Cultural Drivers and Barriers to the Adoption of E-government in the Kingdom of Saudi Arabia

A Thesis submitted to the University of Manchester for the degree of Doctor of Philosophy In the Faculty of Humanities

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Ghada Abdulaziz AL-Sowayegh

Faculty of Humanities
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ABSTRACT

Cultural Drivers and Barriers to the Adoption of E-government in the Kingdom of Saudi Arabia

Ghada Abdulaziz AL-Sowayegh, PhD
The University of Manchester

The Kingdom of Saudi Arabia (KSA) is dedicated to implementing technology within the country and E-government is one of these technologies. However, although significant investment has been made, there has been little progress in this area. The purpose of this study is to identify the key cultural drivers and barriers that are influencing the progress of e-government, by understanding employees’ perceptions and acceptance of the phenomenon. The aim, therefore, is to identify the major cultural aspects that are currently influencing the adoption and implementation of e-government in the public sector in the KSA, as reflected in the behaviour and attitudes of government employees involved in the e-government service delivery.

For the research design framework model I examined and analyzed earlier studies to provide an appropriate framework for e-government adoption in the public sector in the KSA. This framework could be valuable in guiding the policy makers and the government in recognizing the proper requirements on a cultural level for e-government adoption in the public sector. The proposed framework highlights and identifies some of the cultural aspects that could drive and hinder the process of adoption.

Furthermore, the research method in this research adopts a qualitative approach by conducting three case studies in three public organizations in the KSA. In-depth interviews were conducted to gather primary data from thirty-two employees. The data collection took around three to four months to complete in the field. The research reveals that culture has a significant influence on employees when dealing with e-government implementation in the public sector. In addition, the research encountered several limitations in that I conducted, a female from Saudi Arabia living and working in a conservative Arab culture, who carried out in-depth interviews with male employees in three public sectors. This resulted in a number of exacting challenges which had to be faced.

The value and originality of this research is illustrated in the method I chose to employ. Adopting a qualitative research methodology involved me in conducting in-depth interviews with employees. As a female Arab, it was inevitable that I would have to undergo a difficult and complex journey to gather the required data. The nature of the country’s conservative society played a role in this aspect. However, this is part of the culture and fabric of the country, and culture is the essence of this research. Hence, this research study offers an insight into the experiences I encountered in employing this qualitative research study.
DECLARATION

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In the name of God, the most Merciful, the most Munificent
DEDICATION

To my Mother whose soul and spirit are still with me; always along the way she fills my mind and has a special place in my heart and life. To the great mother she was.

To the best Father for his continuous emotional support throughout my life and my PhD voyage. To the great father he is.

To my cherished brother and sisters who have supported my progress and advancement throughout.

To my precious daughter, Soraya, who was with me on this voyage to achieve my dream of completing a thesis for the award of Doctor of Philosophy.

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It is a pleasure to thank my sponsor, the Ministry of Higher Education and the country of Saudi Arabia for offering me this opportunity to achieve my ambition.

This thesis would not have been possible without the support and encouragement of my dear husband Ziad. He took me by the hand and guided me through the rough times. He continually and convincingly conveyed a spirit of achievement and success.

Finally, I would like to offer my blessing and regards to all individuals who supported me during the development of my research work. I will never forget all of them and their encouragement.
### LIST OF ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABT</td>
<td>Agreement on Basic Telecommunications</td>
</tr>
<tr>
<td>CAQDAS</td>
<td>Computer-assisted analysis of qualitative data</td>
</tr>
<tr>
<td>CITC</td>
<td>Communication and Information Technology Commission</td>
</tr>
<tr>
<td>GATS</td>
<td>General Agreement of Trade in Services</td>
</tr>
<tr>
<td>G2B</td>
<td>Government to Business</td>
</tr>
<tr>
<td>G2C</td>
<td>Government to Citizen</td>
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<td>G2G</td>
<td>Government to Government</td>
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<td>G2E</td>
<td>Government to Employee</td>
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<tr>
<td>GT</td>
<td>Grounded Theory</td>
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<tr>
<td>HC</td>
<td>High Context Culture</td>
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<tr>
<td>ICT</td>
<td>Information and Communication Technologies</td>
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<td>IS</td>
<td>Information Systems</td>
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<td>ISP</td>
<td>Internet Service Provider</td>
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<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>ITT</td>
<td>Information Technology Transfer</td>
</tr>
<tr>
<td>KACST</td>
<td>King Abdulaziz City for Science &amp; Technology</td>
</tr>
<tr>
<td>KSA</td>
<td>The Kingdom of Saudi Arabia</td>
</tr>
<tr>
<td>MCIT</td>
<td>Ministry of Communication and Information</td>
</tr>
<tr>
<td>MENA</td>
<td>Countries from the Middle East and North Africa</td>
</tr>
<tr>
<td>OCED</td>
<td>Organization for Economic Co-operation and Development</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational Scientific and Cultural Organization</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
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<tr>
<td>YESSION</td>
<td>The e-government national program that enable e-government program transactions at government agencies</td>
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Chapter One: Area of Concern

1.1 Introduction

Nowadays, technology is present in almost all walks of life and governments all around the world are motivated to make optimal use of it, hence, there is no place in the modern age for a nation with undeveloped technology. The Kingdom of Saudi Arabia is strongly dedicated to employing technology throughout the country. There are advancements and plans for the telecom sector, and for reforms and structural changes in all economic sectors. In addition to implementing cutting edge advances in technology, the government is determined to transform the Kingdom into an information- and knowledge-rich society. The ICT sector is developing and growing rapidly and e-government is part of these transformations that the government is implementing (Yesser, 2009a, Yesser, 2009b).

The government of Saudi Arabia has proposed and implemented a multi-stage plan for the adoption of an effective future of e-government (KSAYesserProgram, 2007). However, the e-government phenomenon involves making radical changes to the entire public sector at various levels (Scholl, 2005, Traunmuller and Wimmer, 2003). Changes in the organizational structure, values, and culture are all influenced by these fundamental changes. As a result, a plethora of issues has emerged at the political, organizational, technological, cultural and social levels (Tolbert and Mossberger, 2003). These issues should be considered and investigated thoroughly in order to move the country into the modern information and knowledge era successfully.

The aim of this chapter is to outline the area of concern for the study and the reason for choosing this research. A statement of the problem, previous studies, the research problem, and the approach and procedures are outlined. The context (background) of the research is presented and described. Finally, the motivations for, and significance of, the research, its aims and objectives, and the questions are presented and explained.
1.2 Statement of the Problem

The developed countries have implemented the power of the Internet and successfully adopted e-government in the public services, whereas developing countries have been slow to adopt e-government strategies (Karunanada and Weerakkody, 2006, Stoltzfus, 2005, Weerakkody et al., 2007). However, the potential benefits of e-government projects have not been fully realised in various developing countries, such as the KSA. This research study aims to examine the problems inherent in the adoption of e-government in the public sectors from the perspective of employees. The purpose of the study is to explore the underlying key cultural issues that both drive and impede e-government initiatives in the Kingdom of Saudi Arabia by way of employees in different parts of the public sector. It is based on qualitative research methods and empirical research conducted in the three different public sectors. The research is a case study employing in-depth interviews to collect primary data about the perceptions of employees who will be using the new e-government system.

1.3 Previous Studies

Various studies have been conducted in Saudi Arabia that address similar issues, including studies related to technology and technology transfer, studies related to some aspects of culture and organization, others that are related to the users and end users of technology, and finally studies that are related to the importance of technology and the implementation of e-government (Abanumy and Mayhew, 2005, Abdul Ghani and Al-Sakran, 1998, Abdullah et al., 2006, Al-Fakhri et al., 2008, Al-Gahtani, 2003a, Al-Gahtani et al., 2007, Al-Khalid and Olusegun Wallace, 1999, Al-Somali et al., 2008, Atiyyah, 1989, Bakry, 2004, Bawazir, 2006, Bjerke and Al-Meer, 1993, Elmusa, 1997, Hamner and Al-Qahtani, 2009, AL Shehry et al., 2009, Alhussain and Drew, 2010). However, these studies are not all-encompassing in that they do not cover all areas in the field and it is these areas that are the concern of this research. Previous studies were conducted in the KSA by many researchers with different points of view and focus. Although they were significant and highlighted numerous important areas, they did not present the human perspective in dealing with technology and the impact of culture. Nonetheless, there is one research study of a similar nature which studied the
government employees’ perceptions of the introduction of biometric authentication at the workplace in the KSA; however, culture was not an aspect of the study (Alhussain and Drew, 2010). In this study, I will focus on the employees and explore the impact of culture in their workplace when dealing with technology.

1.4 Area of Concern (Research problem)

Many research studies have been conducted into discovering the most successful approaches to adopting e-government, as well as introducing various frameworks for understanding the adoption process. However, there have been very few studies on the influence of culture on the adoption and implementation of e-government from the employee’s perspective, especially in the Gulf area. This research study seeks to address this shortcoming by providing an overview of culture and the key cultural dimensions that influence employees charged with the adoption of e-government in the context of Saudi Arabia. As there is little research into the perceptions of the e-government service providers (employees), this study is intended to provide a balanced understanding of the key cultural dimensions that influence the adoption of e-government in the KSA.

Policies, regulations and people play a crucial role in promoting the success of e-government implementation. Technology is significant, but not as crucial to successful adoption as the human factor (Cabrera et al., 2001, Doherty et al., 2003). Organizational and cultural changes are complex compared to technological change. Nonetheless, it is important that both technology and humans work in harmony for the best results. However, at the same time, human beings are influenced by the culture in which they live. In this light, this research was conducted to explore the influence that culture has on employees in organizations adopting an e-government system in order to understand the different issues that go into the adoption process to achieve the full potential of the programme’s implementation. Various problems were identified from the literature and the field study that highlighted the importance of conducting such a study in order to find ways of overcoming such problems associated with handling technology. Thus, this study was conducted to address this matter and to find ways of preventing obstacles to the adoption of the e-government project.
For this research, I conducted an empirical case study in three different public sectors to explore and research the cultural drivers of and barriers raised against the implementation of e-government in the Kingdom of Saudi Arabia. E-government provides a great opportunity for the government to deliver its services and to be able to interact with businesses and citizens. In addition, it reduces costs, enhances efficiency, and speeds up jobs and transactions. Furthermore, this modernization of government services provides information, communication and transaction services all in one place.

Despite this attractive picture of e-government benefits and opportunities the success rate is not high. As (Heeks, 2003) pointed out, the majority of e-government project implementations fail. (Heeks, 2002) believed that many information systems in developing countries could be judged to have failed totally or partially. Thus, it is important for government and policy makers to understand e-government initiatives in order to be able to identify the challenges to adopting e-government and to be aware of any factors that might either facilitate or impede the implementation of an e-government system. Elements that could drive or hinder the adoption of e-government may be political, social, economic or cultural. However, much of the current IS literature identifies the importance of the human and organizational aspects as crucial to the success of the adoption process. Thus, it appears that the successful implementation and development of new IS systems depends, to a large extent, on the human factor. Some authors have even asserted that human and organizational issues are now the most critical factors for the success of IS (Cabrera et al., 2001, Doherty et al., 2003).

For this reason, I conducted this research to try to shed some light on the human aspects involved in the adoption of e-government in the KSA. I chose to conduct a qualitative case study as the research method for this study, focusing on in-depth interviews conducted with different participants and employees in the public sector. The purpose of this case study research was to investigate the key cultural drivers and barriers that emerge from organizations in adopting e-government. Drivers could be identified as factors that facilitate the adoption of e-government, and barriers as factors that obstruct it. Thus when I turned my attention to organisations adopting new technology, I placed great emphasis on the organizational cultural context which was a crucial element. Employees in the sector are strongly influenced by the culture they live in and
understanding how culture has an impact on the adoption process is a vital element for successful implementation of e-government.

**Key Aspects of the Study**

Adapted from (Partington, 2008)

**Figure 1: Key Aspects of the Study**

To explore how employees in the organization perceive e-government adoption in the public sector

What are the cultural drivers and barriers that influence employees with the adoption of e-government in the public sector?

Cultural impact on employees in the organization when dealing with e-government

Semi-structured qualitative interviews with employees to understand the impact of culture when implementing a technology as e-government
1.5 Approach and Procedures for this Study

1.5.1 Philosophical assumption of qualitative research

The philosophical assumption of qualitative research is the interpretive constructive view. This view was chosen since it assists in discovering the meaning that is constructed in the social world by individuals and studies the contextual elements that have an impact on the behaviour of individuals. In addition, the current research is interpretive in nature due to the focus of this study on cultural drivers and barriers to e-government adoption by employees.

1.5.2 Qualitative research strategy

For this research I conducted a qualitative empirical case study research to explore and address the problem of adopting e-government in the public sector in the KSA. This strategy provides a more in-depth perspective and a more extensive explanation to enable a better understanding of the e-government adoption phenomenon (Hoepft, 1997, Yin, 2009).

1.5.3 Role of this researcher

I acted as an objective observer, maintaining some distance from the observed events and not becoming directly involved, in order to avoid influencing subjects. However, notes were gathered in the field (Flick, 2009, Walsham, 2006).

At this juncture, it is pertinent to explain my position and my research study. As a Saudi female researcher, I am attempting to break new ground by collecting data through in-depth interviews. I come from the most conservative and closed country in the Middle East. In my country, religion and Islamic fundamentalism have an enormous influence over many aspects of people's lives and society in general (LosAngelesTimes, 2009). In my country (KSA), there are various restrictions and constraints that females have to face (as further explained in the following chapters). Women are not allowed to drive or travel (LosAngelesTimes, 2009); nor are they permitted to participate in public life (Deif, 2008, Booz&Co., 2009). Before September 2011, women were not allowed to vote or run in municipal elections (BBCNews, 2011). All females in the country must
rely on and be accompanied by a male at all times (also explained in the following chapters) (LosAngelesTimes, 2009).

As a dutiful Saudi female living in the Kingdom, I do understand and respect the culture and its boundaries. It is important, therefore, to point out that I am not criticizing my country which I am proud to be a part of. Instead, I am trying to present and illustrate an image of the KSA that is unfamiliar to non-Saudis and Westerners. In short, I wish to fill a gap in the knowledge that is always there and to explain enigmas about the culture of KSA that have never been understood (Menoret, 2006). My role here would be to provide some insights to readers who are interested in my culture and to try to convey why things are so different in my country.

As previously mentioned, the strong influence of fundamentalist Islam on society leaves females severely restricted in the country. However, it is important to reveal that even though we are a very conservative society, there are ways to do things and achieve objectives although, one has to know the background and use the space available to reach goals. Therefore, as a Saudi female citizen who lives in this culture, I am in a position to take this opportunity to reveal all the challenges, obstacles, and risks encountered in pursuing this research.

1.5.4 Data collection procedures

*Interviews*: interviews were conducted to enable me to discover how employees perceive the adoption of the new e-government programme; through them, I attempted to delve into the minds of employees to learn the reasons behind their perceptions.

*Documents*: I used documents to offer more insight into the problem under study and gain extra information. Various documents were reviewed and related to the e-government project in the KSA.

*Observation*: in addition, I observed the context when possible, in order to study subjects’ procedures and motivations.
The Kingdom of Saudi Arabia is an oil-based economy with strong government control over the main economic activities (Peterson, J. 2003). The introduction of the Internet has offered a great opportunity for the government to transform the old conventional bureaucratic ways into a more efficient government by adopting the e-government concept (Sait, S. K. Al-Tawil, et al. 2003). The Kingdom of Saudi Arabia is entering the digital and information era and wants to be a well-informed and knowledgeable society (Yesser, 2009b). A huge investment has been made in the development of the telecommunication infrastructure to support the growing needs of information technology. Nevertheless, KSA remains behind its smaller neighbours who are forging ahead with rapid Internet development (KSA Yesser Program, 2007). However, the Saudi government is keen to implement the e-government concept and wants to achieve significant growth and development in various ways. The objectives of adopting an e-government programme in Saudi Arabia are: raising the productivity and efficiency of the public sector; providing better services to residents, citizens and businesses; increasing the return on investments; and providing the required information in a fast and accurate manner (Yesser, 2009b).

According to the (UnitedNations, 2001), developing countries should consider the use of e-government not only for the benefit of both government organizations and citizens, but also to reduce corruption and increase transparency and social control. One of the officials in the government organization responsible for communications and technology echoed similar reasons for implementing e-government in the KSA. The government wants to decrease bureaucracy, reduce corruption and have transparency. In addition, the Saudi government, by applying the e-government system, wants to be liberated from routine work, save time, and be more efficient. This government official also announced that the use of the new technology would be able to create jobs for women who could work from home (Al-Jazirah-newspaper, 2007).

It is not surprising, therefore, that the Kingdom has developed a strategy and action plan for an e-government initiative called “Yesser” (the enabler program and motivator for the application of e-government transactions in government agencies) to be implemented within five years. Thus, the year 2010 was identified as the deadline for
the implementation of e-government to enable everyone in the country to enjoy e-government services.

*By the end of 2010, everyone in the Kingdom will be able to enjoy – from anywhere at any time – world class e-government services offered in a seamless, user friendly and secure way by utilizing electronic means (Yesser, 2009a).*

The action plan included various projects to meet the strategic objectives of the initiative. There were three types of project: infrastructure, e-service and national application projects. The government concentrated on information technology to improve the economy. The IT sector had advanced and developed enormously in the previous forty years. (Slater and Tacchi, UNESCO 2004) identified a number of critical issues that emerged from the implementation of different e-government projects that are crucial for success: political commitment, project design and leadership, implementation, financing, local development and sustainability. This demonstrates that the implementation of new technology for e-government is extremely challenging and requires careful consideration, including recognizing that the impact of culture on organizations and their employees could interfere with the adoption process.

Indeed, the greatest challenge that the Kingdom is facing or will be facing is not the technology itself, but the integration of this technology and ensuring that it is effective, utilizable, deliverable, and accepted. Government officials need to have a strategy to achieve successful integration of e-government. This entails the need to consider the internal organizational context and the employees who will be using the technology. Consequently, the implementation of e-government involves not only the transfer of technology but also the reinvention of internal procedures in the organization in terms of both the internal (administration) and external (services) implementation of the technology (Grönlund, 2002). With this in mind, this research examines the internal element of the organization and the influence of culture on the organization.

Installing an ICT programme in an organization is a technical undertaking that can be achieved successfully with the right professionals, technicians and adequate financial resources. The KSA has the financial wherewithal and has invested heavily in the
technology, obtaining the best professionals in the field. However, particular attention needs to be paid to each individual organization, from its internal structure to its manner of conducting work. Reforms have to be undertaken to ensure a smooth transition of technology which entails, *inter alia*, managing one of the most significant aspects of internal organization which is the workers who will be using this technology.

The failure rate of e-government project implementation is high, particularly in developing countries, despite the advantages and benefits that e-government technology provides. A report on e-government implementation projects in developing countries indicated that 35% failed, 50% partly failed, and only 15% were successful (Heeks, 2003). Therefore, assessments of different challenges should be made in advance to enable a clear plan and strategy to be drawn up to achieve the full potential of e-government adoption. Issues that deal with culture and how employees perceive the system are a critical aspect that should not be overlooked. For this reason, leaders in the government should recognize the drivers and barriers that influence the deployment of e-government in particular contexts (Pardo, 2000). The government should have a vision and a strong strategic plan that works specifically for the employees in their particular context rather than relying solely on imported technologies. Every country is unique and has its own characteristics that make up the specific culture and this aspect should not be ignored.

1.7 Research Motivations and Significance

The study of e-government in KSA is significant and was chosen for various reasons:

- I saw it as a challenge as a female conducting research in a male-oriented culture. This kind of work is seen as a completely novel enterprise in my society and culture. As a female of Saudi origin, I may have had the advantage of being able to decipher meanings that are rooted in the culture (Hall et al., 1996, Hall). However, conducting this research I encountered various obstacles and risks as a Saudi Muslim female (Gardner, 1988, Martin, 1980).

- The importance of this research is its originality, signified by the qualitative research method applied in collecting the primary data through in-depth interviews with employees. This meant that I needed to take the initiative to
communicate with employees in different male-oriented public sectors in a conservative society. This was a challenge, bearing in mind the cultural background of Saudi Arabia; however, many changes were happening at this time (and still are) which allowed me to take such a step. These changes are explained in the body of the research especially in the methodology and the discussion chapters.

