to identify the approach that works well in an e-government environment and would facilitate the implementation of e-services. Three styles were selected as being appropriate to the implementation of e-services: transformational, transactional, and servant leadership. The analysis shows that these three styles are commonly applied by the leaders in the five organisations under study. It must be noted, however, that the level of adoption of these styles varied between Saudi organizations. According to the results, the leaders in organisations B and E had the highest means for all leadership styles (transformational, transactional, and servant styles), indicating that these two organisations' leaders were generally transformational, transactional, and servant leaders. Furthermore, based on the results obtained, these two organisations received the highest percentages for e-services implementation. This reflects the role of leadership as a source of power in these organisations. Consequently, it can be said that the transformational, transactional, and servant styles had a direct and positive impact on e-services implementation. Furthermore, leaders who employ hybrids of transformational, transactional, and servant leadership styles could achieve better results and outcomes.

Question 2. Which styles of leadership are best suited to fostering an organisational culture which supports the implementation of e-services?

The current research examined how leadership styles could impact organisational culture and provide better e-services. The importance of leadership in relation to organisational culture is linked to leaders becoming sources of values within an organisation; as such, they have an influence on followers' behaviour. Literature shows that leaders' behaviours can shape organisational culture and so influence how employees

react to change and innovation (Fishman & Kavanaugh, 1989). This makes leadership an important factor in work interactions and in shaping organisational culture to support change and innovation. This research provides evidence that there are strong relationships between specific leadership styles and specific aspects of organisational culture. The suggested model has connected hybrid leadership with organisational culture, the results showing that leadership has a significant positive correlation with organisational culture. Furthermore, this study confirmed that the transformational, transactional, and servant styles have major effects on organisational cultures and that such leaders foster, support, and sustain the required organizational cultures that facilitate and support an organization's goals and objectives, particularly e-services implementation.

Question 3. Which dimensions of organisational culture affect e-services implementation?

The current research used the organisational culture variable as a mediator between leadership style and implementation of e-services. Organisational culture is deemed to be a central contributor to organizational success. It is one of the prominent factors in a highly interdependent organizational environment, serving to facilitate the acceptance or rejection of e-services within organisations. After reviewing the relevant literature, six organisational cultural dimensions were judged to be appropriate supporters (or barriers) of e-services implementation; namely, involvement, mission, innovation, task-orientation, bureaucracy, and future-orientation. All of these supported e-services implementation. While the impact of management by exception was positive in regard to the bureaucratic culture (which has been suggested in this study), the relationship between bureaucratic culture and e-services implementation had the weakest effect on e-services implementation. According to the results, the cultural dimensions among Saudi organizations were varied. Organisations B and E recorded the highest means for cultural

dimensions (involvement, mission, innovation, task-orientation, and future-orientation). These two organisations also recorded the highest percentage for e-services implementation of all the organisations under study, which could be attributed to organizational culture. Therefore the organizational culture dimensions can be considered central contributors to e-services implementation.

Question 4. Which dimensions of national culture affect the relationships between leadership styles and organizational culture and between organisational culture and e-services implementation?

The literature review revealed that national culture has a major impact on leaders' behaviour and different types of organisational culture in different environments. Therefore, national culture (power distance and uncertainty avoidance) was included in the model as a moderating variable. It was proposed that this dimension might have an external influence on both the relationship between leadership style and organisational culture and between organisational culture and e-services within Saudi organisations. According to the results, national culture did not have a significant association with the relationship between leadership style and organisational culture. However, it had a direct negative impact on leadership style, which means that different leaders' behaviours and actions are interpreted according to their cultural environment, and are due to variations in people's ideas of the 'ideal' leader. It is believed that the variations exist because the concept of leadership appears to vary across cultures. Moreover, national culture has an impact on the relationship between organisational culture and e-services implementation. This means that organizational values which were identified and supported by senior leaders for developing a shared understanding of expected behaviour would be affected by the national culture espoused by employees. Moreover, employees may resist organisational culture if it is counter to the beliefs of their own national culture.

Therefore, it cannot be assumed that even a very powerful organisational culture will render national influences insignificant.