- It focuses on the complex, conservative and traditional culture of Saudi Arabia and provides an in-depth look at the cultural phenomenon; to date, very little research has been conducted on socio-cultural phenomena in the KSA (Menoret, 2006, Al-Saggaf, 2004, Adelman and Lustig, 1981b).

- It is hoped that this study will raise the awareness of the public sector about e-government initiatives in the KSA. In addition, it will identify issues concerning potential improvements for the implementation of the e-government concept.

- It is a practical initiative and offers a tangible insight into the highly complex affiliation between culture and the implementation of technology in a specific context (Straub, 1994b, Straub et al., 2002b).

- The culture of Saudi Arabia is characterized as being highly resistant to change (Alriyadhnewspaper, 2008), thus, it is hoped that this research will make some contribution to confirming or disconfirming this finding, and why. This point is explained in more detail in the discussion chapter with the appropriate references.

- Another vital aspect of the motivation for this study is whether the government institutions and individuals are ready for the change, despite the government’s determination to implement e-government (Alriyadhnewspaper, 2008). This is a key element in addressing e-government or any other technology. The financial and technological expertise is in place; however, acceptance of such change within sectors and by individuals is an unknown factor. The question of readiness not only lies in the availability of the telecommunication infrastructure, existing budgetary resources, and the e-business environment, but also in the acceptance by the workers. The e-government concept is in its infancy in the KSA and full consideration should be given to all these elements to avoid failure in the adoption process.
• The application of e-government application should be based on the citizens’ needs in order to offer appropriate services, and the main objective of e-government implementation is to make these services more accessible. However, some people in Saudi society feel that the adoption of e-government will be yet another obstacle which has to be overcome as it is seen as another example of dealing with bureaucracy and the centralized ideals and mindsets that seem to be prevalent in the public sector. (Al-Yam, 2006)

• A study of cultural aspects is imperative when examining the adoption of any new technology. Usually, the technology is created in a developed country and then transferred to other countries. Therefore, it would be safe to assume that it was built and created to satisfy needs that are compatible with the developed country and not the country the technology is going to. This research is therefore essential in shedding some light on the matter of transferring and adopting new technology.

• E-government has been chosen as a potential area for study since a number of issues arise in the field and there is still a lack of knowledge about the inherent problems. Given some of the concerns expressed about e-government in KSA, it seems that there is some evidence to suggest that e-government implementation requires more attention, focusing on any issues arising to ensure a better and successful adoption.

• The Saudi government’s vision of the e-government initiative is another significant reason to conduct this study. This vision was that by the end of 2010 everyone in the Kingdom would be able to enjoy various e-government services by using the “Yesser” programme (the e-government national programme) (Yesser, 2009a).

• One of the key objectives of the “Yesser” programme is to improve the efficiency and effectiveness of the public sector. For this to be successful, research should be conducted to investigate some of the key issues that could drive or inhibit efforts to achieve efficiency and effectiveness in the public sector (Yesser, 2009a). It is the employees in the sector who will be using the new system to ensure efficiency and effectiveness; as such, a study should be conducted to evaluate their adoption process. Examining the human factor is
extremely significant as employees influence and are influenced by culture in their own familiar environment.

- The government has high expectations with the deployment of e-government and wants to achieve growth and development in all aspects of life. Currently, the major concern is the transfer of technology and having the IT infrastructure ready to work with ease and speed; however, the government does not appear to able to acknowledge the human factor and how this is going to influence the adoption process.

- It is empirical because it goes beyond the standard pattern of describing e-government to provide a proposed framework that could be used in a culture like Saudi Arabia.

- This is a new phenomenon, which is worth studying; hardly any research has been conducted on it to date. Therefore, this research will contribute to knowledge of the subject.

- The lack of literature in this area, especially studies done in the KSA, is another factor that demonstrates the significance of the research into the problem under study (Adelman and Lustig, 1981b, Al-Saggaf, 2004).

### 1.8 Research Aim and Objectives

Despite the fact that IT is regarded as a “good thing” for the government, elements that may cause shortcomings in the use and implementation of the technology, leading to failure to adopt e-government, have been overlooked (Heeks, 2001a, Korac-Boisvert and Kouzmin, 1995). (Heeks, 2002, Heeks, 2006) analysis of e-government stresses that IT implementation in the public sector has its advantages and disadvantages, but significantly, the influence of humans on e-government is substantial and cannot be overlooked. In other words, the government and officials should not neglect the human element in the implementation of new technology. The aim of the research is to study the employees (i.e. the human aspect) who use the e-government system and how culture influences the adoption process.
In order to achieve the aim of the research, related literature was reviewed to identify the key issues that hamper or facilitate the successful development of e-government. Some important aims of this research study are to:

- Review relevant literature to identify potential barriers to and drivers for successful e-government implementation.
- Explore, discover, and analyze the key drivers and barriers encouraging or hindering the development of e-government in KSA.
- Explore the relationship between culture and the implementation of technology in the public sector in KSA.
- Present some recommendations that could help in the implementation of e-government in the public sector in KSA.

1.9 Research Questions

Main Question: What are the key cultural drivers and barriers that are inherent in employees in the public sector who are involved in the adoption of e-government in the Kingdom of Saudi Arabia?

Sub-question: How do the culture and the beliefs of the employees (history and background) affect the organization when adopting e-government in the KSA?

1.10 Thesis Structure

Chapter One: The first chapter provided an overview of the research under study in terms of the statement of the problem, previous studies, research focus and the approach and procedures offered. In addition, it presented the research background, significance, aims and the research questions.

Chapter Two: This chapter presents the case study research context of KSA. It gives an overview of the location and population, the political structure, the economic structure, and the socio-cultural structure. It also reviews the of technology in the KSA, and previous related work.
**Chapter Three:** this chapter presents a review of the relevant literature. It provides an overview of the basic concepts of e-government and of culture. In addition, the chapter provides an overview of the dimensions of Arab culture. Finally, the drivers and barriers present in e-government adoption are identified.

**Chapter Four:** the relevant frameworks related to e-government and its development stages are described. An “e-acceptance framework” for implementation of e-government is presented. The drivers and barriers that are related to the Arab and other cultures are identified.

**Chapter Five:** this presents the different underlying philosophical paradigms and the qualitative techniques for data collection. It describes the difficulty in conducting the research and the access issues and explains the procedures taken to obtain access. Finally, the chapter provides a justification for the research method selected and the choice of data collection techniques used in the case study.

**Chapter Six:** the different approaches of qualitative data analysis and the criteria for choosing the data analysis approach are explained. In addition, this chapter presents the rationale for the data analysis approach and the rationale behind the use of the condensation approach. Finally, the applied data analysis procedures and evaluation criteria are explained.

**Chapter Seven:** this chapter provides the results from the fieldwork and in-depth interviews. The different cultural dimensions of e-government adoption which influence employees in the organization are then provided. Finally, the conceptual framework for the adoption of e-government is developed.

**Chapter Eight:** this chapter summarises the study itself, discussion, contribution, implications, limitations and conclusion of the research. The analysis of transcripts revealed that culture has a strong influence on individuals in the organization.
Chapter Nine: the last chapter presents an overview and summary of the research process procedures, the results and conclusion. Finally, it identifies the research’s limitations and provides recommendations for future research as well as revealing the gap between expectations and the reality of achieving the potential of e-government.

1.11 Chapter Conclusion

In recent years, there has been rapid growth in the implementation of e-government projects. Many countries are developing e-government because of the significant advantages it offers to a country and its economy. The major aim of this research is to explore the key cultural drivers and barriers to successfully implementing e-government in the public sector in the KSA. In this chapter the area of concern and the research context was outlined. Moreover, this chapter has identified the aim and objectives, the significance, and the limitation of the research.
2 Chapter Two: Case Study Research Context

2.1 Introduction

In the previous chapter an overview of the research study and the area of concern were presented. In this chapter, the research context of the case study is illustrated. The chapter is divided into two sections; first, the background of the KSA (location and population, government and political structure, economic structure, and social and cultural structure) is outlined and second, the technological aspects appertaining to the KSA are explored. In addition, previous related work is presented.

2.2 Background of the Kingdom of Saudi Arabia

2.2.1 Introduction

Saudi Arabia is the birthplace of Islam and home to Islam’s two holiest shrines, in Makkah and Medina; the King’s official title is the Custodian of the Two Holy Mosques (CIA, 2008). Islam, along with Judaism and Christianity, is one of the world’s three great monotheistic religions. The Quran is the holy book of Islam. The official religion of the KSA is Islam (Network, 2009). The modern Saudi state was founded in 1932 by Abdulaziz bin Abdulrahman Al-Saud, after thirty years of campaigning to unify most of the Arabian Peninsula (Niblock, 1982, Pisoiu, 2009, Salameh and Steir, 1980).

The country of Saudi Arabia went through a variety of reforms during the reign of King Abdullah (TheEconomist, 2010). When he was Crown Prince the government held national elections from February until April 2005 for half the members of the 179 municipal councils, to promote more political participation. In December 2005, King Abdullah completed the mission by appointing the remaining members of the advisory municipal councils. In 2008, with his mind set on reform, he instituted an Inter-Faith Dialogue initiative to encourage religious tolerance on a global level. He also restructured the cabinet, with a trend towards appointing more moderates to hold ministerial and judicial positions. He also appointed the first female member of the cabinet (CIA, 2008).
2.2.2 Location and Population

The Kingdom of Saudi Arabia comprises approximately four-fifths of the Arabian Peninsula, bordered on the west by the Red Sea, on the south by the Indian Ocean and on the east by the Arabian Gulf. The Kingdom itself occupies approximately 2,250,000 square kilometres (868,730 square miles). In July, 2005, the country has a population of 26,417,599, including the non-nationals, indicating a 2.32 % growth rate (CIA, 2009, Metz, 1993).

2.2.3 Government and Political Structure

The KSA has been a monarchy since 1992, and the King has complete decision-making power. He serves as both the head of state and head of government. The country was established under a fundamentalist interpretation of Islam; however, the discovery of oil transformed the country into a global nation and so Saudi Arabia is now evolving from a rural into an urbanized country (Metz, 1993).

Religion is a significant factor in the KSA (Al Sayyari, 2008, Metz, 1992) and the country does not make a separation between the state and religion; as such, the Quran is considered to be the country’s constitution. The Quran is the primary source of the Sharia (Islamic law). Basic Law was introduced in 1992 to be used in conjunction with Islamic Sharia Law as an added source of legal guidance with particular reference to government issues which Sharia Law does not address. However, it should be noted that neither the Basic Law nor the King’s Orders are capable of overriding Sharia Law (Metz, 1993).

2.2.4 Economic Structure

Saudi Arabia has an oil-based economy, with sturdy government control of the main economic activities. It owns about 25% of the world’s proven petroleum reserves, ranks as the largest exporter of petroleum, and plays a leading role in OPEC (alloexpat, 2009). Petroleum is the largest economic sector in Saudi Arabia and accounts for about 80% of budget revenues, 45% of GDP, and 90% of export earnings. The private sector is responsible for about 40% of GDP (CIA, 2008). The government through the public
sector plays a significant part in the country’s economic activity (Al-Farsy, 2003). Approximately 6.4 million foreign workers are key elements in the Saudi economy, especially in the oil and service sectors. The Kingdom is continuing to pursue economic reform and diversification (Clary and Karlin, 2011, CIA, 2009) and became affiliated to the WTO in December 2005. Foreign investment in the Kingdom is promoted. There are plans to launch six ‘economic cities’ in various parts of the country to encourage development and diversification. Until mid-2008, high oil prices boosted growth and revenues, giving the country generous financial reserves with which to combat the global financial crises; however, tight international credit, falling oil prices, and global economic growth were predicted to reduce economic growth in 2009 (CIA, 2009).

2.2.5 Social and Cultural Structure

In order to assess the technological impact of e-government in the country and its cultural drivers and barriers, this research must try to consider the full national context of Saudi Arabia. Saudi culture is characterized by various aspects that distinguish it from other countries. The conservative society of Saudi Arabia has strong links with the religion of Islam (Al Sayyari, 2008, Baker et al., 2007), which plays a significant role in people’s lives and acts as a key force in determining and identifying Saudi culture. Management of the country is based on Islamic teaching and Arabian cultural values are dominant (Baker et al., 2007). In fact, the role of Islam is echoed in the social norms, patterns, traditions, obligations, privileges and practices of the society (AlMunajjed, 1997, Al-Saggaf, 2004). Islam is considered not only a religious ideology, but also a comprehensive system that encompasses a whole way of life (AlMunajjed, 1997). The importance of the role of Islam is recognized by (Hofstede, 1991) in his analysis of Saudi Arabia and different cultural dimensions. Saudis as Muslims follow the Quran and adhere to it in their activities. Historically, the KSA has had a significant and special place in the Islamic world due to its being the home of the two Holy Mosques for the Muslims (Al-Farsy, 2003). In the following pages the researcher will go over some of the specific cultural and social dimensions of the people of Saudi Arabia.

The impact of religion on people’s lives is evident in various aspects of the Kingdom. For instance, the shops in Saudi Arabia are required to close at all prayer times in order to allow people to perform their praying at the time dedicated for that matter. All
commercial shops and public places, such as grocery shops, barber shops, malls, pharmacies, restaurants and gas stations, whatever and wherever they may be, have to abide by this rule. Therefore, most businesses and public places should close down for thirty minutes for prayer time. However, Shaikh Ahmad Al Gamdi who is the President of the Promotion of Virtue and Prevention of Vice in Makkah, has rejected the general requirement for closing shops to perform ‘group prayer’ stating that there is no point in forcing people to close their shops during prayer times. However, he had to face strong criticism from Muslim leaders and even from his own members of staff in the department. Furthermore, he encountered attacks against his family and friends (Gulfnews, 2010).

When this matter reached the Shoura Council members (The Consultative Assembly of Saudi Arabia - a formal consultative body with 179 members) they described it as a matter that “requires study”. One of the members said that he had experienced delays at petrol stations on the highways where he was obliged to wait to be served for half an hour. He went on to compare Saudi Arabia with other Gulf Arab and Islamic states which do not close their shops at prayer times and yet the mosques are full of worshippers (Gazette, 2010). This is just a small example of how religion is not taken lightly in the country and is reflected in all aspects of Saudi life.

As will be explained in the literature review, Arab culture is traditional, socio-centric and male-dominated (Abdalla, 1997, Badawy, 1980). Gender roles in the society are based on Islamic law and the cultural tribal traditions. All females in Saudi Arabia must have a male guardian regardless of the female’s age or status. The male guardian is the father or husband who is practised in and encompasses different modes of protecting women based on religious principles on travel and marriage. In addition, women cannot work without the permission of their guardian as determined by official law, customs and traditions. In addition, a woman must not leave home without her mahram (a close male relative) (Al-Mohamed, 2008, Zoepf, 2010) and is not allowed to drive (Wilson and Graham, 1994, Kliger, 2010).

One very significant aspect that profoundly influences all aspects of social and public life in the country is the segregation of the sexes. The segregation of males and females is a cultural dimension that is very specific to the culture of Saudi Arabia. Males and
females are separated in schools, universities and the workplace. As a general rule, it is imposed in education, public places, hospitals, restaurants, shopping malls, banking, and job opportunities. It is proscribed by Islam for a woman to mix with men who are not related to her (AlMunajjed, 1997, Ember and Ember, 1988, Wheeler, 2000), resulting in a clear division of labour between men and women, which is practised in various public areas throughout the country (Baker et al., 2007). Public separation of men and women is a very distinctive characteristic of the country (Zoepf, 2010). However, this practice is considered to be a positive feature of society because it is based on a religious tenet. The majority of Saudi organizations adopt this firm division, confirming the generally accepted cultural practices (AlMunajjed, 1997, Field, 1994). Women in general feel more comfortable in the workplace and more relaxed with no men around them. Moreover, the practice of segregation is designed to protect their chastity (AlMunajjed, 1997). However, although this general rule applies in most public and private places, there is some mixing of the sexes in areas such as hospitals and banks, parts of the private sector and also in KAUST, the new university of science and technology established by King Abdullah (AlArabiyaNews, 2009). Indeed, hospitals were among the first places in the country where women worked in a mixed-gender environment. In urban areas, Saudi patients became used to the idea of having female nurses and doctors and other female workers in positions of authority (TIME, 2010).

In addition, Arab society is a collective culture which encourages dependence on relatives and friends (Hofstede, 1984). This means that the extended family is firmly placed at the centre of Arab society and from this family base relations and dependencies are extended to the tribe or clan (Said, 1979). This feature is tangible in Saudi society and it impacts on their relations in both life and the workplace. The tribal traditions require that individuals seek consultation in decision-making within the same tribe or extended family (Mellahi and Wood, 2001). Asabiyah – intense loyalty to one’s own tribe or regional group – exists in both the public and private sectors; however, it is more pronounced in the public sector. The characteristic of Asabiyah with its strong tribal and regional connotations affects various activities in the workplace in Saudi Arabia. Thus, Saudi culture is characterized by a tribal system that is a dominant feature of society. The Saudis share this characteristic (Asabiyah) with other Arab countries that have strong kinship and tribal traditions. These traits influence the individual at
various levels in society, and may have an effect on people’s success or failure in the traditional and innovative aspects of life (Vassiliev, 1998, Vogel, 2000).

Thus, the notion that family orientation in Saudi culture is significant and strong is obvious, with family relations coming first, as stressed in the verses of the Qur’an (Bjerke and Al-Meer, 1993). The religion of Islam pays particular attention to family and kinship relations. A study conducted by (Bjerke and Al-Meer, 1993) pointed out that family and friendship are significant and influential factors in Saudi society.

**Employment and Women in Saudi Arabia**

The public sector in Saudi Arabia is the biggest employer of women in the country. Many females are working in the sex-segregated education system and the number is increasing in an effort to replace the foreign teachers. In 1994 about 70% of women working in public schools were Saudi nationals. In addition, health care is considered to be as appropriate an occupation for Saudi females as education since it is deemed suited to their nature (Doumato, 1999).

It is not surprising therefore that women’s participation in the labour market since 1992 has risen from 5.4% to 14.4% (the labour force includes people currently employed and those seeking employment) (booz&Co., 2010a). The majority of these women are working in the education field which is considered to be a major part of the public sector in the country. These females are teachers who work at public schools teaching female students in an all-female environment. Therefore, most employed females are working in the services sector predominantly in education and in health and social services. In other words, most of the job opportunities for women are concentrated in girls’ education and the health services sectors (UNDP, 2002). The employment laws are guided by Islamic law and traditions that espouse the need to protect women and create an appropriate moral environment (Moghadam, 2005). In addition, women cannot work without the approval of their husbands or male guardians. Furthermore, the job should be suited to the nature and physique of the female (Al-uthaymeen, 1998, Deif, 2008).

A further stipulation concerning the employment of females is that contact with non-mahrams (i.e. with men who are not close male relatives) in the workplace should be
kept to a minimum (Al-MaraAl-Amila, 1998). The private sector is advised to follow the example of the government workplaces where women work in isolation from the men. In addition, the female should not travel to her workplace without a male relative although it is possible for her to travel alone to work with a male driver if necessary (Al-uthaymeen, 1998, Deif, 2008).

Even though the government is taking major steps to improve the status of women in employment, nevertheless, there are a number of factors that are obstacles to Saudi women’s full participation in the labour market such as social, legal, educational, and occupational constraints. These social constraints are evident in the cultural traditions and local customs of Saudi Arabia which influence the nation’s economic development and which create unique opportunities and challenges that could inform and constrain labour policy. Thus there is an on-going debate about the role of women in society at this time. The Kingdom has been hesitant in embracing anything that could harm the traditional family unit which the nation strongly values. The issue of the mixing of the genders in the workplace is another problem that society faces. Therefore, these social norms strongly influence and play a role in shaping government policies (booz&Co., 2010a).