Question 5. What are the appropriate measures for ensuring the implementation of e-services?

The e-government evaluation frameworks over the last decade that have been cited in the literature include:

1. Accenture (2000)
2. Brown University (2001)
3. United Nations (2002)
4. Capgemini Europe (2002)

Based on the definitions of e-government reviewed in the literature (Chapter Four) the central feature of e-government projects is the availability of online services. Therefore, the e-government project in Saudi Arabia focuses mainly on providing better services to citizens with the vision that “*users will be able to enjoy world-class government services offered in a seamless, user-friendly and secure way*”. Consequently the definition adopted for this project, and the one most consistent with the Saudi government’s vision for e-government is the Accenture model.

Question 6. How can a new model be created that will help achieve the implementation of e-services, taking particular account of leadership style and organisational culture?

The model suggested in this study proposes that leadership style forms the desired organisational culture, thereby linking leadership style with e-services implementation (organisational culture being the mediator, and the national culture the moderator). This

means that certain leadership styles would foster particular organisational cultures so that better level of e-services could be produced.

The following stages should be taken into account to implement this model, these are:

1. Vision statement: E-services vision should be clearly stated so that detailed objectives and strategies can be set up. Such a vision, however, would enable organisation to understand the move towards e-services.
2. Strategic goals: the existence of strategic direction, goals and objectives are fundamental factors in maintaining an organisation's future directions.
3. Roadmap and Milestones: The visions and objectives of E-services can be shaped by establishing agenda as the defined goals providing information on roads and milestones that indicate the direction to the destination.
4. Strategy setup: E-services and government innovation share common outcomes including creating or manipulating specific dimensions of organisational culture improvement in organizational structure, process, and the quality of service.
5. Managing Critical Factors: these including; human resources, financial resources and technological resources, legal and regulatory arrangements (such as promotion and protection), stakeholder analysis, outsourcing (such as change management).

Question 7. How can the proposed model be evaluated using public and private agencies in KSA?

This thesis adopted the partial least square technique because of its powerful predictive ability, this methods having been used previously in a wide variety of

disciplines. Consequently, it was employed for this study to generate model fit indices and general model elements. This study also used SPSS version 20 to analyse the demographic data. The theoretical model was a path model that formalized the hypothesized relationships among leadership styles, organisational culture variables, and e-services implementation. This theoretical model was statistically analysed using path analysis with WarpPLS 4.0, a structural equation-modelling software package.

10.5 Conclusions

The results of this project reveal a distinct pattern in the use and effectiveness of transformational, transactional, and servant leadership in the participant organizations. Also, organisational culture was adopted at different levels within each organisation. E-services have been implemented with different levels of maturity breadth and depth:

1. The three leadership styles (transformational, transactional, and servant) were more common and were adopted in organisations B and E.
2. Organisation E had the highest level of implementation of all leadership styles, followed by organisation B.
3. Organisation C had the lowest level of implementation.
4. Organisations B and E were highest in all leadership sub-dimensions (idealized influence, intellectual stimulation, individualized consideration, contingent reward, and management by exception).
5. Organisational culture typologies (involvement culture, mission culture, innovative culture, task culture, and future culture) were more common in organisations B and E than in the other organisations.
6. Organisation C was the highest in bureaucratic culture.

7. National culture did not have an impact on the relationship between leadership styles and organisational culture. However, it has a direct and negative impact on leadership styles.
8. National culture had a negative effect on the organisational culture typologies.
9. E-services implementation varied between the organisations. Organisation E had higher levels of maturity, breadth, and depth of e-services than organisation B, D and A; organisation C had the lowest level of e-services implementation.