These cultural constraints are evident, for example, in the case of lingerie shops in Saudi Arabia. The Saudi government through the Ministry of Labour passed a law in 2006 to give women the opportunity to work in shops that sell clothing and underwear or any female-related items. The legislation specified that all lingerie salesmen should be replaced by saleswomen within a year. However, this law was ignored by the majority of these shops which faced pressure from Saudi clerics and conservative forces opposed to females mixing with men in the workplace (France24, 2010). Meanwhile, the percentage of unemployment among female Saudis reached 28 %. The ministry was trying to bring this down to a minimum and deployed officials to monitor implementation. However, a number of conditions were laid down before women were allowed to work in lingerie shops. All females had to secure the consent of their legal guardians, were not allowed to mingle with men in the workplace, and the saleswomen were required to wear Islamic dress (Gulfnews, 2006). To accommodate the influx of women into their staff, shops had to be designed in a manner that prevented anyone from seeing inside, and they were obliged to set up separate entrances for women.
However, so far, the law still does not appear to have been implemented appropriately and there has been no official reason given to explain it. Possible reasons for this state of affairs might be that men will be put out of work, strong pressure from the Muslim clerics to contend with, and the majority of individuals in the Kingdom still believe that women’s natural place is in the home (BBCNews, 2009).

In addition, there are legal constraints. The Saudi Universities Law, the Civil Service Law, and the Labour and Workers Law treat women equally with men in specific areas such as the awarding of grades, salary, curricula, opportunities in education, employment and training. These aspects of modern life are enshrined in Saudi law since they do not contravene Islamic law. However, these laws are not implemented due to a combination of local norms and traditions, social beliefs, and principles that impact on women’s lives (Booz&Co., 2009). Although the Saudi employment laws and regulations do not discriminate against women, the regulations regarding discrimination against women are limited. In addition, the problem of implementation occurs on both international and national levels. Women’s rights exist in theory but are not enforced or implemented in reality. Meanwhile, another constraint considered to be an obstacle is the fact the women are not permitted to drive (booz&Co., 2010a).

Also educational constraints play a role in limiting women from participation in the labour market. The lack of high quality education for females is the reason for the Saudi labour market segmentation. The girls from public schools do not meet the demands of the labour market. This is because the Saudi educational system does not offer the skills and background that women need to succeed in the labour market (booz&Co., 2010a).

Furthermore, there are occupational constraints that affect the Saudi labour market since women are restricted to traditionally female-oriented fields in the public sector. Men have greater opportunities than women to obtain productive work. In addition, there is a lack of organized infrastructural support for women in the workplace in both the public and private sectors. Also, trade unions are not permitted to exist in the country. The lack of a specialized unit at the Ministry of Labour that is responsible for regulating women’s work only compounds the problem. Furthermore, the absence of data makes it
difficult and hinders socioeconomic planning and future labour policies (booz&Co., 2010a).

Nevertheless, some initiatives have been put in place to promote Saudi women in the labour market. At the international level the Kingdom has ratified three conventions in order to promote gender equality in the workforce. At the national level, the Kingdom has taken some legislative steps. The Saudi labour code grants every citizen the right to work and firms must offer opportunities and training. Saudization (which seeks to increase the proportion of Saudi nationals in new competitive jobs) policy has identified positions particularly suitable for women. The Eighth Five-Year Development plan (2005-2009) also emphasized the need for more opportunities and employment for women. Prince Sultan bin Abdul Aziz Al Saud announced plans in 2007 to allocate one-third of government jobs to Saudi women in addition to the many other government initiatives that had been created to support the promotion of Saudi female job opportunities. In addition to the government initiatives to combat unemployment in the country, there is now a major initiative coming from the private sector to combat unemployment from Abdul Latif Jameel Community Services Programs (booz&Co., 2010a).

Moreover, Prince Alwaleed is open and frank in his disapproval of traditionalist political machinations, especially concerning the treatment of women in Saudi Arabia. In 2004, he hired the first female airline pilot in Saudi Arabia. His support of women is clearly demonstrated by the fact that nearly 65% of the staff at his palace and at his Kingdom Holding Company are women. He asks “how can a country advance when 50% of the population is idle?” (Khan, 2005, Forbes, 2005). Prince Alwaleed has shown his strong commitment to women in Saudi Arabia by offering continuous contributions to educational and training programmes to women in the country. He personally believes that active women play an important social and economic role in society. In addition, he is a strong advocate of women’s rights and empowerment (ADC, 2005). Alwaleed further believes that lifting the ban on women driving in Saudi Arabia would be the fastest way to reduce dependence on foreign workers. He is quoted as saying: “Saudi society wants fewer foreign labourers so why the hesitation [over whether to allow women to drive]?” (ArabNews, 2011b, Reuters, 2011).
Comparing other Countries to Saudi Arabia

At first blush, if one surveys the Gulf Cooperation Council (GCC) countries that have similar customs, traditions, and tribal relationships with the Kingdom, one finds that women enjoy more robust political and civil rights. For instance, in Bahrain, women have served in parliament and as ministers; on the other hand, a Saudi woman still needs to have a mahram (a close male relative such as a father, son, or uncle) to escort her everywhere. In the other GCC countries, women can participate in parliament, mix freely face-to-face with men, and represent their countries as ambassadors unescorted by male supervisors, whereas in Saudi Arabia, a woman’s male guardian is required to give signed permission to allow her to travel (Al-Mohamed, 2008). In addition, the Shoura Council appointed six female academic parliamentary advisors (AlsarqAl-awsat, 2006) but they were only allowed to enter parliament as advisors only (Al-Mohamed, 2008). However, even with all the publicity for the new female members of the Shoura Council they still do not have the right to vote as their male colleagues do (TIME, 2009). In addition, when male workers feel the necessity to consult with their female colleagues, the resultant interaction between them is done only via video conferencing (Al-Mohamed, 2008). In contrast, Kuwaiti women received the same political rights as men in 2005. Indeed, women in Kuwait were able to practise their newfound right to vote and seek election to office for the first time in the 2006 parliamentary elections (Kelly, 2009).

Currently, women in Saudi Arabia still make up less than 15% of the national workforce. Consequently, participation of Saudi females in the labour market is low compared with others in the region. In the The United Arab Emirates it is 59%, in Kuwait it is 42.49%, Qatar 36.4%, Bahrain 34.3%, and Malaysia (a Muslim country outside the Middle East) is 46.1%. Of the total population of working Saudi women, about 95% are employed in the public sector and 85% of all working women are in education in both teaching and administrative positions. Only 5% of working Saudi women are employed in the private sector (booz&Co., 2010a, Al-SharqAl-Awsat, 2006, AlMunajjed, 2010, BusinessIntelligence, 2010).

Thus the public sector in Saudi Arabia is the largest employer of women in the country with most of them working in the education field in all-female public schools. Malaysia, however, which is also Muslim and family-oriented, has identified the need to strongly
support women in the labour market. There, the private sector is the largest employer of females and the government is supporting this situation and offering access to funds (Al-uthaymeen, 1998, Deif, 2008).

In Saudi Arabia, women are permitted to work if their husbands and male guardians allow it, while the environment also has to be suitable for females. It is forbidden for Saudi females to be appointed as judges and certain positions of high public office are reserved for men (Deif, 2008). In contrast, women in the United Arab Emirates (UAE) and Bahrain are now permitted to act as judges and prosecutors (Kelly, 2009). In addition, Malaysia ranks fifth globally for the percentage of senior positions for females in different size enterprises. Moreover, around 39% of corporate women are holding high decision-making positions (Daily, 2009). Thus, women in Malaysia have taken significant steps towards greater participation in all segments of the Malaysian economy and have displayed success in the public and private sector (ArabNews, 2011a). However, in the KSA, there are legislative, social and occupational constraints that prevent women from fully participating in the labour market (BusinessIntelligence, 2010).

The question of gender is a controversial issue in Saudi politics, economics and society. For instance, gender segregation in the country is deep-rooted in the culture whereas in most other Muslim countries there is no isolation due to gender. The gender issue is evident in the labour market; the CEO of a Malaysian Islamic financial institution had to use the backdoor of the bank in Kuwait and in Saudi Arabia because she was not permitted to come through the front door which is used by males (ArabNews, 2011a). Furthermore, Algeria and Oman which are very close to KSA in religion and values (especially Oman) treat the gender matter differently. Gender discrimination in the workplace is officially forbidden and the laws support equal pay at work for both. In addition, the Yemeni government adopted a national strategy in 2003 for gender equality. Furthermore, in 2006, Morocco adopted a national strategy on gender equality (booz&Co., 2010a, Internationallabouroffice, 2008). However, women in Saudi Arabia who work at jobs that are held by men such as banking, earn less than men who also get better benefits. A female worker told a reporter that she does not get covered for childbirth whereas her male counterparts do (Zawawi, 2008).
Table 1: Facts about the Kingdom of Saudi Arabia

<table>
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<tr>
<th>Facts about the Kingdom of Saudi Arabia</th>
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<tbody>
<tr>
<td>Area</td>
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<tr>
<td>Population</td>
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<tr>
<td>note: includes 5,576,076 non-nationals</td>
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<tr>
<td>Population growth rate</td>
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<td>Age structure</td>
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<tr>
<td>(2009 est.)</td>
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<tr>
<td>Median age</td>
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<td>Ethnic groups</td>
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<td>GDP (purchasing power parity)</td>
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<td>note: data are in US dollars</td>
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<td>GDP - real growth rate</td>
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<tr>
<td>Government organizations</td>
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<tr>
<td>Public sector labour</td>
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Facts about the Kingdom of Saudi Arabia

<table>
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<tr>
<th>Labour force</th>
<th>6.74 million</th>
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<td>Note: about one-third of the population in the 15-64 age group is non-national (2008 est.)</td>
<td></td>
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<tr>
<td>Telephones – main lines in use</td>
<td>4,123,000 (2008) source MCIT</td>
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<tr>
<td>Telephones – mobile cellular</td>
<td>29,753,000 (2008) source MCIT</td>
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<tr>
<td>Internet users</td>
<td>7,700,000 (2008) source MCIT</td>
</tr>
<tr>
<td>Broadband</td>
<td>1,331,000 (2008) source MCIT</td>
</tr>
<tr>
<td>Natural resources</td>
<td>Petroleum, natural gas, iron, gold and copper</td>
</tr>
</tbody>
</table>

2.3 Technology in the Kingdom of Saudi Arabia

2.3.1 Information Technology (IT) and the Internet in Saudi Arabia

Since Information Technology is now considered to make a significant contribution to economic growth in many countries, the KSA is strongly supporting the development of IT. IT applications have spread throughout different sectors in the country, providing better productivity and advancing performance in fields such as finance, commerce, industry, education, government and healthcare (Al-Turki and Tang, 1998).

The government provides and encourages the use of IT systems in the economy. These policies support public and private organizations in their efforts to implement and employ modern and developed IT systems (MOP, 1995). The most advanced IT systems in KSA are considered to be found in the banking, oil and petrochemical sectors (AbdulGader, 1989). However, problems are associated with the use of IT in the KSA, such as shortage of skilled employees, language barriers and lack of collaboration between organizations (Hamade, 1995, Namlah, 1982, Shidma and Ohta, 1988).
The Saudi government is dedicated to fulfilling the plans announced for liberalizing the telecom sector, in line with strategic economic reforms and structural changes in all economic sectors. The government wants to transform the country into an information and knowledge society, and is therefore continuing the development of ICT (KSAYesserProgram, 2007). The ICT sector is growing rapidly in the Kingdom and contributing to the increase in gross domestic product (GDP). The government has deployed a multi-stage plan for restructuring the ICT sector with the aim of encouraging effective competition, attracting local and foreign investment, and at the same time protecting the interests of the public and consumers. In December 2005, Saudi Arabia joined the World Trade Organization (WTO) as its 149th member, and as a result, is committed to liberalizing its ICT sector according to the General Agreement of Trade in Services (GATS), the Agreement on Basic Telecommunications (ABT) and the Reference Paper (UnitedNations, 2007).

The King Abdulaziz City for Science & Technology (KACST) was developed and a comprehensive national ICT plan was disseminated with the aim of further developing ICT. KACST is devoted to developing the science and technology infrastructure of the country by encouraging applied research and designing and employing national science and technology policies and projects. In addition, it operates the Internet backbone in Saudi Arabia, as well as the local registry address space. However, it should be noted that Saudi Arabia has one of the highest controlled media environments in the MENA region (UnitedNations, 2007) as all Internet-web traffic goes through the “IP block” registered to KACST. KACST is not only the Internet gateway to the Kingdom; it also acts as a filter for unsuitable material, in order to prevent the spread of pornographic materials on the web. These materials include gambling, terrorism and politics as well as anything contrary to Islamic beliefs and local culture (UnitedNations, 2007, ArabNews, 2005a).

2.3.2 E-government Initiative in KSA

The government of Saudi Arabia is eager to implement e-government for its effective role in boosting the state’s economy. The IT National Plan supports this interest in the transformation to e-government, and the e-government initiative was part of the overall information technology plans in 2001. The plan focused on reforming public
organizations via ICT. However, it became apparent that the transformation to an information society could not be attained without comprehensive cooperative efforts. As a result, the Ministry of Communication and Information Technology (MCIT) established the e-government programme in association with the Ministry of Finance and the Communication and Information Technology Commission (CITC) (KSAYesserProgram, 2007, Yesser, 2005).

In general, the objectives were focused on developing and supporting the country’s economy by way of developing e-government, e-health, and e-learning, and in addition, improving productivity at low additional cost, setting up standards and guidelines for national networks, developing a security framework and conserving society’s traits in the digital age (SaudiComputerSociety, 2004). Three areas were the focused on, namely e-readiness, e-society and IT training. In 2003, the Saudi government developed “Yesser” the e-government programme designed to encourage growth and development in the government. This programme was intended to improve the productivity of the public sector and make available government services to different businesses and citizens in an easy manner, offering accurate and timely information (MICT, 2004).

It is anticipated that the “Yesser” project will help to transform the public sector in terms of methodologies, data, standards and knowledge. “Yesser” is also part of many initiatives the Kingdom is aiming to implement to achieve sustained growth and development in all aspects of life. The programme’s objectives are: raising productivity and efficiency in the public sector, providing better and easy-to-use services for citizens and businesses, increasing returns on investment (ROI), and providing needed information in a timely and accurate way (Yesser, 2009a).

The vision for Saudi Arabia’s e-government initiative is user-centric, that is, to provide better government services for the user. The mission statement is that by the end of 2010 the Kingdom should be able to offer the service to everyone and enable them to enjoy the system from anywhere and at any time in a user-friendly and secure manner, through various electronic methods. The initiative is part of the National Information Technology plan that includes a long-term vision for IT in the Kingdom over the next twenty years, in addition to the five-year plan (Yesser, 2009a).
This plan is to be executed over a five-year period through two parallel tracks (Yesser, 2009a). The developmental policies are outlined in the eighth five-year national development plan (2005-2009) and deals with various global challenges, for the first time addressing a long-term strategic perspective on development, based on the future vision of the Saudi Economy towards 2025 (UnitedNations, 2007). The first track is expected to continue for a maximum of two years, and the second should be for the full five-year period. The government services portal (www.saudi.gov.sa) of the first phase of e-government was launched on 14th January 2007 with an allocation and investment of more than $800 million for this phase. Through this portal the government provides visitors with information on government services, organizations, systems, regulations, national plans and initiatives, electronic services, and news and activities (Yesser, 2009a).

2.4 Previous Related Work

In this section, previous studies of technology and culture in Saudi Arabia are reviewed. In 1989, a study by Atiyyah on public organizations in Saudi Arabia examined the determinants of the computer systems in operation at the time and their effectiveness in the sector. He discovered that the adoption of ITT applications in Saudi Arabia faced various problems, especially in terms of acceptance of ITT which was hindered by three problems: technical, organizational, and human issues (Atiyyah, 1989). In 1998 another study examined the transfer of new technology to Saudi Arabia. This study focused on organizational culture and the structure of the organization (Abdul Ghani and Al-Sakran, 1998). Yet another Saudi Arabian study concerning cultural consequences and management styles appeared in 1993; its objective was to analyze Saudi culture by the use of the four cultural dimensions that were developed by Hofstede (Bjerke and Al-Meer, 1993).

A study conducted in Saudi Arabia in 1997 argued that the massive transfer of technology had changed the traditional culture of the country, and that modern technology carries with it new paradigms of perceptions and actions (Elmusa, 1997). A 1999 study investigated the relationship between end users’ attitudes and computer utilization; the researchers used Triandis’ theory that proposes that behaviour is
determined by social norms, attitudes, habits and expected consequences of behaviour (Al-Khaldi and Olusegun Wallace, 1999). An investigation into how perceived attributes of computer technology affect the rate of adoption in the workplace used Rogers’ five attributes of innovation: relative advantage, compatibility, complexity, trainability, and observability (Al-Gahtani, 2003a). A study of the transition to e-government that used the STOP development profile introduced the benefits of using technologies and discussed the importance of e-government at national and international levels (Bakry, 2004).

Research has also been done in Saudi Arabia and Oman to evaluate the accessibility of e-government websites, exploring three aspects: website accessibility guidelines, website accessibility tools and human implications. It concluded that further efforts were required to make websites more accessible (Abanumy et al., 2005). In 2005, research into e-government in Saudi Arabia shed light on the role of e-government applications for the purposes of conveying better information and services to citizens (Abanumy and Mayhew, 2005). In an e-government workshop a study was conducted to investigate the motivations behind the change toward e-government, aiming to provide insights into the e-government phenomenon from the perspective of Saudi Arabia (Abdullah et al., 2006).

Another study of e-government in Saudi Arabia in the same year addressed the key factors for successful sustainable development, pointing out that organizations can achieve their goals by understanding the technology (Bawazir, 2006). A year later, a study of cultural acceptance and the use of IT in Saudi Arabia used the unified theory of acceptance and use of technology to analyze research to determine ‘intention to use’ and ‘usage behaviour’ for workers using computer applications (Al-Gahtani et al., 2007). Another study implemented the technology acceptance model (TAM) with regard to online banking in Saudi Arabia, examining the factors that influence the adoption of online banking in the country (Al-Somali et al., 2008).

An important study that examined e-government in Saudi Arabia found that there were many Saudi government departments that had websites; however, they were ineffective. This implied that the Saudi government needed to understand the challenges they (government departments) encounter to enable them to adopt proper solutions to
developing the websites (Al-Fakhri et al., 2008). A study in 2009 focused on the acceptability of e-government by individuals; the researcher used a people-centric approach to determine the overall level of acceptability by people in a developing country such as Saudi Arabia (Hamner and Al-Qahtani, 2009).

Furthermore, another study about e-government was conducted in KSA in order to highlight the key organizational issues that affect e-government adoption at a national and agency level (AL Shehry et al., 2009). Also, another important study conducted in Saudi Arabia investigated the employees’ perceptions of the use of biometric technology adoption in e-government. This study found that a digital and cultural gap existed between the technological awareness of employees and the favoured authentications solutions supported by management (Alhussain and Drew, 2010).

All of these studies, carried out in Saudi Arabia by various researchers, focused on different perspectives. Some concentrated on organizational aspects in the public sector while others conducted their research on the transfer and adoption of IT in developing countries. Others focused on organizational culture, different management styles, and the attitudes of individuals working with technology. These different research studies are significant and informative; however, this research study focuses on a different perspective in dealing with technology. Its aim is to study the social culture of individuals and explore its impact on employees in the public sector in the adoption of e-government in public organizations, and to identify the cultural drivers and barriers that influence the implementation process. In other words, this research aims to explore these cultural drivers and barriers with regard to employee behaviour in the public sector when faced with the adoption of e-government in the KSA. Chapter eight will discuss these studies in more detail, and how they relate to the present research.
2.5 Conclusion

In this chapter, an explanation of the research context was presented. The background of the Kingdom of Saudi Arabia was outlined, social and cultural structure, in addition to the technical background. Knowledge of the country’s context is significant for a comprehensive understanding of the case study. This chapter also outlined the previous work that is related to the problem under study. Finally, the aims of this research to discover some of the cultural aspects that might have an impact on the adoption of e-government were outlined.
3 Chapter Three: Literature Review

3.1 Introduction

This chapter presents a review of the literature on areas related to the research under study. Results of other studies are presented; in addition, the review provides ways of identifying the gaps and extending prior studies (Marshall and Rossman, 2006). Furthermore, this review offers a framework for establishing the significance of the study and a benchmark for comparing the results with other findings (Creswell, 2009). In addition, since this is a form of qualitative research, i.e. an exploratory case study, it is incumbent upon myself to recognise those areas that have been researched and introduce some aspects that have not been written about previously (Creswell, 2009), especially as little research has been conducted in the area of social science in the KSA. In this research, the focus is on the cultural aspects of society in general and its impact on the organization and not on the dimensions or properties of the organizational culture itself. This chapter has three sections that are presented in figure 2 below.

Figure 2: The Sequence of Topics in the Literature Review
3.2 Basic Concepts of E-government

3.2.1 E-government Definition and Significance

The rapid development of information technology has altered the way organizations conduct their business. The private sector has benefited most from information and communication technology; the public sector less so. Along the same lines, the government paper entitled “Thoughts on e-government” pointed out that the fast development in IT resulting in the integration of both computer and telecommunication technologies helped open up both private and public organizations.

As a result of advances and progress in IT, practitioners and researchers have become extremely interested in e-government in recent years (Huang et al., 2005). Thus, while it can be said that many governments seem to have caught ‘e-government fever’, the same could also be said about researchers who have also found this new phenomenon appealing. (Chen et al., 2008) state that e-government is an evolving and advancing area of research in the IS field. However, most of the studies conducted on e-government are about successful implementation in developed countries and there appears to be a lack of studies on the e-government concept in developing countries.

E-government refers to the employment of the electronic media in the sector, using the Internet, intranets and hand-held services. E-government can be seen as an element that adds public value through the use of ICT (Capati-Caruso and Valle, 2006, Joseph and Kitlan, 2007). Various definitions of e-government are found in different literature. The basic concept is the same; however, it differs according to the field or business that the e-government is related to. In general, the concept of e-government can be defined as a structure that enables the government to deliver its services online, making them easily available to citizens and businesses. E-government, or Electronic Government, involves the conversion of public sector data into digital data, changing the structure, and providing services online via the Internet. (Backus, 2001) refers to the concept of e-government as the conversion of the conventional public sector services and processes into an electronic system that enables ease of access and interaction while (Pons, 2004), defines e-government as the use of the Internet for citizens, businesses, and government for interacting together. According to the World Bank website (2005), e-government
can be defined as the IT that transforms relations with end users and delivers better
government services to citizens and more efficient government management with less
corruption and better transparency (Mundial, 2005). Another definition by (Schedler
and Scharf, 2001) is that e-government is a system that relates to the governments,
citizens, companies and public institutions through the use of modern ICT.

There are other definitions of e-government that deal with the quality of services
provided to the public. The European Union (EU, 2004) defines e-government as the
use of ICT in public administration combined with organizational change and the
development of new skills to improve public services. There are also definitions that
focus on the change and conversion of the public sector, i.e. e-government is a powerful
and influencing steering vision for the change that governments should implement
(Lenk and Traunmüller, 2001).

However, the difficulty with these definitions is that they are based either on ICT or the
delivery of services regardless of the fact that there is a wider range of aspects to
consider when dealing with e-government, and other elements that play a more
important role in the success of e-government implementation. According to (Grant and
Chau, 2005), these somewhat narrow definitions of e-government focus on delivering
services, and the real issues are not considered. The more complex matters are not
mentioned, for example, the process of transformation of the services themselves. A
limited understanding of the concept (as evidenced by the various definitions) and poor
acknowledgment of what an e-government system could really provide can lead to
failure (Ndou, 2004). Therefore, the government and policy makers should understand
these issues and be aware of the capabilities of the system, and not depend on narrow
views that could cause a lack of vision in implementation.

Furthermore, (Heeks, 2003) has pointed out that e-government in developing countries
is implemented for economic advances and in order to modernize government.
Nonetheless, these countries should employ ICT to improve the activities of their
organizations and produce efficient and effective public sector operations. Therefore, it
can be said that the adoption of e-government is not simply confined to the employing
of technology; it is an important step towards enabling the public sector to advance and
benefit from technology. In addition, e-government involves the use of ICT in public
administration instead of classical methods, encompassing changes in the structures and various processes in the organization. The transformation of methods, structures and internal elements is crucial for the success of an e-government project. The employees in the sector are obliged to adopt and change their work methods in order to be compatible with the new system.

3.2.2 Major E-government Categories

E-Government is divided into four major categories: government-to-citizen (G2C), government-to-business (G2B), government-to-government (G2G), and government-to-employee (G2E). According to (Siau and Long, 2005), the four areas of e-government have different degrees of involvement. For example, G2C and G2E engage in communication between government and individuals, while G2B and G2G engage in communication between government and organizations. The authors distinguished another aspect, external and internal interaction. G2C and G2B involve interaction between government and external institutions, whereas G2G and G2E involve communication between government, its employees and internal departments.

**Government-to-Citizen (G2C)**

This deals with the relationship between the government and citizens, permitting government agencies to communicate with citizens and provide different services. In addition, G2C permits citizens to access the government website online and search for information and services from anywhere at any time. Therefore, this is a method that allows both sides to communicate with each other freely and more efficiently. In addition, one of the most beneficial uses of G2C is the posting of different forms and registrations that could be done online instead of waiting long hours in order to receive forms physically (Evans and Yen, 2005).

**Government-to-Business (G2B)**

This deals with electronic interaction between government agencies and private businesses. In addition, it allows for the government to pay for, purchase and perform many work activities with minimum cost (Evans and Yen, 2005). Furthermore, G2B permits e-transaction initiatives, for example, the procurement and advancement of the
electronic marketplace (Fang, 2002). This enables businesses to obtain information, acquire forms and permits, and pay taxes online (Pascual, 2003).

**Government-to-Government (G2G)**

This deals with the relationship between governmental organizations, for instance, national, regional and local, or with other foreign government organizations. This provides the government with an effective tool for communication in an efficient manner requiring less paperwork and eliminating redundancy. Online communication permits cooperation and sharing of databases, resources and skills. As a result, communication is much more efficient and effective (Ndou, 2004).

**Government-to-Employee (G2E)**

This deals with the relationship between government and its employees. G2E provides services to the government employee in that they are able to access information on training and self-development. This is a way in which the government can offer e-learning to its employees and knowledge-sharing between them. In addition, employees have the chance to access other information that interests them, such as financial benefits, rights and laws (Ndou, 2004).

3.2.3 Stages of E-government Development

Different models or stages have been proposed in the literature for e-government. However, the aims and objectives for e-government initiatives are different, depending on the specific context of each country. The general movement towards implementation of e-government has created many e-government visions and strategic plans needed to meet different goals. These different visions and goals depend on social, political and economic factors and conditions (Rohleder and Jupp, 2004).

E-government is an attractive concept that came into the field of public administration in the late 1990s. Indeed, the concept of e-government followed the example set by the private sector’s adoption of e-commerce and e-business (Moon, 2002). Governments initially implemented IT to provide better and more effective management through the development of ICT applications (Moon and Norris, 2005). E-government has four main internal and external aspects: 1) establishment of a secure government intranet and
central database for interaction among governmental agencies, 2) web-based service delivery, 3) application of e-commerce for better e-government transactions, and 4) digital democracy (Government and Survey, 2000).

The adoption of an e-government programme requires that different levels and goals be converted into the new system. In addition, the evaluation of e-government relies on different elements in the implementation process. Culture, technology, economics and human resources are all aspects that are involved in the adoption process (Backus, 2001, Kaaya, 2003, Layne and Lee, 2001). Each stage of e-government is defined by the level and amount of complex technological elements required for the interaction of the internal and external components (Moon, 2002). Some stage models have been developed by individual researchers and others by institutions. The different stage models are: Gartner’s four-stage model (2000), UN’s five-stage model (2001), Deloitte’s six-stage model (2001), Layne and Lee’s four-stage model (2001), Hiller and Bélanger’s five-stage model (2001), Moon’s five-stage model (2002), CapGemini Ernst and Young’s four-stage model (2004), and Siau and Long’s new synthesized five-stage model (2005). All are described in chapter four (Theoretical Framework).

3.2.4 E-government in Developing Countries

Most of the developing countries’ strategies for e-government implementation are based on the experiences and theories of developed countries (Huang et al., 2002). At the same time, the developing countries are pressurised by their citizens to provide e-government systems. However, because of the differences in technological and social aspects between the developed and developing countries, the adoption of e-government systems may not be completely successful or applicable in certain developing countries (Chen et al., 2006).

Additionally, there are some challenges in terms of the political, social, economic and technological composition of some developing countries that may affect the adoption process of e-government. Thus, there is the need to carry out focused studies and research in these countries to overcome the problems that occur in the implementation of new technology. ICT is considered to be an ‘enabler’; however, it can also create many challenges that cannot be ignored by the public and private sectors (Ndou, 2004).
Moreover, the challenges of e-government implementation are not only concerned with technology, but also require changes from a number of organizational perspectives in terms of structures and skills, new forms of leadership, and the transformation of public-private partnerships (Allen et al., 2001).

ICT is known to be a useful tool for addressing some of the key obstacles and challenges that countries face when entering the global economy, which may have an impact on future growth potential. In addition, ICT is not only a tool for storing, collecting and processing huge amounts of data with minimal cost, it is also a means of setting up networks for the purposes of communication around the world (Crede and Mansell, 1998). However, developing countries which fail to take advantage of ICT resources are risking widening the digital divide. In other words, countries that fail to adopt and benefit from the use of technology will suffer (Ndou, 2004).

3.2.5 Challenges for E-government Initiatives in Developing Countries

**The Shift in the Public Sector**

According to Ho (2002) the old systems of government administration are inefficient and need to be changed. He believes that the traditional bureaucratic paradigm, known for its internal productive efficiency, functional rationality, departmentalization, hierarchical control and rule-based management (Kaufman, 1977) needs to be transformed to a modern system that will allow better use of ICT and focus on coordinated network building and external collaboration with customer services. In addition, He pointed out that this shift from the bureaucratic paradigm to an e-government paradigm will affect many aspects of organization, including orientation, process organization, management, leadership style, internal communication, external communication and principles of service delivery.

The management of change and the concurrent shift in methods of organization are initiatives that need to be taken seriously in order to reduce to a minimum the amount of obstacles to the adoption process. Resistance to change from employees in an organization is considered to be one of the most difficult hurdles to manage. Resistance is identified in individual attitudes and in the challenges that stem from conducting and sharing work between different units in the public sector (Welp et al., 2007). In general,
employees fear change, especially when it involves the application of ICT, because of the fear of job losses or being replaced (Ndou, 2004).

**ICT Infrastructure**

Setting up an ICT infrastructure is a key challenge to the e-government implementation process. In fact, a number of developing countries do not have a suitable ICT infrastructure (Khalil et al., 2002). At the outset, the first stage of e-government for developing countries entails the modernization of the internal activities and services of the public sector (Basu, 2004). There have to be plans, strategies and models for the transition to an e-government system. However, the adoption of e-government is hampered not only by the technological aspects of telecommunication; other aspects that should be considered in the deployment process include e-readiness and ICT literacy, and other complex aspects such as social, cultural and political factors (Banerjee and Chau, 2004, Chen et al., 2008, Singh and Secretary, 2000) in order to receive the full benefit of e-government (Ndou, 2004).

**Political Aspects**

The political aspects play an important role in setting down the laws and legislation for regulating the system. In addition, funding issues that are related to supplementing and raising budgets should be considered in the adoption procedures. The political stability of the country is also an aspect that could influence adoption efforts. The adoption of e-government principles and functions needs to be closely monitored. Policies and new legislative changes have to be implemented to enable people and business to work within the system. However, in various developing countries, e-business and e-government lack the rules and laws to deal with the new system. Legal reforms and protection are required to supervise a medium where privacy and security are a concern for users (Ndou, 2004).

**ICT Skills and Human Development**

The shortage of IT skills among the public sector staff, and in addition the lack of IT standards to follow, is an element that should be considered in the e-government adoption process (Backus, 2001). This aspect can be a problem for the developing countries where the lack of qualified staff and human resource training are a legacy of previous years (UNPA and ASPA, 2001). The availability of human resource skills in
the public sector is a central prerequisite for successful adoption of e-government (Ndou, 2004).

**E-government Design and Strategy**

So far, developing countries have tended to adopt technology that was originally created in and for developed countries and have implemented it in their organizations. However, this adopted technology does not consider the context of the specific country. To some extent, there are differences in terms of the context of design and the context of implementation (Heeks, 2005). For best results, governments and policy makers should have a strategy and vision for the planning process before transferring the technology to different sectors. However, various governments and public institutions appear to ignore the differences in the transfer process and conduct a simple transfer of the information and services online, taking no account of the re-engineering process required (Ndou, 2004). To overcome such problems, it is incumbent on governments to consider their particular requirements and construct a specific design that fits the context of the country. In this way, governments and policy makers would reduce the challenges that may emerge from the changes and adoption of new technology.

### 3.3 The Significance of Culture in this Research Study

Any change in the organizational environment, for instance addressing new rules, new structures, and new technology systems, affects the employees in an organization since it happens in a cultural environment. Thus, any change or addressing of the differences is a move that will normally cause a reaction in the setting where it happens. For example, the organization’s cultural attitudes could hinder the adoption and utilization of new technology in the sector. This is why it is important for the government to anticipate these reactions in advance, in order to have a better view of the context and improve the chances of success in the adoption of new technology.

For this reason, it is crucial for this study to address the concept of culture and its impact on employees when new IS technology is implemented in the sector. Nowadays, various countries are adopting technologies that reach outside their national boundaries; therefore, it is vital to comprehend the impact of the cultural differences and their
dimensions on the adoption of that technology. This is because the cultural attitudes and
dimensions could become barriers or obstacles to the integration and diffusion of
technology into an organization. Therefore, there is a significant relationship between
culture and technology. An important question was raised by (Straub et al., 2001):
“What is the nature of cultural obstacles to ITT?” In answer to this, they explained
various points about this relationship. Technology adoption sets up a relationship
between people and machines and the obstacles arise because people carry their
‘cultural baggage’ with them to the workplace. I support this idea since many issues are
present in the process of adopting technology because of the impact of culture.
Therefore, culture plays a significant role in influencing individuals in using or refusing
the new system.

Moreover, the concept of culture tends to be neglected by management as it is rarely
considered to be a major element in the success or failure of organizational innovation
(Detert et al., 2000). However, there is a lack of research in the area of culture and how
it affects change or the implementation of new programmes in the field. This
demonstrates the importance of culture and how it affects staff and employees in an
organization. Although an understanding of culture helps lead to a successful IT
implementation (Myers and Tan, 2002), very few studies have been made on the effects
of culture on IS in the field, as cross-cultural IS research is still at an early age (Straub
et al., 1997).

### 3.4 Basic Concepts of Culture

#### 3.4.1 Culture

In researching the background and history of culture, I discovered various, sometimes
contradictory, definitions of culture by different scholars. There is no single definition;
however, more than one definition is used at different times and in different contexts by
researchers. Individuals are influenced by a range of cultures and sub-cultures that could
be ethnic, national or organizational. Culture is one of the most complex and difficult
terms to define (Williams, 1985), and culture \textit{per se} is considered to be a problem in
the IS research field although, at first sight, it seems to be a simple concept. The broad
range of researchers working on the concept of culture have produced definitions
ranging from the simple to the complex (Straub et al., 2002a). A universally accepted definition is hard to pin down; nonetheless, culture could be described, in general, as a phenomenon which encompasses common behaviours of thinking and feelings, with shared ideas about the environment, all of which are borne out of people having a familiar background and experience.

An initial review of definitions discovered over 160 different definitions of culture in the literature (Kluckholn and Kroeger, 1963). Culture can nevertheless be grouped into three major categories: those based on shared values, those based on problem solving, and those which are general all-encompassing definitions.

**Definitions based on values**
From the early 1950s, Parsons, Shils (1951) and Kroeger (1952) included values as a central concept of their definitions. Kluckholn’s (1951) definition referred to ways of thinking, feeling, and reacting that are influenced by symbols that shape the distinct achievements of human groups, and their image in the artefacts. The heart of their culture consists of traditional ideas and the attachment to values. Geertz (1973) defined culture as being based on shared values which have historic meaning and are preserved in the symbols. It has also been viewed as a system that has inherited concepts that are explained in symbolic forms by means of which people communicate and develop their knowledge and attitudes in life (Straub et al., 2002a).

**Definitions based on problem solving**
This view was popular from the 1940s until the 1980s and into the early 1990s. Ford (1942) pointed out that problem-solving is an outcome and explained that culture incorporates the outcomes of traditional problem-solving techniques that are performed in accepted ways and which are retained if they prove successful. Schein (1999) defines culture as “the sum total of all the shared, taken-for-granted assumptions that a group has learned throughout its history” (Straub et al., 2002a).
General all-encompassing definitions
Sheldon (1951) splits culture into two categories, explicit and implicit culture: “Culture is a theoretical model, and the abstractions and principles from which it is made up are free creations of mind. Some of these abstractions and principles with matters are close to the minds of the individuals’ culture bearers. This aspect of culture is usually called explicit culture or some similar term. Other aspects of culture, the cultural bearers are unable to formulate” (Straub et al., 2002a).

Cultural Levels
National culture (or cross-cultural) research and organizational cultural research have become two separate research concepts in the IS/IT field. However, these two concepts do overlap since they share the central idea of values in their definitions (Kayworth, 2006). Culture in the IS discipline has been studied on different levels, namely, national (cross-cultural), organizational, group and individual (Triandis, 1972, Hofstede, 1984, Myers and Tan, 2002, McCoy, 2003). Culture at a national level is shared between individuals in society (Hofstede, 1984), while culture in the organization is between individuals in the workplace and is called organizational culture (Stahl and El-Beltagi, 2004).

National Culture
The concept of national culture (cross-culture) includes multiple definitions. National culture is the collection of beliefs, values, norms and experiences that are gained from infancy by a group of individuals who share and use them in a particular context. National culture is the foundation of people’s social life that is engraved in their context. It affects how people act, react and respond to elements around them; it is a template that individuals follow throughout their lives. For example, if any kind of action or event occurs within a given society, the outcome can reasonably be predicted by the people who belong to that society. Therefore, national culture is the map that a certain group of people goes by and adapts to.

National culture is defined as people in a society who share a collection of values, norms and practices that form the behaviour of the whole society (Adler, 1997, Bagchi et al., 2003). (Hoecklin, 1995) describes culture as a combination of fundamental values/assumptions and practices: “culture is a collective phenomenon that is about
shared values and meanings”.

Most of the studies done on national culture have relied heavily on the work of Hofstede (1980; 1991) and his model of national culture (Straub, 1994a, Tan et al., 1995), especially in the IS research field (Avison and Myers, 1995). However, most of the definitions focus on the common view that culture is a collection of different artefacts, values and beliefs, and basic assumptions that organizational members share about appropriate behaviour (Detert et al., 2000). In addition, concentrating on patterns of thinking and values, (Hofstede, 1980b) defined national culture as a collective system of the mind that people share and which represents them, making them different from others.

**Organizational Culture**

The concept of organizational culture has been studied by various researchers (Eldridge and Crombie, 1974, Handy, 1976, Hofstede, 1980a, Hofstede, 1981, Pettigrew, 1979, Turner, 1971), who have offered a range of definitions and treatments of the concept. Others who have researched and written about the concept include (Baker, 1980, Henderson, 1979, Ouchi and Cuchi, 1981, Silverzweig and Allen, 1976, Schwartz and Davis, 1981). Moreover, the concept of organizational culture borrows greatly from anthropology and sociology, even though there is no single identified and accepted definition of organizational culture.

(Schein, 1993), one of the most well-known researchers to have studied organizational culture, defines it as a group of people who have their own ideas and assumptions, and their own experiences to rely on in dealing with matters and problems; these different matters are then considered to be the system that they follow and teach others to employ. This system, which is followed by the group of workers within the organization, constitutes a set of rules that they go by; it guides the attitudes of employees in the sector. Likewise, (Yip, 1992) describes this culture as including the values and unwritten rules that direct the manners in a corporation. Culture in Schein’s definition is something that distinguishes one group from another (Avison and Myers, 1995). Another definition describes organizational culture as an aspect that differentiates one group from another; it comprises common ideas, values and expectations that are similar among the members of the group (Louis, 1980).
In addition, organizational culture is an assortment of ideas, beliefs, norms and values that are found in the organization and are seen in different ways. These attributes could be expressed by individuals in the form of symbols, ceremonies, language, myths, rituals and stories that have an impact on the attitudes of staff in the sector (Johnson and Scholes, 1999, Schein, 2004). Various authors have described culture as a means of conveying familiar ideas, values and meanings that a group of people share. In other words, organizational culture is a pattern of beliefs, expectations and values shared by an organization’s members (Hunger and Wheelen, 1996). A similar view describes culture as having similar thoughts, and a set of individuals having common views of their surroundings (Hill and Jones, 2001).