The main objectives of this thesis were to determine the leadership styles that might affect organisational culture and the styles that might contribute to e-services implementation. Many studies have confirmed that leadership influences organisational outcomes and performance directly or indirectly. This study contributes to the literature by adding new empirical evidence which shows that specific forms of leadership have positive and significant impacts on e-services implementation. These were transformational, transactional, and servant styles. These can directly influence e-services implementation because leaders who use these styles combine 'the motivating of followers to achieve organisational goals' with 'transforming a desired vision of the future to their followers'. Furthermore, 'intellectually stimulating followers' and 'paying high attention to differences amongst transformational leaders' are two additional components that distinguish transformational leaders. They offer a 'swapping' or 'trading' motive in an exchange process with their followers, and they articulate the job requirements to their followers and what they should receive if they achieve their objectives. Moreover, controlling followers' behaviours and eliminating performance problems using corrective transactions with followers are other behaviours exercised by those leaders.

According to this study, organisational culture has a major impact on acceptance of e-services implementation. Specific organisational culture dimensions have been confirmed as working well in an e-government environment, particularly for implementing e-services at an organisational level. These dimensions include involvement culture, mission culture, innovative culture, task culture, future culture, and bureaucratic culture. The results indicate that organisations that have these cultures provide their employees with a clear pathway along which the organisation should progress, and they maintain a clear vision for the future of the organisation, and how it will look when its mission is accomplished. Moreover, acceptance of new ideas, change, risk, and failure are common in these organisations. Organisations with these cultures have a tendency to build employees' capability, and they encourage a sense of ownership and responsibility, given that employees are closely involved in their organisation's activities. This means that they concern themselves with developing, informing, and involving employees, and ensuring they remain engaged and focused on the work and on the achievement of the goals of the organisation.

This study did not find national culture to have a significant (positive or negative) influence on the relationship between leadership style and organisational culture. This means that regardless of the national culture (power distance or uncertainty avoidance), the effect of national culture on the relationship between leadership style and organisational culture appeared to be quite consistent. A relationship was found, however, between national culture (both dimensions – power distance and uncertainty avoidance) and leadership styles. Therefore, this study confirmed the findings of previous studies that national culture has an influence on leadership styles. Previous studies failed to specify the nature of this relationship, though this study claims that national culture has a negative effect on leadership styles. This means that uncertainty avoidance and power distance cultures influence the behaviour of leaders and subordinates in the leadership

process. Furthermore, national culture moderates the effect between organisational culture and e-services implementation. Although organizational values are identified and supported by senior leaders so as to develop a shared understanding of expected behaviour, this would be affected by the national culture espoused by employees. Moreover, employees in different organisations may resist organisational culture if it is counter to the beliefs of their national culture. Therefore, based on this study and other studies, it cannot be assumed that even the culture of a very powerful organisation will negate the national culture influences.

The success or failure of e-services implementation depends on many factors, but leadership and organisational culture are perhaps the main forces that hinder or facilitate it. This study contributes to existing knowledge in that leadership and organisational culture are revealed to be key contributors to e-services implementation. The three leadership styles - transformational, transactional and servant leadership - were empirically found to be appropriate styles that work well in e-services implementation projects. These styles have direct and positive benefits to e-services implementation and an indirect impact through the mediating means of organisational culture, and empirical findings bring new evidence for this notion. Moreover, the six organisational cultural dimensions were judged to be appropriate supporters of e-services implementation, specifically: involvement, mission, innovation, task-orientation, bureaucratic, and future-orientation culture.

10.6 The limitations of the study

All empirical studies encounter limitations, however, every attempt was made to minimise the limitations of this project so as to be able to generalise the findings.

1. Many of the limitations relate to those that apply to all postal questionnaire surveys (see Section 7.4.3 in Chapter 7) and need not be repeated here. In

particular, the researcher was not able to communicate with respondents to elicit more information; for instance, to ask the respondents why they gave particular answers, or to ask the question ‘how?’ For example, one question about leadership styles enabled respondents to indicate whether they felt that leaders re-examine critical assumptions or question whether they are appropriate or not. The responses provided very limited information, and it would have been preferable to ascertain *how* leaders re-examine critical assumptions and to question whether they are appropriate.