**Thoughts on Culture and Organizational Culture**

In this research, employees in organizations in general understand their culture either consciously or unconsciously; and have expectations of how they should be treated in the sector and what the general environment is like. As a result, national culture acts as a canvas and guide that shows the way implicitly or explicitly, and works as a guide for people in their everyday life in a specific setting. For this reason, the effects of adopting a new system or change in any aspect of the organization should not be ignored. The adoption of a system that is consistent with and fits with the national cultural expectations will succeed better than one that does not.

It is important to understand organizational culture and how people interact with each other in the sector setting. Understanding this aspect will shed light on various aspects of the organization and will guide the government and policy makers in choosing suitable methods to employ. Any change in the organization’s elements or adoption of a different system will result in an alteration and shift in the organizational culture. However, ignoring this fact may cost the government heavily in terms of both finance and effort, besides the possibility of seeing a system fail before it even starts. This is why it is important for the government and policy makers to introduce systems that are consistent with the organization’s culture.

Nevertheless, it is important to emphasise that the challenge faced by the government and policy makers is quite daunting since the organizational and culture aspects are intangible. The organizational culture is formed by employees whose interactions and
communication are based on what they are influenced by. These individuals in the organization are a microcosm of the bigger society which in turn is affected and influenced by the cultural environment. In other words, every individual coming into the organization carries his/her ‘cultural baggage’ into the workplace. National culture and organizational culture are intertwined, and organizational culture is a miniature version of the whole national culture; however, there could be some differences that relate to the specific setting of the organization and the different influences that could affect individuals in the workplace. As a result, an internal culture will be formed within the organization and create the organizational culture. This culture is a collection of shared values, beliefs, ideas, norms, experiences and expectations that shape the individuals’ actions. In addition, this culture is made up of an assortment of unconscious influences that are picked up subconsciously. This is why any attempt to explain culture will always be a difficult task involving dealing with various nebulous elements in a particular context.

In addition, culture is considered to be a concept that is ever-changing over a period of time as new elements are introduced in special settings. (Morgan, 1997) describes culture as “an active living phenomenon through which people jointly create and recreate the worlds in which they live”. It is active and living because organizational culture is not a static concept that stays the same but will alter depending on the circumstances and new influences in the workplace. The concept of culture and organizational culture, then, is something that cannot be predicted completely; nevertheless, it can be studied and some of the elements that could influence the environment can be anticipated. Thus, it can be considered as a living element that changes, transforms and develops over time and with different experiences. This is why it is difficult to pinpoint and identify exactly the elements or dimensions that affect people’s actions and reactions in the organizational culture, and why it has not been studied significantly. In short, according to (Henrie and Sousa-Poza, 2005), measuring culture is not easy as shortcomings and deficiencies tend to occur in research into the leadership of multinational teams which lead to misunderstandings and confusion when trying to find a definition of culture.

This raises the questions of what organizational culture is, and why it is so important to comprehend the significance of change. Finding answers to these questions might direct
and guide the government and policy makers in the execution of a studied plan before implementing any new system. Culture is the main driver for change (DeLisi, 1990), and acknowledging this fact and having strategies based on it would help the adoption process. Thus government and policy makers should be aware of the impact of their actions on an organization’s culture.

Consequently, organizational culture should be studied and analyzed in advance, paying special attention in the analysis to the small details that could be extremely important. As (Schein, 1993) stated, leaders should be aware of the cultures in which they are introducing change, since these cultures will control them. Furthermore, since culture is deeply embedded in an organization’s background and experience, adoption of a new system requires a major investment of time, resources and effort. These aspects should be attended to before the implementation of any new technology in order to prevent the emergence of any obstacles during the process and thus avoid complete failure of the project.

(Brown, 1995) argued that there are three layers of organizational culture, similar to the dimensions of national culture that Hofstede identified. These layers are as follows:

1) Outer layer: based on values enshrined in the mission statements and objectives of the organization;
2) Middle layer: based on beliefs, representing the issues addressed by the staff in the organization;
3) Third layer: aspects of organizational life that people cannot describe and recall.

**Cultural Layers**

**Values**

Some studies have proposed the importance of values in culture. Values are identified as the relationship between the abstract categories that are defined by strong affective elements and entail a preference for a specific type of action (Karahanna et al., 2005). Values are learned through lifestyle and the different experiences of childhood, family, and education. The different elements of value, once acquired, are considered to be foundation of assumptions and are incorporated into the organized system of values.
Practices

Practices are those elements that are acquired later through socialization in the workplace, long after a person’s values have been firmly entrenched. Practices supply people in the society with ways to perform different activities in life. They can be changed, unlike values that are somewhat difficult to alter (Karahanna et al., 2005).

Values and practices are both significant in understanding the concept of culture. Both are established at an early age in society by socialization, education and other elements that might change over time. However, while it is possible that practices can change over time and through different experiences, it is less likely with values (Gallivan and Srite, 2005, Krumbholz and Maiden, 2001).

This is in line with the findings of a study of IBM employees (Hofstede et al., 1990). It would appear that some organizational cultural dimensions differ from the dimensions that make up national culture, and there appears to be a substantial difference in values and practices among IBM employees in similar jobs to those employees to be found in different national subsidiaries. An important aspect found in the study was that employees with similar values have considerable differences in practices; this could be because of different places of socialization for the values and for the practices. Values are the elements that individuals gain from childhood through family and school, whereas organizational practices are acquired from the social workplace (Pascale, 1985).

Another major feature that needs to be taken into consideration is that there is a relationship between values and practices. They affect and influence each other; however, this occurs in the formative years in which values are starting to take shape. Later on, practices do not influence values, even though practices always change. In addition, practices are dictated at the organizational level and values are from the national level. Therefore, values are more significant than practices in the higher-level (i.e. national) culture and practices are norms that dominate the lower-level (i.e. group) culture (Karahanna et al., 2005).
Cultural Models

Hofstede’s Cultural Model

National culture is chiefly related to individuals’ fundamental values and less to practices. On this note, (Hofstede, 2001) highlights the balance of value and practice in culture. His culture theory (2001) has a framework for defining national culture and by gathering cultural patterns (dimensions). The grouping is based on geographical location or national boundaries. He developed four cultural dimensions: 1) individualism/collectivism, 2) power-distance, 3) uncertainty avoidance, and 4) masculinity/femininity. In addition, Hofstede and Bond (1988) added a fifth dimension, long-term orientation (Straub et al., 2002a). Other writers such as (Trompenaars and Hampden-Turner, 1993), defined culture based on shared values and proposed seven dimensions that are different from Hofstede’s: 1) universalism/particularism, 2) individualism/collectivism, 3) neutral/affective relationships, 4) specific/diffuse relationships, 5) achievement/ascription, 6) internal/external control, and 7) perspective on time.

One main result of Hofstede et al.’s research (Hofstede et al., 1990) is the six dimensions of organizational culture. It is defined through the common practices of symbols, heroes and rituals that correspond to specific meaning in the organization, selected from Deal and Kennedy’s (1982) work. (Hofstede, 2001) developed the following six dimensions of organizational culture: 1) process oriented/result oriented, 2) employee oriented/job oriented, 3) parochial/professional, 4) open/closed, 5) loose/tight, and 6) normative/pragmatic.

Deal and Kennedy’s Cultural Model

(Deal and Kennedy, 1982a) stated that culture is the single most significant element that contributes to the success or failure of an organization. They identified four dimensions of culture:

1. Values: beliefs of the organizational culture;
2. Heroes: individuals who have values;
3. Rites and rituals: aspects of communication that have symbolic characteristics;
4. The Culture Network: internal informal communication systems embedded in the hierarchy of power in the organization.


**Trompenaars’s Cultural Model**

(Trompenaars, 1993), formed his cultural model based on a three-layer *Onion* model:

1. Core: embodies the implicit and non-verbal assumptions that represent how individuals manage and cope with their environment;
2. Middle Layer: includes the values and norms that determine appropriate actions;
3. Outer Layer: includes all elements of life such as language, ritual, and dress.

The model defines culture as the approach individuals take to solve problems. His model has three variables: *Universalism vs. Particularism, Specific vs. Diffuse, and Achievement vs. Ascription.*

**Schein’s Cultural Model**

(Schein, 1993) also considers culture to have three-layers:

1. Artefacts: visible organizational structures and processes;
2. Espoused Values: strategies, goals, philosophies (espoused justification);
3. Underlying Assumptions: unconscious, taken-for-granted beliefs, perceptions, thoughts and feelings (the ultimate source of values and action).

**Hall’s Cultural Model**

For Hall (Hall, 1973), culture is based on behaviour. Hall employed notions of *Context, Space* and *Time* to examine individuals from different countries and to gauge how they react to various situations. He related context with the space variable, as in *Low-Context* cultures and *High-Context* cultures.

- High-Context (HC): high-context cultures value relationships and information more than having a fixed timetable as the information is likely to be fast and free.
- Low-Context (LC): low-context cultures go by fixed schedules and information transfer is likely to be slow.
Later (Hall, 1977), Hall related context with the time variable, as in *Monochronic* time and *Polychronic* time.

- **Monochronic**: people who perform a task at a specific time and usually follow a fixed schedule and calendar.
- **Polychronic**: people who perform several tasks simultaneously or in parallel to each other and do not go by a fixed schedule.

### 3.5 Dimensions of Arab Culture

The values and dimensions already addressed have been examined in studies of Arab societies. However, less has been written about other common dimensions of Arab culture such as: *endurance and rectitude* (Khalid, 1977); *pride, rivalry, revenge* (Almaney and Alwan, 1982, Boutros-Ghali, 1982); *loyalty and dignity* (Nydell, 1987); and *generosity, courage and self-respect*. Nevertheless, other more basic common dimensions have been addressed in the literature, such as *collectivism, hospitality* and *honour* (Patai, 1983).

The foundation of the three dimensions of *collectivism, hospitality, and honour* in Arab society go back to Bedouin values that identify the social fabric of their life (Patai, 1983). Indeed, most of the framework for the description of Arab values and dimensions is based on the impact of ancestors’ history and background. Family relationships, for example, are a very clear indication of the previous manner of living in groups and collective societies. As a result, this manifests itself in the strong ties of loyalty that exist between Arab individuals and towards the group. A trait of this culture is ‘situation-centeredness’, that is loyalty to the extended family and other larger ‘in-groups’ rather than to the individual’s needs and goals (Yousef, 1974, Nydell, 1987).

In line with the previous point, another research study conducted a test of Technology Acceptance Model (TAM) on five Arab countries (Jordan, Egypt, Saudi Arabia, Lebanon, and UAE) and the transfer of technology (Rose and Straub, 1998). The writers emphasized the importance of cultural factors that influence the degree of success in using IT. The cultural factors that they found important were: the *tribal nature* of the society and their preference for *face-to-face* communication that makes emails less
popular in the Arab world. Similarly, (Khalil and Elkordy, 2001) pointed out the importance of face-to-face communication and the value of group relationships in decision making in the organization. In addition, they reported that top management supported technology even if they did not employ it personally in the (Arab) culture.

_Hospitality_ is an outstanding value of Arab culture that is easily identified by anyone from outside the culture. Elaborate forms of hospitality exist on special occasions such as marriage, burial, and the holy month of Ramadan (Patai, 1983). Researchers and scholars explain that the hospitality shown towards guests in the culture needs to be demonstrated by an abrupt and extensive welcome (Almaney and Alwan, 1982, Nydell, 1987). Lee (1990) agrees that this idea is supported by the fact that, for centuries, Bedouin tribes were known for their hospitality to travellers lost in the desert. At the present time, Arabs sustain this tradition of offering generosity and hospitality. Living in the desert and places which are far away from each other means that any guest (usually travelling from one place to reach another and passing by a tribe to rest) is welcomed and provided with a hearty meal (usually the best they have available), a place to sleep and relax, and is offered, before leaving, all the basic necessities to continue the journey. On a similar note, (Feghali, 1997) mentioned that this kind of society encourages people to depend on each other (collectivism) rather than on individual autonomy in their social relations. In addition, in the desert environment in pre-Islamic times, individuals relied on others for assistance and protection during travelling, so people showed high levels of hospitality.

The concept of _Honour_ has been identified as a “controlling value legitimating the family structure and the ‘modesty code’ required of both men and women” (Dodd, 1973). Arabs value honour and honesty highly and would go a long way to prevent losing face (Ali, 1996). The ‘face’ concept incorporates self-identity and creates a personal sense of integrity, dignity and self-respect. In social situations, all individuals want to save and preserve their own ‘face’ (Nelson, 1997). ‘Face’ is significant as the social base in the Middle East. In addition, Nelson points out that criticism in Arab culture could be considered as a personal insult and the grounds for that reaction is the concept of ‘face’. Thus criticism tends to be indirect in nature in order to convey a high regard for the individual.
Further studies by various researchers have also pointed out the importance of socio-cultural factors in Arab countries when adopting new technology. In a book on the Arab world, the author addressed a number of cultural and social characteristics of Arab society (Barakat, 1993). He pointed out that it is especially important to understand that these Arab characteristics are interrelated features and not elements that can be considered in isolation.

A significant characteristic of Arab culture and society depicted in most of the literature is Islam, which is one of the most significant influences on the culture. Islam is the foundation of Arab beliefs and is considered to be a creative driving force that explains the meaning of Arab actions (Asad, 1986, El Guindi, 1981, Nydell, 1987). Most Arabs are Muslims and are significantly influenced by their holy Quran book the (Ali, 1996, Stone, 2002), which they follow and adhere to in their everyday life (Kabasakal and Bodur, 2002). The Quran is significant in Muslims’ lives as it has been a unifying power that strongly influences social behaviour and shapes the common culture in the Arab world (Kalliny et al., 2006).

Arabic is the language used in the Quran. Indeed, the language, social structure and economic philosophy of the Arabs are wholly founded on Islam, and Islam is regarded as the way of life (Kavoossi, 2000, Lawrence, 1998). The Kingdom of Saudi Arabia in particular is based on Islamic teaching, and Arabian cultural values are dominant (Baker et al., 2007). (Shao and Hill, 1994) point out that studies on Arab culture reveal that the different features of the culture are still in existence. In addition, historians and anthropologists have found that traditional societies are controlled by religious and social conventions. For example, Islam encourages a collection of moral values and behaviour in a society based on the teachings of the Quran and the sayings of the prophet Mohammad. Therefore, individuals’ endorsement of the religion of Islam has an impact on their social behaviour and values (Kabasakal and Bodur, 2002).

Research by (Hill et al., 1998) along the same lines emphasizes the strength of Arab characteristics. Their study of Arab culture indicated that cultural and social values are very strong and influence individuals’ activities. Similarly, (Ali and Sabri, 2001) in their research into IT adoption in Arab culture, recognised the significance of these dimensions in Middle Eastern society.
Therefore, understanding these values and dimensions could clarify matters when integrating a new system in an organization. Qualitative research by (Hill et al., 1998) identified social and cultural influences as having an impact on the adoption of technology. Their results confirm that family-orientation in Arab societies is significant and that loyalty to family is stronger than organizational loyalty. This strong identification with family and kin-group relations is considered to be a primary feature that distinguishes Middle Eastern people. Individuals find satisfaction in their affiliation within the group, whether family, neighbourhood, village or school friends. The closeness and interdependence of these relationships provides individuals with a sense of security and safety (Kabasakal and Bodur, 2002). (Nydell, 1987), for example, highlighted the significance of family background and social class in shaping the status of individuals in society.

Furthermore, Arab society tends to prefer an unstructured form of work and is strongly influenced by family and peer groups, which is derived from the way that religion defines the importance of family relations. These studies also point out that social class forms their ideas about the importance of technology. The authors conclude that people prefer to work in a group rather than individually with a preference for face-to-face communication within the organization. Furthermore, changes in the sector need to be driven by superiors. The main reason for resistance to technology is the fear of the unknown. Researchers have identified a number of factors that constitute barriers to the transfer of technology (Hill et al., 1998). The social influences are: social class, education level, organizational hierarchy, status in the organization, leadership of the organization, personal relations between levels of organization, and personal relations in work group. The cultural influences are: family and kinship obligations, the communal world view, religion, valuing the past, face-to-face interactions, allegiance to family and kinship group, concept of time, and gender relations (Hill et al., 1998).

Another study of Arab culture examines the influence of culture on information technology transfer, suggesting that Arab cultural beliefs are a very strong predictor of resistance to systems (Straub et al., 2002b). This study addresses a model for testing the cultural influence of ITT. In this model, the cultural beliefs and values are one major construct, and Arab society is the setting, which they describe as one of the more complex cultural and social systems in the world. Their findings are based on qualitative
research, exploring the relationship between information technology transfer and socio-cultural factors that drive or hinder successful transfer.

The collectivism of Arab society is substantive and goes beyond the family and blood relatives to the clan or tribe (Said, 1979). Therefore, Arab societies define themselves in association with an interdependent network of relationships. The relations they have are vital to society and promote the feeling of commitment to others (Kabasakal and Bodur, 2002). This network becomes more important in the business world and at work (Alpay, 1988). Furthermore, these relations define the individual’s social class in society.

Another characteristic of Arab culture is the polychronic attitude towards time, where the cultural preference is to perform several tasks simultaneously. The Arabs’ attitude towards this concept is complex, based on the emphasis on relationships rather than on adherence to a fixed schedule or time (Hall, 1959). Some cultures see time as a static phenomenon (Hall, 1973) and follow strict time schedules, but (Hall, 1966) describes the Middle Eastern culture as polychronic which perceives time as a complex state with different events happening in parallel. In polychronic cultures the problem is viewed in a holistic fashion and works with all the elements at the same time. Supporting this idea (Nydell, 1987) points out that time in Arab culture is not fixed or strict compared with the Westerners’ concept of time. Time, as he explains it, follows from past to present to future and people flow with it. However, this attitude towards time is changing somewhat, influenced by economic and technical development.

In addition, Middle Eastern culture is classified as a High Context culture, in which most of the meaning in communication is embedded in the context and information is implicit (Hall, 1973). Meanwhile, (Trompenaars, 1993) suggests that Middle Eastern society has a highly Ascriptive culture, meaning that it is the individual’s background and education that build up respect and status, rather than actual accomplishments and actions. Another characteristic of Arab culture is its Oral dominance, in which emotional quality and symbolism take precedence over realistic accuracy and the analytical content of the message (Zaharna, 1995).

(Hofstede, 1991) analysis of the Arab world includes Egypt, Iraq, Kuwait, Lebanon, Libya, Saudi Arabia, and the United Arab Emirates, where the Muslim faith plays a
major role. Saudi Arabia is close if not identical to other Arab countries where Islam plays a significant role in the individual’s life. Here, high power distance and uncertainty avoidance are the most dominant characteristics. He explains that Arabs manifest high uncertainty avoidance through their tendency to view unknown situations as threatening and that they manifest high power distance by maintaining authoritarian and autocratic relationships.

Another study by Hasan and Ditsa (1999) conducted in Egypt, employed Hofstede’s dimensions of culture and borrowing from (Hall and Hall, 1990) named monochromy/polychromy and context as the most prominent. On a more general note, Bottger et al. (1985) contrasted polymorphic and monomorphic cultures. They showed that managers and leaders from the former tend to have a more far-reaching influence over individuals than those from the latter cultures. They also found that the Middle Eastern countries have high power distance, which is thought to be the reason for resistance to technology and its being viewed as a threat. Finally, they added another value or dimension, male domination in the workforce and the nature of women’s jobs in Arab society.

Gender is another frequently cited characteristic of Arab society. Gender relations are unique in Arab society and especially in the Middle East. The male is mostly dominant (Nelson, 1991) and there is separation of the sexes which results in a sharp division of labour. However, it is anticipated that with the adoption of technology, attitudes to gender roles will change, i.e. male domination in the workplace may possibly change, as will the nature of women’s jobs in the Middle East (Shoib and Jones, 2003).