2. The study was applied to Saudi organizations and therefore its findings may be only significant in the Saudi context. The results are specific to the leadership styles anchored in the work culture of Saudi Arabian enterprises. They may be useful as general indicators for other organizations but may not automatically apply to them. In other words, it is necessary to consider the socio-cultural context in which the study was carried out.
3. The study was conducted within a specific period (2011-2015). Other periods may witness developments and changes in Saudi organizations and so yield different outcomes.
4. While considering moderating and mediating factors, the study focused on the relationships between leadership styles and e-services implementation in Saudi organizations. However, the study does not claim that it has investigated all potential variables that could influence those relationships. For example, lecturers and employees might negatively evaluate their supervisors due to personal preference, regardless of the supervisors’ actual efficacy. Further, evaluations could be influenced by the personal characteristics of respondents, etc. Such

issues were not considered by the study because it was not possible to cover all possible variables in one survey.

5. Another limitation was the cross-sectional nature of the study. It is possible that other aspects of leadership and organizational cultures, and their impact on e-services implementation, will emerge in future years. A longitudinal treatment of data might yield additional insights into the influences of leadership styles on organizational culture. Also, this project did not provide the opportunity to observe leaders interacting with followers.

It is recommended that observational data should supplement survey measures of leadership styles where such strategies serve to enhance understanding of complex forms of leadership in several different contexts (Howell & Avolio, 1993).

6. The study was conducted in five Saudi organizations during a set period of time. The Municipality of Makkah has more than seventy branches and the Ministry of Commerce and Industry has more than fifty. It was not possible to include representatives from all the branches in the study, and staff in other branches may have different leadership styles and possibly different approaches to the use of e-services.
7. The final limitation was that the e-services evaluations were conducted twice (March 2013 and March 2014) and other variables were measured between these two months. It is necessary, however, to measure the e-services implementation in the five organizations for many years in order to check their involvement, and simultaneously measure the other variables to see how leadership styles are able to manipulate or create organizational cultures that accept and support e-services

implementation. This is because the cultures of organizations cannot be created or changed within a short time.

10.7 Further Research: This study has broken new ground in the field of leadership styles in Saudi organisations in public and private sectors, and therefore the field of leadership is open to much additional research. Taking the above limitations into consideration, the following proposals are suggested for future research:

1. From a methodological point of view, the sample and context are always an issue. Using employees and lecturers as a target population has contributed to the generalizability of the findings, but it was also a weakness. Further expansion of this research to more organisations and other nations (with different national cultures, different sizes, different religions, etc.) would significantly contribute to our understanding of the link between leadership and e-services implementation.
2. The current study was conducted in a certain period of time and under specific conditions. The changing world requires conducting comparative studies in different contexts regarding changing time and conditions.
3. Women's leadership styles were not tested in this study. There is a need to study the effect of women in leadership roles, which is slowly expanding in Saudi Arabia. The study could establish whether there are significant relationships between gender and variables such as organisational culture and e-services implementation.
4. Although the study reported the influence of organisational culture on the relationship between leadership and e-services implementation, other moderating variables, such as financial and budgeting issues, and other

contextual factors, might reduce or increase this effect. Future research should extend the understanding of leadership behaviours as antecedent to e-services implementation by involving these moderating and mediating variables.

5.As information technology evolves in Saudi Arabia there is a need to investigate the effects of IT on leadership styles and organisational cultures in Saudi organisations.

6.More research on the relationship between the demographics and e-services implementation would be useful, based on the findings of this study. For example, are there correlations between educational background or nationality and e-services implementation?

7.National culture has been used in this study as a moderator variable. In an e-government environment, national culture has been used extensively as a key player for facilitating or rejecting e-government implementation. Therefore, using this variable as a third variable that directly affects e-services implementation is a recommended target for future research.

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Appendix (A)

Survey Questionnaire

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Hamdi Fawwaz Alomiri
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1st February 2013

Dear Survey Participant,

My name is Hamdi Fawwaz Alomiri and I am a Doctor of Business Administration (BA) candidate at the University of Plymouth Business School Faculty. As a part of the course, all candidates are required to undertake a large research project that examines a significant issue relating to business.

The issue I have elected to research is leadership styles of managers in (some) Saudi organisations. I am also researching organisational cultures espoused by these organisations' managers and employees. I shall be measuring e-government implementation in these organisations and will examine the effect of leadership styles and organisational cultures on e-government implementation. Finally, all the data gleaned during this research will be employed to evolve a model designed to assist managers in the Saudi business environment to adopt appropriate leadership styles that create or 'manipulate' the desired organisational cultures necessary for government implementation.

To this end, I have attached a survey, the completion of which is voluntary and should take approximately 30 minutes to complete. Surveys are anonymous and all are **private** and **confidential**. Only my research supervisor and I will have access to the information you provide and the data will be kept in a secure place. Any enquiry should be directed to Mr. Hamdi Fawwaz Alomiri, email: hfm1998@yahoo.com.

Your assistance in completing the survey is appreciated and participants may withdraw at any time without consequence.

Survey Questionnaire

The Impact of Leadership Style and Organisational Culture on E-government Implementation: An Empirical Study in Saudi Arabia.

Please answer the questions below.

PART A

A1) Tick <input type="checkbox"/> appropriate box		
1	Male	<input type="checkbox"/>
2	Female	<input type="checkbox"/>
A2) Age? Please tick <input checked="" type="checkbox"/> only one time		
1	20-30 years.	<input type="checkbox"/>
2	31-40 years	<input type="checkbox"/>
3	41-50 years.	<input type="checkbox"/>
4	51-60 years	<input type="checkbox"/>
5	Over 60 years.	<input type="checkbox"/>
A3) Education? Please tick <input checked="" type="checkbox"/> only one time		
1	High School	<input type="checkbox"/>
2	Undergraduate	<input type="checkbox"/>
3	Postgraduate	<input type="checkbox"/>
4	Doctorate Level	<input type="checkbox"/>
5	Others	<input type="checkbox"/>
A4) Which of the following best describes your position in the organization's hierarchy? (Please tick the one that is most appropriate)		
1	CEO/Chairman/Managing Director	<input type="checkbox"/>
2	Director	<input type="checkbox"/>
3	Senior management	<input type="checkbox"/>
4	Lower management	<input type="checkbox"/>
5	Other	<input type="checkbox"/>

PART B

Leadership Questionnaire

My Name: _____ Date: _____

Name of the organisation _____

You are being asked by your manager to assess his or her leadership behaviours. You will find 'thirty three' statements describing various leadership behaviours. Please read each statement carefully, and using the RATING SCALE on the right, ask yourself:

“How frequently does this person engage in the behaviour described?”

When selecting your response to each statement:

- Be realistic about the extent to which this manager actually engages in the behaviour.
- Be as honest and accurate as you can be.
- Do NOT answer in terms of how you would like to see this person behave or in terms of how you think he or she should behave.
- DO answer in terms of how this person typically behaves on most days, on most projects, and with most people.

Answer all items on this answer sheet. If an item is irrelevant, or if you are unsure or do not know the answer, leave the answer blank. Please answer this questionnaire anonymously.

Thirty three descriptive statements are listed on the following pages. Judge how frequently each statement fits your manager.

Use the following rating scale:

Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
------------	-----------------	-----------	--------------	------------------------------

B1) The Person I Am Rating. .		Not at All	Once in a while	Some times	Fairly often	Frequently, if not always
1	Stresses the importance of having a strong sense of purpose.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
2	Emphasizes the importance of having a collective sense of mission	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3	Is always seeking new opportunities for the unit/ department/ organization	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
4	Has a clear understanding of where we are going	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
7	Gets others to look at problems from many different angles	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
8	Has ideas that have forced me to rethink some of my own ideas which I have never questioned before.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
9	Has stimulated me to think about old problems in new ways	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
10	Considers each individual as having different needs, abilities and aspirations from others	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