In addition to the various cultural values of the Arab there are language and verbal communication characteristics. Kim (Kim, 1988) describes language as: “a ‘veil’ over the reality of the culture in which it is used, involving an agreement of its users about what there is to be seen and how it should be seen”. An example of this is the communication style of the Arabs which has such features as repetition, indirectness, elaborateness and effectiveness (Adelman and Lustig, 1981a, Gudykunst and Ting-Toomey, 1988).
Indirectness, for instance, is a feature that is mostly associated with high-context societies (Hall, 1966). Arab conversations are usually not straightforward and use few words to express their ideas; their concepts are embedded in the speech. (Shouby, 1951) described the Arabic language as “general vagueness of thought”. In addition, the Arabic language is an important aspect that creates a sense of personality among the members of the Arab population. The Arab identity is mainly founded on language (Hourani, 1970, Kabasakal and Bodur, 2002).

Table 2: Summary of Cultural Dimensions of Arab Culture

<table>
<thead>
<tr>
<th>Cultural Dimensions of Arab Culture</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endurance and rectitude</td>
<td>(Khalid, 1977)</td>
</tr>
<tr>
<td>Pride, rivalry, revenge</td>
<td>(Almaney and Alwan, 1982, Boutros-Ghali, 1982)</td>
</tr>
<tr>
<td>Loyalty and dignity</td>
<td>(Nydell, 1987)</td>
</tr>
<tr>
<td>Generosity, courage and self-respect</td>
<td>(Patai, 1983)</td>
</tr>
<tr>
<td>Honour</td>
<td>(Ali, 1996, Patai, 1973a)</td>
</tr>
<tr>
<td>Honesty</td>
<td>(Ali, 1996)</td>
</tr>
<tr>
<td>Harmony (collectivistic society values)</td>
<td>(Kalliny and Gentry, 2007)</td>
</tr>
<tr>
<td>Harmony (harmony with others)</td>
<td></td>
</tr>
<tr>
<td>Respect parents and elders</td>
<td>(Kabasakal and Bodur, 2002, Nydell, 1987)</td>
</tr>
<tr>
<td>Religion (Islam)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Hill et al., 1998) (Kabasakal and Bodur, 2002)</td>
</tr>
<tr>
<td>Uncertainty avoidance</td>
<td>(Hofstede, 1991, Danowitz et al., 1995)</td>
</tr>
<tr>
<td>Resistance to IT</td>
<td>(Danowitz et al., 1995)</td>
</tr>
<tr>
<td>Family orientation</td>
<td>(Feghali, 1997, Hill et al., 1998)</td>
</tr>
<tr>
<td></td>
<td>(Kabasakal and Bodur, 2002)</td>
</tr>
<tr>
<td>Cultural Dimensions of Arab Culture</td>
<td>References</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Loyalty to family</td>
<td>(Hill et al., 1998) (Kabasakal and Bodur, 2002)</td>
</tr>
<tr>
<td>Allegiance to family and kin group</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td></td>
<td>(Kabasakal and Bodur, 2002)</td>
</tr>
<tr>
<td>Family and kinship obligations</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td></td>
<td>(Kabasakal and Bodur, 2002)</td>
</tr>
<tr>
<td>High-need affiliation and relationship interdependence</td>
<td>(Yousef, 1974) (Hofstede, 2001)</td>
</tr>
<tr>
<td>Loyalty -to one’s primary group</td>
<td>(Kalliny et al., 2006) (Hill et al., 1998)</td>
</tr>
<tr>
<td></td>
<td>(Bates and Fratkin, 2003)</td>
</tr>
<tr>
<td>Organization loyalty</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Unstructured form of work</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Social class</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Education level</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Organizational hierarchy</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Personal relations in work group</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Pride in work</td>
<td>(Abboushi, 1990)</td>
</tr>
<tr>
<td>Leadership in organization</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td></td>
<td>(Kabasakal and Dastmalchian, 2001)</td>
</tr>
<tr>
<td></td>
<td>(Kabasakal and Bodur, 2002)</td>
</tr>
<tr>
<td>Personal relations between levels of organization</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Personal relations in work</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Centralization</td>
<td>(Sharda and Miller, 2001)</td>
</tr>
<tr>
<td>Communal world view</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Valuing the past</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Face-to-face interactions</td>
<td>(Hill et al., 1998)</td>
</tr>
</tbody>
</table>
This literature review of previous research work and studies has so far provided an overview of the e-government and cultural backgrounds. In addition, this chapter has overviewed the dimensions of the Arab culture. This section is a significant part of the study since it supplies the reader with substantial information about Arab society that includes their eminent traits, related to their geographical, historical, cultural and spiritual origins. In conducting this type of research which encompasses individuals and their social life, enough of the research context should be presented to facilitate the reader’s understanding of this environment and explain why such traits and characteristics are evident in this culture. For example, Arabs in general are described as placing great emphasis on the importance of hospitality and generosity. An outsider might wonder why such cultural dimensions are very elaborate and important to individuals. If a person understands that this trait is related to the way that the Arabs
lived in the past and sustained them through the generations, then s/he will be able to make more sense of this cultural aspect. This is why Arab cultural dimensions have been presented in this chapter - to offer an understanding of the context that will aid comprehension while reading this research study.

3.6  **Drivers and Barriers to E-government Development**

The purpose of this research is to explore the key issues that affect organizational culture when adopting technology, i.e. drivers and barriers. Therefore, to begin with, studies of drivers and barriers in the literature will be explored. This review of the literature is divided into two sections. The first section reviews some of the key studies regarding the cultural values and aspects that are identified in Arab culture, to provide a basis for determining the drivers and barriers to e-government initiatives. In the second section, reviews of a number of various documented generic drivers and barriers are summarized.

This research will focus on the drivers and barriers from a cultural perspective since the study is about the influence of culture on the adoption of e-government in the organizational culture. However, it is important to note that culture interacts with various other dimensions and contains many other elements that may seem remote from culture. The cultural concept is complex and cannot be explained exclusively without including other elements to qualify it.

3.6.1  **Drivers**

The following section will outline some of the drivers mentioned in previous studies. The term *driver* for the purposes of this research can be defined as the different aspects that facilitate or assist the advancement and development of e-government. Identifying these drivers is important for the public sector since it enables the organization to understand the benefits of the new technology and to have better work performance and efficiency.
Identified drivers that relate to Arab culture based on existing literature

A significant study by (Hill et al., 1998) indicated that cultural and social factors are powerful explanations in the success or failure of adopting technology. The aim of the study was to examine the role of culture in the transfer of information technology to Arab countries. It was qualitative research that used focus groups, semi-structured interviews and field study methodology to collect data. The authors gathered social and cultural influences that affected the transfer of technology. The drivers of technology adoption were identified as:

- **Being educated in the West,**
- **The need for action rather than rhetoric from top-level managers,**
- **Political leaders setting an example for workers,**
- **Keeping business competitive,**
- **Considering future needs of the younger generation,**
- **Linking up to the world system,**
- **Organizational efficiency,**
- **Teaching children,**
- **Increasing the knowledge base,**
- **Improving business outcomes,**
- **Increasing independence and opportunities.**

Another aspect of Arab culture influencing the adoption process is the ‘consultation’ or ‘participation’ aspect which is specific to the leadership attributes of Middle Eastern culture. This attribute is not the same as in Western countries. Usually Arab leaders use consultation to encourage a feeling of belonging to the group rather than to get agreement or improve the quality of decision-making. If this attribute is used properly the organizational environment will improve. This aspect is based on the teaching spirit of Islam (Kabasakal and Dastmalchian, 2001). In addition, leaders are expected to be team integrators and form team-orientation, using consultation and diplomacy to bring people and the group together and give a sense of belonging (Kabasakal and Bodur, 1998).
Education is another important aspect that influences organizational behaviour and the acceptance of new technologies. Education is critical for individuals who have ambitions of achieving an improvement in their social standing in Arab society (Hill et al., 1998). This is the reason for the large numbers of Saudis attempting to reach higher levels of education currently (Vasil’ev, 1998).

### Table 3: Identified drivers that relate to Arab culture based on existing literature

<table>
<thead>
<tr>
<th>Drivers</th>
<th>Reference from literature review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education in West</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Action rather than rhetoric of top-level managers</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Political leaders set example for workers</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Keep business competitive</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Imperative for younger generation</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Age</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Link to world system</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Efficiency of organization</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Teach children, increase knowledge base</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Improve business outcomes</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Increase independence and opportunities</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>‘Consultation’ or ‘participation’</td>
<td>(Kabasakal and Dastmalchian, 2001)</td>
</tr>
<tr>
<td>(Kabasakal and Bodur, 1998)</td>
<td></td>
</tr>
<tr>
<td>Group orientation</td>
<td>(Kabasakal and Bodur, 1998)</td>
</tr>
</tbody>
</table>
Identified drivers based on the existing literature

In Gordon’s (2002) study, she stated that the motivations behind the adoption of e-government are the demands for greater efficiency, cost saving, improved management of government, and greater efforts to achieve financial growth. Further motivation has emerged from the demand of the younger generation for the use of electronics and from the need of citizens to reduce the time needed to finish their work (Gordon, 2002). Furthermore, there is a need for policy makers to reduce cost and have efficient transparent procurement procedures for enhancing G2B initiatives.

In a study conducted in Scotland which analysed the role of Chief Executives as the main drivers of e-government, the most significant driver of change to e-government was related to improving the quality and accessibility of the current services of the government. Another aspect of motivation was the need to break down the organizational obstacles in order to offer new and improved services (Li and Steveson, 2002). Meanwhile, in Ireland, motivations for e-government development identified for the government of Ireland had three key aspects: demand for a more efficient government, a genuine desire to make government more citizen-centric, and consumer-friendliness. Their ultimate goal was to achieve seamless client-centred service delivery (O’Donnell et al., 2003).

With regard to developing countries, there are some further driving forces behind the employment of e-government, such as: personal initiative to reform policy, supporting the government’s programme of reform, creation of competition between departments and states and countries, the demand for better services from investors, demand from citizens, and the adoption of technology to satisfy pride (Bhatnagar, 2003).

All in all, the benefits of e-government application in developing countries appear to be similar to those of developed countries (Ndou, 2004). However, the differences could lie in the limits and lower employment levels of e-government. These benefits and drivers are: cost reduction and efficiency gains; quality of service delivery to businesses and customers; transparency, anticorruption and accountability; increase in the capacity of government; network and community creation; improvement in the quality of decision making; and promoting the use of ICT in other sectors of society. In addition, (Joseph and Kitlan, 2007) have identified some of the advantages of
integrating e-government in public administration. The main advantages are: *paper reduction, transaction efficiency, and improved governance*. These are in addition to other drivers that are listed in the following table.

**Table 4: Identified drivers based on existing literature**

<table>
<thead>
<tr>
<th>Drivers</th>
<th>Reference from literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper reduction</td>
<td>(Joseph and Kitlan, 2007)</td>
</tr>
<tr>
<td>Transaction efficiency</td>
<td>(Joseph and Kitlan, 2007)</td>
</tr>
<tr>
<td>Improved governance and increased capacity of government</td>
<td>(Ndou, 2004, Joseph and Kitlan, 2007)</td>
</tr>
<tr>
<td>Devoted budgets</td>
<td>(O’Donnell et al., 2003, Ribes, 2003)</td>
</tr>
<tr>
<td>Internet penetration in households</td>
<td>(Ribes, 2003)</td>
</tr>
<tr>
<td>Co-operation between public and private sectors</td>
<td>(NewZealand, 2003, Ribes, 2003)</td>
</tr>
<tr>
<td>Requirement to involve all sections of the organization; Stakeholder involvement</td>
<td>(Burn and Robins, 2003, Heeks, 2003, O’Donnell et al., 2003)</td>
</tr>
<tr>
<td>External pressure</td>
<td>(Heeks, 2003)</td>
</tr>
<tr>
<td>Citizen demand</td>
<td>(New Zealand 2003; Sharma and Gupta 2003) (Stoltzfus, 2005)</td>
</tr>
<tr>
<td>Knowledge sharing inside the country</td>
<td>(Ribes, 2003)</td>
</tr>
<tr>
<td>Quality of service delivery to businesses and customers</td>
<td>(Ndou, 2004)</td>
</tr>
<tr>
<td>Network and community creation</td>
<td>(Ndou, 2004)</td>
</tr>
<tr>
<td>Improving the quality of decision-making</td>
<td>(Ndou, 2004)</td>
</tr>
</tbody>
</table>

### 3.6.2 Barriers

This section will outline some of the barriers mentioned in previous studies. The term *barrier* for this research can be defined as the different cultural aspects that are obstacles to, or hamper the advancement and development of e-government. Identifying the barriers is significant if the organization is to avoid problems that might occur. The identification of barriers is crucial for planning and implementing new technology initiatives in government.
Identified barriers that relate to Arab culture, based on existing literature

A review of computing and the adoption of technology in the Middle East pointed out that the absence of agreed standards for Arabic code is an obstacle that delays the introduction of software (Goodman and Green, 1992). Furthermore, IT in the Middle East is diverse and complex. Indeed, a number of researchers have conducted research in Saudi Arabia itself and found that the transfer of technology is hindered by three different factors (Atiyyah, 1989, Ali, 1990, Goodman and Green, 1992, Al-Sulimani and Sharad, 1994, Bukhari and Meadows, 1992). These factors are technical, organizational and human issues in the organization. In addition, (Al-Meer, 1989) detected cultural factors that influence Middle East society. The motivation of Arab workers is one of these factors, as it is different from motivation in Western workers, which affects the acceptance and use of technology.

One of the key studies found various barriers to the adoption of technology in Arab culture (Hill et al., 1998). These barriers were: loyalty to work group, loyalty to national traditions, attitudes towards outside influences, fear of change, fear of the unknown, lack of worker motivation, words substituted for action, generational and class differences, financial, isolation of computing departments, conflict with personal values (religious), incompatible hardware and software, lack of worker motivation, time constraints, lack of education, fear of loss of identity, and fear of being controlled. For example, areas related to finance and training were featured in the research. It was found that lack of budget and lack of training were the major reasons for not using technology in Arab society. The participants in the study said that they did not use technology for financial reasons, lack of training, and not having access to computers. This is in line with another article which found barriers to IT implementation in areas of finance, lack of funding, places for training and the problem of there being no continuity of practice (Shoib and Jones, 2003). Education has also been identified as another important aspect that affects culture and the organization (Hill et al., 1998).

Similarly, (Khalil and Elkordy, 2001) found that top managers support technology even when not using it personally. Individuals in Arab culture prefer face-to-face communication and favour group relations in the organization. Another study shows that Arab cultural beliefs are very strong and do not recognise or readily accept information technology transfer, which makes them highly resistant to the adoption of
new systems (Straub et al., 2001). The values endorsing this resistance could be the preference for *face-to-face communication* and the *polychronic* attitude towards time, (Walsham, 2000). All in all, the literature on the Middle East indicates that a major problem in adopting IT is *national culture*. The Arab preference for *face-to-face communication*, *high uncertainty avoidance*, *high power distance*, *different time orientation*, and the *preference for an informal work environment* represent some aspects of this national culture. Unsurprisingly, Walsham (ibid) identified *culture* as being the key barrier to technology implementation.

The Arab attitude towards *time* as being *polychronic* can be seen as a barrier to the implementation of e-government technology. If time is flexible and there is no fixed schedule to adhere to, problems will occur in the workplace. According to (Straub et al., 2001) this attitude towards time gives Arab society less appreciation of the value of long-term planning. However, it should be noted there is a new perspective towards time; it is changing due to developing technological and economic demands (Nydell, 1987). This point is supported by (Feghali, 1997) who postulates that modernization is influencing the Arab attitude towards time, especially in the business sector.

This *polychronic* characteristic in Arab culture reveals other issues related to the concept of time. For example, individuals who are not from Mediterranean countries find the bureaucracy unusually awkward; a person needs to be an insider or know someone in order to accomplish things (Hall, 1984). This process is identified as *Wasta* (nepotism) when a person uses one’s influence to get favours. This trait is strong and prominent in the Arab region and people in Arab society practise it heavily. There are negative and positive aspects related to Wasta at social and individual levels. Wasta can impede the opportunities open to competent and confident people, but on the other hand it can be useful for individuals in power (Cunningham and Sarayrah, 1993).

*Fatalism* is another key characteristic related to Arab culture (Patai, 1973b). The concept of ‘fate’ is related to Islam, encouraging individuals to believe in and agree to the notion that all deeds in the past or future are arranged by God’s will, even though there are verses in the Quran which do emphasise the importance of choice in actions (Tapper, 1995, Kabasakal and Dastmalchian, 2001). However, it would be a mistake to believe that Arab culture does not consider planning and prediction as important,
making it less future-oriented (Kabasakal and Dastmalchian, 2001). A survey by (Badri, 1992) ranking important aspects for Chief Officers in the GCC (Gulf Cooperation Council that comprises Saudi Arabia, Kuwait, Qatar, Bahrain, Oman and the United Arab Emirates) countries points out the significance of planning in conducting operations in organizations at international level. This is in line with other writers’ (Abdul-Gader and Al-Bureay, 1993) view that planning is a significant strategic issue in some quarters and that the concept of fatalism in the Islamic world should be further investigated and explained.

Another aspect is the environment (that which is external to an organization), which is described in terms of infrastructure (Shoib and Jones, 2003). Similarly, (Sahay et al., 1994) found that the infrastructure and human resources of developing countries are always presented as underdeveloped. This could be a reason for the failure of IT implementation in the Arab world. Language is another cultural aspect that affects the adoption of technology. Indeed, linguistic problems are considered to be an obstacle to using and adopting technology in Arab countries (Brown and Humphreys, 1995).

Another important barrier has been identified as the digital divide. One of the objectives of implementing new technologies in the Arab world is to decrease the digital gap between Arab countries and the developed countries (Baker et al., 2007). According to the United Nations Development Program’s Arab Human Development Report, the digital gap became even greater because of the nature of the Arab ICT industry. The report claimed that it is susceptible to three aspects: monopoly and consolidation, the high cost of infrastructure, and the high cost of intellectuals leaving (brain drain) the country for developed countries (Fergany et al., 2002). In addition, the problems of the digital divide in the Arab region are exacerbated by lack of finance and poor education (Dutta and Coury, 2002).
Table 5: Identified barriers that relate to Arab culture based on existing Literature

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Reference from literature review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of work motivation</td>
<td>(Al-Meer, 1989, Hill et al., 1998)</td>
</tr>
<tr>
<td>Loyalty to work group</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Loyalty to national traditions</td>
<td>(Kabasakal and Bodur, 2002)</td>
</tr>
<tr>
<td>Attitudes towards outside influences</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Fear of change</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Resistance to change</td>
<td>(Margetts and Dunleavy, 2002a, Joseph and Kitlan, 2007)</td>
</tr>
<tr>
<td>Fear of the unknown</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Words substituting for action</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Generational and class differences</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Financial issues</td>
<td>(Hill et al., 1998, Shoib and Jones, 2003)</td>
</tr>
<tr>
<td>Isolation of computing departments</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Conflict with personal values (religious)</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Incompatible hardware and software</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Barriers</td>
<td>Reference from literature review</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Lack of worker motivation</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Lack of education</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Fear of loss of identity</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Fear of being controlled</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Lack of training</td>
<td>(Hill et al., 1998, Shoib and Jones, 2003)</td>
</tr>
<tr>
<td>Lack of budget</td>
<td>(Hill et al., 1998, Shoib and Jones, 2003)</td>
</tr>
<tr>
<td>Polychronic attitude toward time</td>
<td>(Nydell, 2002, Straub et al., 2001)</td>
</tr>
<tr>
<td>Different time orientation</td>
<td>(Hill et al., 1998)</td>
</tr>
<tr>
<td>Top managers supporting technology</td>
<td>(Khalil and Elkordy, 2001)</td>
</tr>
<tr>
<td>Preference for face-to-face communication</td>
<td>(Hill et al., 1998, Straub et al., 2001, Shoib and Jones, 2003, Khalil and Elkordy, 2001)</td>
</tr>
<tr>
<td>Favouring group relations in the organization</td>
<td>(Hofstede, 1991) (Feghali, 1997)</td>
</tr>
<tr>
<td>Strong cultural beliefs</td>
<td>(Straub et al., 2001)</td>
</tr>
<tr>
<td>National culture</td>
<td>(Walsham, 2000)</td>
</tr>
<tr>
<td>Preference for informal work environment</td>
<td>(Shoib and Jones, 2003, Walsham, 2000)</td>
</tr>
<tr>
<td>Absence of agreed standards for Arabic code</td>
<td>(Goodman and Green, 1992)</td>
</tr>
<tr>
<td>IT in the Middle East is diverse and complex</td>
<td>(Goodman and Green, 1992)</td>
</tr>
<tr>
<td>Barriers</td>
<td>Reference from literature review</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>No continuity of practice</td>
<td>(Shoib and Jones, 2003)</td>
</tr>
<tr>
<td>Lack of funding</td>
<td>(Shoib and Jones, 2003)</td>
</tr>
<tr>
<td>Treating individuals as 'cultural dopes'</td>
<td>(Giddens, 1979, Shoib and Jones, 2003)</td>
</tr>
<tr>
<td>Environment and infrastructure</td>
<td>(Sahay et al., 1994, Shoib and Jones, 2003)</td>
</tr>
<tr>
<td>Language</td>
<td>(Brown and Humphreys, 1995)</td>
</tr>
<tr>
<td>Low future orientation (limited planning)</td>
<td>(Patai, 1973b, Tapper, 1995) (Kabasakal and Bodur, 2002)</td>
</tr>
<tr>
<td>Nepotism (Wasta)</td>
<td>(Cunningham and Sarayrah, 1993, Hall, 1984)</td>
</tr>
<tr>
<td>Digital Divide</td>
<td>(Baker et al., 2007, Fergany et al., 2002)</td>
</tr>
</tbody>
</table>

**Identified barriers based on existing literature**

Four critical barriers that impeded the development of e-government are found in a study by (Atkinson and Ulevich, 2000b): *lack of political support, lack of funding and flexibility, the prevalence of a traditional government paradigm and not considering the customer, and lack of pressure to change*. In addition, a UN report (UnitedNations, 2001) identified a number of significant aspects hindering e-government in developing countries, such as: *institutional capacity, cultural and human resources, funding arrangements, local environment, ICT strengths, and political commitment*.

However, the main barrier to the implementation of e-government found by (Li and Steveson, 2002) was not the technical elements of e-government, but cultural and social attitudes. In addition, they stated that there should be a clear vision, strong leadership, and a rigorous implementation process in order to move e-government forward. *Lack of access to the Internet* was another significant barrier to e-government implementation. This particular aspect constitutes a strong contributory factor to the ‘digital divide’ which is considered to be a key problem for public sector organizations.

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Another study, conducted in India, identified three major barriers to the development of e-government: cultural, organizational and resources (Sharma and Palvia, 2003). Cultural barriers, for example, are evident in the role of political leadership. The digital divide problem was also related to poor infrastructure which was considered to be an organizational barrier.

A survey based on interviews to investigate e-government matters and challenges in Scotland identified barriers and categorized them as follows: lack of access to Internet due to digital divide, lack of finance for capital investment in IT, the need for individual organizational culture change, and security and authentication issues (Li and Steveson, 2003). Additionally, this study pointed out that e-government development requires essential alterations in organizational behaviour and culture, besides having to eliminate traditional organizational challenges and redesign the process of business to reap the benefits of implementing e-government in the organization.

Other studies have identified various challenges to the successful implementation of e-government initiatives that could hinder employment and the realization of opportunities (Ndou, 2004; Shoib and Jones, 2003). These barriers are: ICT infrastructure (e-readiness, computer literacy, telecommunication equipment); policy issues (legislation); human capital development and lifelong learning (skills, capabilities, education, learning); change management (culture, resistance to change); partnership and collaboration (public/private partnership, community and network creation); strategy (vision, mission); and leadership role (motivate, involve, influence, support).

An empirical study conducted by (Lam, 2005) pointed out various barriers to e-government adoption. He placed the barriers under four categories: strategy, technology, policy and organization. In addition, he suggested that strategic planning and change in management are important drivers for change since e-government is not solely a technical issue. (Joseph and Kitlan, 2007) presented the key issues in e-government and public administration and highlighted different matters. The main barriers and challenges identified were: trust, resistance to change, digital divide, cost, and privacy and security concerns. The authors pointed out that these barriers were interrelated in that they could have an impact on each other. A further hindrance to the
adoption of e-government is that employees and managers in public administration feel threatened by new technology. Executives and employees in the public sector, by sharing information via the Internet, may feel threatened by loss of the hierarchies in the public sector structure (Margetts and Dunleavy, 2002a).

*Lack of strategy and organization of information* are also elements that influence the success of e-government projects (Weerakkody and Choudrie, 2005). The implementation of e-government projects should follow a planned strategy that aids the integration of new technological systems in the public sector. An information management framework is an important element that would benefit from government information and records which governments sometimes overlook in making their services available online (Reffat, 2003).

*Lack of funding* is another barrier to the implementation of e-government project in the public sector. This could explain the lack of availability of experts with the IT skills needed for the adoption of e-government in organizations. Not providing sufficient salaries and not offering incentives to IT staff could result in delays to projects. This lack of funding has an impact on e-government initiatives (Weerakkody and Choudrie, 2005). In addition, *accessibility of the website* has two related elements: social and financial. First, from a social context, it is found that some of the population, especially older people, are more comfortable with face-to-face meetings than with using the Internet. As for the financial aspect, some individuals cannot afford to buy their own computer or pay for the cost of broadband services (Weerakkody and Choudrie, 2005).

Another survey rated thirty barriers to e-government (Eynon, 2007). The aim was to investigate the major barriers to expanding effective e-government services, and eventually to define possible initiatives within a European context to overcome such obstacles. The thirty barriers were analyzed and grouped into nine categories: *resistance, technical, take-up, administrative, privacy, design, legal, cost and accessibility.*
Table 6: Identified barriers based on existing literature

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Reference from literature review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threats posed by new technology</td>
<td>(Margetts and Dunleavy, 2002a)</td>
</tr>
<tr>
<td>Lack of funding</td>
<td>(Weerakkody and Choudrie, 2005)</td>
</tr>
<tr>
<td>Central Government funding</td>
<td>(Heeks, 1999, Bonham et al., 2001, Ho, 2002)</td>
</tr>
<tr>
<td>(lack of Internet access)</td>
<td></td>
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<tr>
<td>Lack of awareness</td>
<td>(Reffat, 2003)</td>
</tr>
<tr>
<td>Generation gap</td>
<td>(Fang, 2002)</td>
</tr>
<tr>
<td>Language barrier</td>
<td>(Fang, 2002)</td>
</tr>
<tr>
<td>Design barriers to e-government</td>
<td>(Joseph and Kitlan, 2007)</td>
</tr>
<tr>
<td>E-government applications are difficult to use</td>
<td>(Joseph and Kitlan, 2007)</td>
</tr>
<tr>
<td>Barriers</td>
<td>Reference from literature review</td>
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<tr>
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<tr>
<td>Policy issues (legislation)</td>
<td>(Ndou, 2004)</td>
</tr>
<tr>
<td>E-government is not a priority</td>
<td>(Hahamis et al., 2005)</td>
</tr>
<tr>
<td>Conflicting priorities of organizations</td>
<td>(Hackney and Jones, 2002)</td>
</tr>
<tr>
<td>Poor relations between functional departments and acceptance by senior management</td>
<td>(Fletcher and Wright, 1995, Aichholzer and Schmutzer, 2000)</td>
</tr>
<tr>
<td>Agency-centric rather than customer-centric</td>
<td>(Atkinson and Ulevich, 2000a)</td>
</tr>
<tr>
<td>Negative attitudes to IT (from organizational culture, management strategy and individuals)</td>
<td>(Li and Steveson, 2002, Sharma and Palvia, 2003)</td>
</tr>
<tr>
<td>Barriers</td>
<td>Reference from literature review</td>
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<td>-------------------------------------------------------------------------</td>
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<tr>
<td>Lack of e-communications with all constituents for e-services delivery</td>
<td>(Sharma and Palvia, 2003)</td>
</tr>
<tr>
<td>Correlation as part of culture</td>
<td>(Sharma and Palvia, 2003)</td>
</tr>
<tr>
<td>Lack of competitive pressure to change</td>
<td>(Atkinson and Ulevich, 2000a)</td>
</tr>
<tr>
<td>Lack of E-government applications</td>
<td>(Eyob, 2004)</td>
</tr>
<tr>
<td>Barriers</td>
<td>Reference from literature review</td>
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<tr>
<td>-------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------</td>
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<tr>
<td>Change management (culture, resistance to change)</td>
<td>(Ndou, 2004)</td>
</tr>
<tr>
<td>Partnership and collaboration (e.g. public/private partnership)</td>
<td>(Ndou, 2004)</td>
</tr>
<tr>
<td>Lack of effective leadership support</td>
<td>(Heeks, 2001b, Burn and Robins, 2003, Ndou, 2004)</td>
</tr>
</tbody>
</table>

This research has presented the drivers and barriers found in the literature review in order to provide a sense of the context. These various drivers and barriers highlight different features of Arab culture and explore the range of aspects that could drive or impede the adoption of technology. The drivers and barriers were listed in tables to summarize the different elements in the literature that relate to Arab culture. These were provided in order to extract all the different issues related to the adoption of technology in Arab society which will, it is hoped, enhance understanding of the behaviour of individuals when dealing with such matters. For instance, loyalty to national traditions is identified as one of the barriers to the adoption of technology in Arab culture. This matter is closely related to the cultural context of the social life of the people in the Arab region. Therefore, including those aspects that are related to the Arabs but that could not be found in other areas of the world is significant. In this way the reader can shape a picture of the environment where the study is taking place, illuminating the problem under study and guiding the reader to an understanding of the context and how such aspects can influence individuals in society.

Furthermore, the general drivers and barriers found in the literature were presented. This proved useful later on in the field research when they were compared with similar matters in the field. The presentation of this literature also highlights a number of general aspects that may emerge from the adoption of technology in any context.
However, the research does not investigate all of these elements. This research will focus on those elements to be found in the research field and which emerge from the in-depth interviews with participants. Finally, the review of drivers and barriers from the literature gives a general overview of e-government adoption. This will provide the research study with the important topics and themes that may emerge in the field research.

3.7 Conclusion

In this chapter the literature review introduced the different concepts involved in this research. An overview of e-government and the basic cultural concepts was presented. Cultural dimensions of Arab society were presented. The last section outlined the research on drivers and barriers to e-government development, identifying those that relate to Arab culture according to the literature.
4 Chapter Four: Theoretical Framework

4.1 Introduction

The purpose of this chapter is to propose and suggest an appropriate framework for the key cultural drivers and barriers that affect the adoption of e-government in the public sector in the KSA. A review of previous work and frameworks related to technology and e-government is presented. Other related studies and frameworks relating to culture are also reviewed. Furthermore, this chapter provides an overview of previous endeavours that are listed in appendix I. This review will guide the research and provide the basis for shaping an appropriate framework. Appendix I covers different studies related to e-government and technology, to e-government and the public sector, to information systems adoption, and to culture and organization.

4.2 Review of Relevant Frameworks

A framework is generally employed in research studies to outline the stages and actions of the research and to present a ‘roadmap’ for the most appropriate approach to a project. It would normally consist of a number of concepts and ideas about different planned frameworks. Major parts and aspects of the research can then be studied through this theoretical framework, allowing the researcher readily to understand the study problem (Miles and Huberman, 1994, Montagna, 2005, Oates, 2006). As (Montagna, 2005) pointed out, using a framework offers a way to organize and plan various aspects of the research, to help reduce confusion and suggest ways of looking at the problem. (Grant and Chau, 2006) mentioned that an e-government framework provides a strong tool for analyzing and anticipating the influence of future requirements.

In this research I conducted a search on various frameworks and models which are related to e-government adoption and culture. E-government integration into the public sector is a daunting task which is accompanied by various challenges and many opportunities. Since the study is related to different disciplines I attempted to present a general overview of the different concepts. The research, as explained previously, is
concerned with the adoption of technology into the public sector and aims to explore the influence of culture on the attitudes of employees in the organization. Therefore, the study deals with culture, organization, public sector and technology. Reviewing existing literature in this area, it is hoped, will shed some light on an array of issues and challenges associated with e-government implementation and its different stages. The setting of the research is the public sector and the variable under analysis is the cohort of employees.

4.3 Research Background and Theoretical Framework

The work done by Goodman and colleagues has pointed out that the diffusion of IT is variable around the world (Ariav and Goodman, 1996, Danowitz et al., 1995, Goodman, 1994, Nidumolu and Goodman, 1993). However, as (Straub et al., 2001) argued, research has not developed or tested any hypotheses resulting in a theory of the transfer of technology (ITT), and little empirical research has been conducted into national culture and its impact on the adoption of technology.

From the previous reviews of a wide range of literature, this research has found that there is a strong association between culture and technology and both concepts are intertwined. In addition, a study by (Straub et al., 2002b) found that cultural beliefs have a strong impact on the process of adopting technology, especially in the Arab world. This supports the study by (Ho et al., 1989), that culture has an influence on the adoption and use of electronic systems. The study by (Hill et al., 1998) supports the same idea in terms of the high impact of culture on the adoption of technology. Their findings suggest that it is difficult to integrate IT when specific aspects of culture embedded in IS do not match Arab culture.

The previous review of research into the framework of e-government, culture, and adoption of technology acts as a guide for research into different related elements. However, although these different frameworks offer a pointer for this research, they are not suitable for employing and achieving the objectives of this study. Hence, they are presented as a guide to developing a framework that will offer a better understanding of
how culture has an impact on employees in the adoption of e-government in the public sector, and help to identify the cultural drivers and barriers that are in play.

4.4 Framework Development Process

The proposed model attempts to highlight how culture has a strong impact on individuals in the adoption of technology, and how these individuals, in this case employees of the public sector in the KSA, behave towards, perceive, use and adopt e-government. The adoption of technology cannot be considered separately from people since they are the ones who will use and apply it. This framework recognizes the importance of culture and cultural elements in the integration of IT.

An overview of the different models and their development follows, in order to provide a better understanding of the implementation of e-government and the different elements involved in the adoption process. The different stage models described in this overview have their own specific scopes and visions. Several researchers have worked on e-government stage models, and the major ones are described in the following sections.

4.4.1 Gartner’s four-stage model (2000)

Baum and Di Maio (2000) reported on the Gartner Group’s proposed four-stage model for e-government: 1) Web presence: the government presents a website online that contains basic information for the public; 2) Interaction: users can communicate and interact with the government via the use of the web pages available online and go through emails or download different documents; 3) Transaction: customers and businesses at this stage are able to complete whole transactions through the Internet (e.g. licence application and procurement); 4) Transformation: government provides a more efficient, integrated, unified and personalized service that is different from the current operational processes.
4.4.2 UN’s five-stage model (2001)

The United Nations and American Society for Public Administration (2001) suggested a five-stage e-government model to provide an efficient web-based public service. The five stages were: 1) *Emerging presence*: the government provides information for the public online, but it is limited and static information; 2) *Enhanced presence*: the government provides online dynamic and specialized data, and updates the information systematically; 3) *Interactive presence*: at this stage the government website is more like a portal to connect the users and the service providers in a more refined manner; 4) *Transactional presence*: users are able to complete their tasks and transactions securely (renewing visas, obtaining passports, and updating birth and death records) through a single website; 5) *Seamless or fully integrated presence*: the government provides users with a one-step portal where they are able to access various types of information fast and more conveniently (United Nations, 2001).

4.4.3 Deloitte’s six-stage model (2001)

Deloitte & Touche (2001) suggested a six-stage model for e-government with the purpose of serving citizens and building long-term relationships with them. The six-stages are: 1) *Information publishing/dissemination*: the government at this stage provides increased access to information; 2) *‘Official’ two-way transaction*: at this stage both government and users are familiar with interaction, and communicate using technology such as digital signatures and security keys; 3) *Multi-purpose portals*: the government provides users with a one-step service for different departments; 4) *Portal personalization*: users can customize their portal according to their needs; 5) *Clustering of common services*: the government provides a better and more unified seamless service for users that is enhanced and has fewer intermediaries between operational processes; 6) *Full integration and enterprise transaction*: the government at this stage provides more sophisticated and coherent services for users (Siau and Long, 2005).

4.4.4 Layne and Lee’s four-stage model (2001)

(Layne and Lee, 2001) advocate a four-stage model that consists of: 1) *Catalogue*: here, basic and static information is found on the website; 2) *Transaction*: this stage goes
further than cataloguing and enables users to conduct simple transactions online; 3) *Vertical integration*: the government starts to transform services, not just automating the current process, and concentrating on functions at different levels; 4) *Horizontal integration*: the aim is to integrate the various functions from different isolated systems, in order to offer a coherent seamless service to users.

4.4.5 Hiller & Bélanger’s five-stage model (2001) and Moon’s five-stage model (2002)

Hiller and Bélanger (2001) put forward a five-stage model which was adapted by Moon (2002). The stages are: 1) *Simple information dissemination* (one-way communication): at this stage the basic form of e-government exists with simple postings on the website; 2) *Two-way communication* (request and response): communication and interaction between government and users occurs at this stage; 3) *Service and financial transaction*: transactions between both government and individuals (such as visa applications) and between government and businesses (such as ordering office facilities) are possible; 4) *Vertical and horizontal integration*: this stage refers to combining two separate systems at different levels (vertical) and from different departments (horizontal); 5) *Political participation*: the promotion of political participation occurs at this stage, such as online voting and surveys (Siau and Long, 2005).

4.4.6 CapGemini Ernst & Young four-stage model (2004)

CapGemini Ernst & Young focus on evaluating the development of e-services using a four-stage model drafted by the European Commission. The model comprises: 1) *Information*: only information regarded as important is provided to begin the service online; 2) *One-way interaction*: a publicly accessible website offering various services; 3) *Two-way interaction*: a publicly accessible website that provides electronic forms to start procedures for the service; 4) *Transaction*: a publicly accessible website for the whole public service including decision-making, delivery and payment (no paperwork) (Ernst and Young, 2004).
4.4.7 Siau & Long: new synthesized five-stage model (2005)

(Siau and Long, 2005) proposed a new synthesized five-stage e-government model. They used meta-synthesis integration in their research to compare, interpret, translate, and synthesize different research frameworks, and suggested a new framework consisting of five stages: 1) Web presence, 2) Interaction, 3) Transaction, 4) Transformation, and 5) E-democracy.

4.5 Criticism of e-government stage-models

Despite the variety of stage-models presented, there were limitations. There was criticism that they ignored the potential benefits of political change. In addition, the stage models did not take into account the re-engineering of internal government changes, and some did not cover and capture the ‘true’ meaning of the stages (Siau and Long, 2005). Furthermore, most existing models do not cover all the aspects of e-government implementation and those that do are narrow and limited. Most of the models focus on the technological aspect of the implementation and do not provide the whole picture of the impact of e-government (eEurope, 2002).

In addition, these stage-models appear to me, studying the influence of technology on individuals in a specific culture, to be quite inadequate. They are quite complex and are suitable for implementation on general and generic aspects of e-government. However, they do not provide an explanation or evaluation of the context of individual countries. The adoption of technology requires many elements to be incorporated into the model in order to fit a particular country’s environment and culture. Indeed, the generic models might benefit from borrowing some approaches from these models, but for the specific internal aspects of a particular country, consideration should be taken of different political, economic, organizational and cultural contexts. For instance, any given country could perceive one particular aspect as more important than others, requiring alterations to any adopted model. Thus all kinds of national differences need to be taken into account for any adopted approach. Therefore, for the purposes of this study, these models do not provide a complete perspective covering all necessary aspects.
Not all countries have reached the same level of e-government implementation. Some developed countries, for example, already have a good working system and can assess the quality of their services. However, other countries are still taking their first steps in implementing an e-government system. They are in the nascent stages and will need to include specific elements that fit their situation. This is because the generic models are narrow and cannot adjust very readily to the varying levels of maturity of different countries. Thus models that are designed to cover small areas of e-government development and implementation should be capable of being altered in ways that will make them suitable for any specific country.