B1) The Person I Am Rating. .		Not at All	Once in a while	Some times	Fairly often	Freque ntly, if not always
11	Acts without considering my feelings (R)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
12	Treats staff as individuals, supports and encourages their development	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
13	Fosters involvement and cooperation among team members	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
16	Makes clear what one can expect to receive when performance goals are achieved.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
17	Always gives me positive feedback when I perform well	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
18	Commends me when I do a better than average job	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
19	Frequently does not acknowledge my good performance (R)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
20	Focuses attention on irregularities, mistakes, exceptions, and deviations from standards	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
21	Concentrates my full attention on dealing with mistakes, complaints and failures	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
22	Keeps track of all mistakes	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
23	Directs my attention toward failures to meet standards	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
24	Practices what he/she preaches	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
25	Serves people without regard to their nationality, gender or race	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
26	Sees serving others as a mission of responsibility to others	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
27	Is genuinely interested in employees as people	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
28	Understands that serving others is most important	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
29	Is willing to make sacrifices to help others	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
30	Seeks to instil trust rather than fear or insecurity	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
31	Is always honest	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
32	Is driven by a sense of higher calling	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
33	Promotes values that transcend self-interest and material success	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

PART C

Organisational Culture Questionnaire

Please think about the behaviours that are expected and encouraged in your organization.

Use the following rating scale:

Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
1	2	3	4	5

C1) In this organisation...		Not at All	Once in a while	Some times	Fairly often	Frequently, if not always
1	Most employees are highly involved in their work	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
2	Decisions are usually made at the level where the best information is available	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3	Information is widely shared so that everyone can get the information he or she needs when it is needed	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
4	Everyone believes that he or she can have a positive impact	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
5	Business planning is ongoing and involves everyone in the process to some degree	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
6	Cooperation across different parts of the organization is actively encouraged	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
7	People work like they are part of a team	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
8	Teamwork is used to get work done	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
9	Teams are our primary building blocks	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
10	Work is organized so that each person can see the relationship between his or her job and the goals of the organization	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
11	Authority is delegated so that people can act on their own	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
12	The “bench strength” (capability of people) is constantly improving	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
13	There is continuous investment in the skills of employees	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
14	The capabilities of people are viewed as an important source of competitive advantage	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
15	Problems often arise because we do not have the skills necessary to do the job (R)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
16	The way to be successful in this organization is to plan ahead	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
17	In this organization, the accepted norm is to plan for the future	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

C1) In this organisation...		Not at All	Once in a while	Some times	Fairly often	Frequen- tly, if not always
18	In this organization, meetings are usually planned well in advance (2 or more weeks in advance)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
19	In this organization, employees are worry about current crises more than planning for the future	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
20	There is a long-term purpose and direction	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
21	Our strategy leads other organizations to change the way they compete in the industry.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
22	There is a clear mission that gives meaning and direction to our work	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
23	There is a clear strategy for the future	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
24	Our strategic direction is unclear (R)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
27	The leadership has “gone on record” about the objectives we are trying to meet	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
28	We continuously track our progress against our stated goals	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
29	People understand what needs to be done for us to succeed in the long run	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
30	We have a shared vision of what the organization will be like in the future	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
31	Leaders have a long-term viewpoint	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
33	Our vision creates excitement and motivation in our employees	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
34	We are able to meet short-term demands without compromising our long-term vision	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
35	Our management is prepared to take risks to find innovative solutions to tasks	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
36	In completing tasks we always have a clear view of the result we wish to achieve	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
37	As far as possible we take a creative approach to tasks.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
38	Pressure is placed on employees to complete tasks in close conformity with the vision of the management.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
39	Staff feel by and large that they are working in a stimulating environment	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
40	Staff are excited by the prospect of new challenges	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
42	Staff feel under pressure and driven to complete tasks in exact accordance with management demands.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
44	There is an ordered approach to everything undertaken	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
46	The management style is a top-down so that those at the bottom of the pyramid have little understanding about the issues discussed at higher levels.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
48	We have an achieved an established, solid operation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
50	There is a single source of power and the sphere of influence and control is part of its internal policy	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

C2) In this organisation, our staff...		Not at All	Once in a while	Sometimes	Fairly often	Frequently, if not always
51	Work to achieve self-set goals	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
52	Explore alternatives before acting	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
53	Take on challenging tasks	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
57	Think ahead and plan	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
58	Take moderate risks	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
60	Know the business	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

PART D

National culture Questionnaire

D1: Please think of an ideal job, disregarding your present job, if you have one. In choosing an ideal job, how important would it be to you to ... (please circle one answer in each line across):		of utmost importance	very important	of moderate importance	of little importance	of very little or no importance
1	Have a boss (direct superior) you can respect	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
2	Be consulted by your boss in decisions involving your work	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

D2: Please circle one answer in each line across:		Very good	Good	Fair	Poor	Very poor
3	All in all, how would you describe your state of health these days?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

D3: Please circle one answer in each line across:		always	usually	sometimes	seldom	never
4	How often do you feel nervous or tense?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

D4: Please circle one answer in each line across:		never	seldom	sometimes	usually	always
5	How often, in your experience, are subordinates afraid to contradict their boss (or, in the case of students, their teacher)?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

D5: To what extent do you agree or disagree with each of the following statements? (please circle one answer in each line across):		strongly agree	agree	undecided	disagree	strongly disagree
6	One can be a good manager without having a precise answer to every question that a subordinate may raise about his or her work	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
7	A company's or organization's rules should not be broken - not even when the employee thinks breaking the rule would be in the organization's best interest	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
8	An organizational structure in which certain subordinates having two bosses should be avoided at all cost	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

THANK YOU VERY MUCH FOR YOUR TIME AND HELP!

Appendix (B)

E-services Evaluation

This questionnaire is to evaluate the e-government project (online services) in this organisation. Thirty descriptive statements (or services) are listed on the following page. I will Judge whether these services are provided electronically to the users. If so, I will check in which level these services are provided. There are three levels in providing these services.

First level: Publish level: the user does not communicate electronically with the government agency and the agency does not communicate (other than through what is published on the website) with the user. Example - publishing information online.

Second level: Interact level: the user must be able to communicate electronically with the government agency, but the agency does not necessarily communicate with the user. Example- applied online but user does not receive a confirmation from the agency.

Third level: Transact: the user must be able to communicate electronically with the government agency, and the agency must be able to respond electronically with the user. Example - applying for a service online and receiving an electronic confirmation of the application.

Using the following rating scale:

Service not exist	Service exist in the first level	Service exist in the second level	Service exist in the third level
0	1	2	3

Ministry of Commerce & Industry Services (Makkah)

1. Career services
2. Information (e.g. about ministry, rules and regulations, etc.)
3. Issuing Commercial registration (is a service designed to register businesses and gather key contact/address and legal data)
4. Issuing Commercial registration for companies
5. Query about Commercial registration
6. Renew the Commercial registration
7. Update the Commercial registration
8. Cancelling Commercial registration
9. Request to reserve a trade name
10. Modify the Commercial registration
11. Inquire on the status of the Commercial registration
12. MoCI Permit (Professional Services Permit) (is required for any Saudi individual, who wants to practice certain professions, e.g., engineering.)
13. Initial industrial permit
14. Final industrial permit
15. Issuance of a license to transfer ownership of a factory to a fully national
16. Issuance of a license amendment ownership of the factory
17. Issue a letter of amendment factory name
18. Issuance of industrial Laboratory license
19. Registration a commercial agency
20. Customs Exemption
21. Country of origin certificate for imported Goods
22. Commercial disputes
23. Commercial name registration
24. Cancelling Commercial name registration
25. Exhibition permit
26. Import permits
27. Hotels and furnished apartments permit
28. Real estate public offering
29. Jeweler permit

30. Issuance of a permit to import the chemicals listed in the Convention on the Prohibition of Chemical Weapons
31. Trademark Registration
32. Obtaining a license to import chemicals for the purpose of trade
33. Query for materials exempted customs
34. Inquire about the status of a customs exemption request
35. Licensing the abolition of industrial Licensing
36. Issuance of a license amendment ownership of an industry
37. Merging one or more manufacturers to several owners
38. Issuance of industrial license for a specific period to individuals or companies
39. Open a branch of a foreign company
40. Reporting on the status of commercial fraud

Municipality (Makkah)

1. Information (e.g. about ministry, Rules and regulations etc.) (38 services)
2. Career services
3. Commercial Shop Permit
4. Medical Certificates issuance
5. Wedding hall permit
6. Gas station permit
7. Women sewing/tailoring institution permit
8. Coffee shop permit
9. Internet café permit
10. Workshop permit (e.g. mechanic, woodwork, ironsmith, etc.)
11. Change of activity / change of location
12. Real estate plan permit
13. Renovation permit
14. Demolition permit
15. Vacation house permit
16. Construction permit
17. Road Maintenance Service
18. Land grant
19. Street naming and numbering
20. Payment of a financial claim for municipality with others
21. Issuance payment order for individuals or contractors
22. Investments public utility sites and kiosks
23. Apply for permission selling by car (e.g. Ice cream's car)
24. Removing damaged cars and scrap from street
25. Rain's drainage (request to be done by Municipality)
26. Renew vocational permit
27. Inquiry (land grant, application, commercial activities, etc.) (15 services)

Umm AlQura University

1. Career services
2. (1) Information (university objectives, strategy, admission Policies, application forms, etc) (67 services)
3. Applying to the University
4. Modify Application Online
5. Cancel Application Online
6. Admission Results
7. Academic Calendar
8. Academic Plans
9. Student Information
10. Student timetable
11. Add Courses
12. Change Section
13. Delete Course (s)
14. Restore Course(s)
15. Student Academic Plan
16. Plan Remain
17. Plan Taken
18. Change Major
19. Change Study Type
20. Change Study Type with Major
21. Change University
22. Courses Results
23. Postponement study
24. Grant application
25. Disclaimer Graduate Report
26. Disclaimer Withdrawal Report
27. Apology of continuing the study for term(s)
28. Loans' request
29. Available Jobs
30. Issuing the university card
31. Applying for accommodation
32. Applying for vehicle permit and parking inside the university
33. Opening medical file
34. Transcript (by term or the whole one)
35. Admission Confirmation Report

- 36. Airline Report
- 37. Paying Library's fine
- 38. applied for delayed (outstanding) grant
- 39. Lecturer's Evaluation
- 40. Evaluation of university utilities and equipment

King Abdulaziz University

1. Career services
2. Information (university objectives, strategy, admission Policies, application forms, etc)
3. Applying to the University
4. Modify Application Online
5. Cancel Application Online
6. Admission Results
7. Academic Calendar
8. Academic Plans
9. Student Information
10. Student timetable
11. Add Courses
12. Change Section
13. Delete Course (s)
14. Restore Course(s)
15. Student Academic Plan
16. Plan Remain
17. Plan Taken
18. Change Major
19. Change Study Type
20. Change Study Type with Major
21. Change University
22. Courses Results
23. Postponement study
24. Grant application
25. Disclaimer Graduate Report
26. Disclaimer Withdrawal Report
27. Apology of continuing the study for term(s)
28. Loans' request
29. Available Jobs
30. Issuing the university card
31. Applying for accommodation
32. Applying for vehicle permit and parking inside the university
33. Opening medical file
34. Transcript (by term or the whole one)
35. Admission Confirmation Report

- 36. Airline Report
- 37. Paying Library's fine
- 38. Applied for delayed (outstanding) grant
- 39. Lecturer's Evaluation
- 40. Evaluation of university utilities and equipment

Saudi Airlines

1. Career services
2. Information (Flights info, In-flight Cuisine, In-flight Entertainment, etc.)
(21 services)
3. New booking (Payment through different means (SADAD or Credit Cards)
4. Flight cancellations (e-mail, voice, text)(if the cancellation from the
company)
5. Retrieve Information from Web site
6. Latest Updates available through Web site (e-mail, voice, text)
7. Update from the Wait-List (e-mail, voice, text)
8. Providing booking for Hotel, cars etc.
9. Upgrading Class of Travel
10. Information on Delay
11. Food selection
12. Customers with Disabilities
13. Lost baggage
14. Amendments to an existing booking
15. Cancelling Booking
16. Re-issue tickets
17. Check-in through the WB
18. Seat changes
19. Self-offloading
20. Joining the frequent flyer program
21. Buy redeem tickets
22. Refund tickets
23. Ancillary services, such as excess baggage