4.6 Selected Method to Employ

Many researchers have studied e-government and developed theoretical and conceptual models to understand the diverse elements of e-government (Gil-Garcia and Pardo, 2005; Gupta and Jana, 2003; Moon, 2002; Cresswell and Prado, 2001; Dawes et al., 2004). Others have explained the e-government staged approach in terms of their degree of technological and organizational sophistication (Gil-Garcia and Luna-Reyes, 2003; Moon, 2002; Schelin, 2003).

For this study I choose to work with the Siau & Long (2005) five-stage e-government model as the basic framework, albeit with some alterations and modifications that would better fit the context of the problem under study. Every country has its own social and administrative aims and objectives, which should be acknowledged when adopting and employing any new system such as e-government. Therefore, any given government and its policymakers should bear in mind the country’s vision and strategic plans and priorities in order to adopt a framework that is appropriate for the nation’s vision. Consequently, it is incumbent on every nation to apply an e-government programme that analyzes and evaluates their context (Corrocher and Ordanini, 2002). With this in mind, this research study aims to explore and understand the context of Saudi Arabia and identify its specific requirements in order to develop a framework that acknowledges and respects the setting; this will facilitate the adoption process and progress through the different stages of e-government, achieving its full potential.
(Siau and Long, 2005) used the meta-synthesis approach to integrate multiple studies in order to come up with comprehensive and interpretive findings. They evaluated the uniqueness of each of the five individual studies and developed a comprehensive whole. In addition, they generated an interpretive synthesis and not a summary of the findings. This enabled them to compare the differences and the common aspects of each individual framework and come up with a new framework that maintained their central concepts but at the same time revealed a more comprehensive synthesis in their ‘five-stage model’. For this reason, I selected this particular framework to work with since it contains all the main ideas of the previous ones, and in addition has a more inclusive concept.

This study proposes five stages of e-government development and growth, to represent the progress of the e-government initiative in gradual phases and make the design more possible to achieve and maintain. To achieve the design’s full potential, a great deal of time has to be allocated to cover the full range of aspects involved in the development process. For example, technical, economic, organizational, cultural, political and regulatory aspects are all involved in the implementation and development. According to (Holden et al., 2003, Moon, 2002) each of the stages represents different levels of technological sophistication, citizen orientation, and administrative change. Therefore, to achieve the best outcome, classifying the e-government projects into stages is necessary in order to utilize the delivery of the various services which the government is intent on providing.

The (Siau and Long, 2005) framework followed in this research has been modified to accommodate the context of Saudi Arabia. Since culture is pivotal to this study, this aspect is incorporated in the framework. Therefore, the new five-stage model is:

1) **Web presence**: this phase presents the basic form of e-government. The government posts simple and limited information on its website, showing its vision and mission, but there is no interaction (Siau and Long, 2005). Governments at this phase usually provide static information about the services they offer to different levels (UN and ASPA, 2002).
2) **Interaction**: In this phase the government provides some basic interaction with different users. However, this interaction is still very simple and includes basic search engines, email facilities, and downloading of some documents (Siau and Long, 2005).

3) **Transaction**: In this phase, different users can perform complete transactions online. Citizens can complete and conduct services such as tax filing and licence applications, and businesses could, for example, obtain orders (Siau and Long, 2005). At this stage, interaction between citizens and different government agencies increases (Hiller and Belanger, 2001, UN and ASPA, 2002).

4) **Transformation**: This stage moves towards transforming services provided by the government by digitizing current operational procedures. This transformation involves vertical (government at different levels) and horizontal integration (different departments or governments in different locations) (Siau and Long, 2005).

5) **E-democracy**: This stage is a long-term goal of e-government development. The government offers political participation tools on the web such as voting, polling and surveys, citizen involvement, and political transparency (Siau and Long, 2005). At this stage, a high degree of trust between government and citizens is a prerequisite for achieving change.

### 4.7 E-government Adoption and Culture

An understanding of culture is crucial to the adoption of a new technological system by an organization. Culture plays an important role in the implementation of any new system since it directly or indirectly influences the adoption process of IT. Understanding culture at its various levels is a major and significant step in achieving successful implementation of new systems. The different levels of culture, i.e. national, occupational, organizational, group and individual, all have a great influence on peoples’ behaviour, organizations and the adoption process. Technology and people are both involved in the integration process. As a result, the social characteristics and behaviour of people in an organization can have a great influence on the success or failure of the adoption process. Organizational effectiveness depends on how well the social and technical systems are designed with consideration given to both concepts (Cabrera et al., 2001).
Furthermore, (Hofstede, 1991) pointed out that there are three major elements that determine the attitudes and behaviour of individuals in the workplace: national culture, occupational culture, and organizational culture. This is why the government and policy makers should take these aspects into account when integrating a project like e-government in the public sector. A review of various studies covering the areas of culture, organizational culture, and the adoption of technology is presented.

Integrating new technology into an organization requires an understanding of the context of the country in which this technology is going to operate. With globalization of many IT applications, it is important to highlight the need to understand fully the use of technology within different cultures. Cultural differences have become critical issues in the transfer of technology from one country to another. Therefore, any model adopted for implementation by another country should be robust across cultures. Thus any government and policy makers in this position should determine initially whether or not a specific model can function across cultures. For this reason, they have to determine and understand the potential impact of culture on people’s attitudes towards the new technology and make appropriate changes in the institutional structure of the organization.

4.8 Theoretical Framework (E-Acceptance Framework)

The model for this research is presented in figure 3. It was derived from (Siau and Long, 2005), but modified by adding another element in the cultural leap phase. Therefore, in addition to the transaction stage in the cultural leap phase, this study includes an e-acceptance stage. Since there is a strong relationship between culture and the adoption of IT (Straub, 1994b, Straub et al., 2002b) I felt it necessary to shed some light on this aspect in the context of Saudi Arabia. Consequently, this research sets out the state of understanding about ‘culture’ and how it can have a great impact on the adoption process of technology, in this case ‘e-government’. This framework will help to provide a picture of how culture relates to the adoption of e-government in the KSA. It recognizes that:

- Culture is a vital concept for understanding the adoption of IT.
• Cultural values, beliefs, attitudes, behaviours, norms, experiences, and all of these concepts in conjunction affect the adoption process of e-government.
• The adoption of e-government in the public sector is influenced by the behaviour of employees and how they perceive, use, accept and adopt this technology.
• E-government adoption in the public sector is influenced by technological and social factors.

Figure 3: The inclusion of E-Acceptance in the modified five-stage model of e-government.

4.9 The Concept of E-Acceptance

Various aspects contribute to the e-acceptance concept, and it is important to determine through research based on data collection, a review of the literature, interviews, and field study which of these aspects might contribute to the progress of e-acceptance.
With this in mind, I aim to develop a comprehensive e-acceptance framework that could be used in the Kingdom of Saudi Arabia for adopting the e-government project.

**E-acceptance defined and interpreted**

*E-Acceptance* is the mental attitude of individuals towards a new electronic or technological system and the pattern of rejecting or accepting it. E-acceptance is the state of a society’s culture as it is faced with embracing the new technology and adopting it into their lives. E-acceptance is the ability of a society’s culture to take advantage of the new technology to promote the country’s growth and human development.

The pattern of acceptance and rejection is related and linked closely to culture. Culture carries the background, history, beliefs and values of a society in any given nation. Culture is considered to be a ‘roadmap’ that directs people’s actions and behaviours, so understanding how culture impacts on people’s acceptance from different aspects is crucial. For the successful acceptance of a new system there should be cultural acceptance and understanding of the significance of the system. There should be an understanding of what this new system is going to provide and how people are going to benefit from it. Finally, it is important to take the necessary steps to change any negative social attitudes in society that hinder the development and advancement of the nation as a whole.

The government is currently adopting a new IT e-government system which constitutes, in essence, a technical and mechanical adoption bearing no relation to the environment that this technology is to operate in. However, some consideration needs to be given to the human aspect of using this technology. For e-government to be successful the development of a further step should be taken. This research proposes that further step, the development of an e-government model framework of e-acceptance, which has been integrated into the framework constructed by (Siau and Long, 2005).

E-acceptance is a stage that works as a comprehensive cultural and social strategy for the adoption and development of e-government. This study aims to reconfigure and reconstruct the e-government framework and extend it to include e-acceptance in the
adoption stages, in parallel with the implementation of e-government. This will support the impact of culture on technology and develop a tailored e-government adoption model that is in line with the national context of the KSA.

This chapter therefore introduces the concept of e-acceptance that takes into account the cultural context of the country that e-government technology is going to operate in. The concept of e-acceptance provides a good basis for the elimination of any gaps in the implementation of e-government in any given society which has a different culture from the country of origin. In the adoption process it is necessary to go beyond the technical aspects of e-government and include other essential social aspects. Thus e-acceptance aims to provide a sufficient basis for e-government adoption. The concept takes individuals (employees in the organization) and their cultural influences and differences into consideration. In addition, it adds some insights into the process of e-government implementation. As such, it is proposed that e-acceptance could provide a solution to some of the inadequacies of technological e-government adoption.

For an e-government adoption project to be successful it should be noted that besides technical-, financial-, economic- and infrastructural- readiness, there is also the need for the relevant society to embrace the technology and understand it; in short, willingness to use and accept it is crucial. Some developing countries, for instance, have small budgets for such projects as e-government; however, they have developed and utilized technology in such a way that it has opened up many new opportunities for their nation. These countries may have limited resources, but they do have the will to accept that technology is a great incentive for them to develop and move forward.

The government of Saudi Arabia has the financial ability to employ the best systems for an e-government programme, but this alone is not enough for successful implementation. Individuals at different levels have to be willing to work with such a system. Thus the governmental administrative structure will need to undergo various changes and reforms. Furthermore, a successful implementation requires appropriate vision and strategy by the government and officials in the adoption process, as well as a suitable groundwork made up of appropriate regulations and policies. The most important criterion for success is having a culture that is open to and will embrace change, accepting the new which will add value and other advantages.
A country such as Saudi Arabia has the financial muscle to develop a powerful infrastructure for e-government and its technical needs, but without the genuine acceptance of the people in terms of using and adopting such technology, there will always be a flaw in the system, leading to possible failure in the development and adoption process. At the very least, the implementation of e-government could take a very long period of time to slowly and gradually spread across KSA society due to the lack of acceptance or understanding of the e-acceptance concept. Therefore, it is my view that the nation’s priority is not to provide more funding or state-of-the-art technology at this time but to find ways to encourage and obtain acceptance.

4.10 Practical Implications

The concept of e-acceptance should be clearly outlined for the government and officials, if the full potential of cultural and social aspects in the implementation of e-government is to be realized. E-acceptance should be considered as an extension of the e-government development stage-model. However, e-government is faced with resistance on different levels, from individuals, groups, employees, managers, and government politicians and officials to changes in the structure of the organization (Alriyadhnewspaper, 2008). This is why e-government should go beyond the technical aspects and be aware of the more complex issues intertwined with the adoption process, such as human factors. E-acceptance can help to shed some light on ways in which users can accept a new application of technology. However, in order to effectuate this, it is necessary, in the first instance, for the government to build up awareness. As Branden (1987) states: “The first step toward change is awareness. The second step is acceptance”.

For successful e-acceptance there needs to be the right conditions. These right conditions should be provided by a high power and authority in the country to enable an IT system to be successfully implemented. The government, as the high authority, could accelerate the process of e-acceptance. The process should be proposed by the government for both sectors, public and private, highlighting the benefits arising out of this new initiative. One of the most powerful methods for adopting change is when the proposal comes from a powerful authority (Senge, 1996).
Leadership is another significant aspect in the acceptance of new systems (Northouse, 2009, Kavanagh and Ashkanasy, 2006, Ndou, 2004). It can be a great tool in paving the way and finding the means to accepting what is contrary to the traditional manner of conducting business. Furthermore, prevention of e-government failure would be an acknowledgment of the need for and benefits of the new technological system. The country should realize that if they fail as a nation to accept new technologies they will suffer the consequences of lagging behind and ‘falling off the wagon’. As a result, the country will risk falling behind both economically and socially in the emerging advanced world and would be in danger of becoming isolated by a digital divide from the rest of the developed world.

4.11 Proposed E-Acceptance Framework

A special framework is proposed and developed for use in this study. This framework has been specifically designed to meet the needs of developing countries, particularly the Arab nations and especially the KSA. The framework is derived from (Siau and Long, 2005); however, it has been modified to include e-acceptance. E-acceptance has been strategically placed within the cultural leap phase in addition to the already existing transaction stage. The challenge of adopting a new information system technology is daunting for both governments and businesses. Both should be aware of the fact that individuals might resist or reject change for various reasons. No-one can ignore the power of culture and its influence on individuals in society, which is why more should be done in terms of culture to ensure the successful adoption of e-government.
Figure 4: Proposed E-Acceptance Framework
The addition of e-acceptance in the framework is considered to be significant in the context of Saudi Arabia since it could become the basis of accepting new technologies in an organization. Since culture impacts on individuals in the organizations, an important step in introducing technology is paving the way for understanding and accepting the programme. This framework proposes that culture is significant in the process of accepting new technology into the organization. This is the reason why e-acceptance is placed in the cultural leap phase of the framework. In addition, this framework proposes that e-acceptance could influence the culture which in turn influences the organization and then the employees.

In figure 5 below, I indicate how the organization is related to and part of the culture. Therefore, culture appears to extend a powerful influence on individuals and organizations which means that the adoption of information technology is closely intertwined with culture. This is why the phenomenon of culture has been held responsible in various cases for the failure of different information systems (Kayworth, 2006). Culture theory has been used in many studies to explain a variety of social attitudes, behaviours and outcomes in organizational settings (Keesing, 1974, Nadler and Tushman, 1988). Researchers have studied culture and social behaviours including job attitudes (Birnbaum and Sommers, 1986), administrative practices (Thomas, 1989), and technology transfer (Hussain, 1998). In addition, culture is reputed to have a strong impact on information-related behaviour, in terms of, for example, what is considered to be legitimate information (Hall, 1984).

In addition, most IS research reveals a stark division between national culture and organizational culture (Kayworth, 2006). However, in this research the influence of culture as a whole (national and organizational culture) is explored and how it has an impact on the adoption of technology in the public sector. A more comprehensive review of both national culture and organizational culture will provide a better understanding of the integration process of the new technology in the organization and the relationship between culture and technology.
4.12 E-acceptance Framework Application and its Value

Currently, e-government is an important priority for all countries to adopt and employ. The government of Saudi Arabia has already acquired all the necessary elements for implementing this technology in the different sectors of the country. However, the most significant element in the employment of any technology is the people. The use and implementation of any technology requires people to employ and operate the system. Therefore, it is not possible for e-government to be activated and function if people do not use or accept the system. This is why this research focuses on the employees and how they might accept and use the e-government system in order to make it successful.

A proper acceptance of technology by individuals is required for suitable implementation and this framework is crucial in this context. In this framework I will identify the cultural drivers and barriers for e-government adoption. Knowing and identifying the cultural drivers and barriers could help to define more clearly the problems that could occur in the application process. Therefore, clearly defining the problems inherent in the implementation of e-government system is a necessary requirement before proper solutions can be proposed in advance in order to manage the
various obstacles that may appear. Consequently, government and policy makers should acknowledge these obstacles and identify methods to solve all sides of the problem. They should be able to recognize the employees in the sector and the obstacles they may encounter. In addition, the government and policy makers should be able to evaluate the levels of acceptance and performance of individuals in using the system. Thus when any new system is adopted by a government, the whole process may be packed with issues. These different issues could be related to polices, technologies, and people.

The government and policy makers employing such a system should embrace the different human aspects in the sector and deal with them in order to reach their goals. The e-government initiatives are faced with many obstacles especially on the human level. It is possible, for example, that some employees in the sector might not accept working with the system because of fear or lack of knowledge. Other reasons for not accepting the e-government initiative might be the relinquishing of power for some employees due to the transparency that comes with the system. Another potential problem is nepotism which is a strong trait in the culture and any threat to its influence would constitute another reason why employees might refuse to accept the system.

Therefore, it is crucial to have a framework that considers the cultural dimensions in order for the e-governmental project to be successful. This is why I proposed this framework which focuses on the need for acceptance of technology by its employees if the system is to be successful. Therefore, there are different areas that government and policy makers should look into and this framework highlights these different areas in this research.

It is important to clearly define various problems that could occur in the applications process in order to be able to deal with them. This framework identifies clearly the various obstacles that could occur; as a result, it is possible for government and policy makers to ascertain and understand in advance these issues. Understanding prior to implementation is a vital aspect because in the planning process the government and policy makers could organize plans and training accordingly. Identifying problems clearly would provide the basis for identifying methods that match the fundamental problems in the sector and represents different issues that need to be considered in this complex situation. This is the significance of having a framework that presents the
different obstacles, especially cultural, since culture is intangible and could be hidden and not considered in the implementation process. In the past, many different frameworks have been proposed for e-government application, however, most focused on technical, financial, structural, matters and not human matters; to make matters worse, there was no one framework that could fit them all. Thus changes and alterations should be made that are compatible with the setting and context of the country. With this in mind, this research study has proposed a suitable framework that is compatible with the country’s context and differences. Furthermore, while a number of proposed models and definitions of e-government have various limitations for implementation in the different public sectors in the Kingdom, this (proposed) framework highlights and provides some pointers for the development of the e-government programme in this context.

Moreover, since e-government is a massive and costly programme the policy makers and the government should recognize and be aware of the obstacles prior to starting the project. This is where this framework could provide some insights into different issues that a large project such as this could raise since it involves substantial changes that will influence employees in the sector. Furthermore, overcoming the cultural barriers is one of the key challenges to the implementation of e-government in developing countries (Ndou, 2004).

Culture is a complex concept that holds many different notions that need to be considered. Background, values and beliefs, traditions and customs, religions, social norms and characteristics, and different experiences all are part of culture and need to be kept in mind to ensure successful adoption. Cultural aspects need to be carefully studied by having an organized and planned development schema to assist in the acceptance and trust of the e-government systems (Al-dosari and King., 2004). E-government applications should be a medium for developing the public sectors in the country and not a new trend that the government adopts and finances.

In addition, this framework could assist policy makers and the government to establish a clear vision and a strategic action plan for future direction into the “Information and Knowledge Society age” through recognizing key cultural barriers that could complicate the implementation process of an e-government programme. Furthermore, it is
anticipated that the cultural dimensions recognized in this research will provide the policy makers and government with an awareness of the obstacles and barriers that may have a bearing on the success of the e-government project. Understanding these barriers will assist in the adoption process of e-government since it anticipates the problems and challenges that might exist during the implementation process which then allows strategies to be devised to overcome them.

4.13 Towards Achieving E-acceptance and E-government Success

In order to achieve e-acceptance in Saudi Arabia certain improvements need to be considered. These improvements are:

- A national e-acceptance plan in place in all cities of the Kingdom.
- Strong will on the part of the government and policy makers to lead the people towards positive change and show actions and not just words. A strong leadership, leading by example, is required.
- Improving public awareness of the importance of the new technology at different levels: i.e. individuals, groups, families and society as a whole. The government should promote awareness of technology and demonstrate its benefits in daily life.
- Increasing technology teaching and training courses.
- Involving and engaging training programmes for employees in the organization.
- Introducing technology in secondary schools and promoting ethical values.
- Eliminating barriers to the implementation of new technology.
- Motivating and encouraging by providing different incentives.
- Making technology easily available for people to use and experiment with, to eliminate the digital divide.
- Reducing costs for the mass use of technology.
- Providing the appropriate infrastructure.
- Informing and engaging individuals and society through marketing, production and forums.
- A powerful, responsible and authoritative individual decision-maker, with a clear objective.
An understanding of the complexity of the implementation process which is not be underestimated as a simple project. It is a complex undertaking that requires particular attention to detail as well as the negotiation of a number of different stages in order to attain a successful outcome.

4.14 Conclusion

This chapter has proposed an e-government framework that could be adopted generally in developing countries and particularly in the KSA. This framework is derived from the five-stage e-government model of (Siau and Long, 2005), but with a modification to make it more appropriate to the Saudi Arabian context. This modification takes the form of the e-acceptance model which is accompanied by a definition of the concept.
5  Chapter Five: Research Methodology

5.1  Introduction

In the previous chapter, a description of the framework and research design for the research problem was presented. This chapter describes the methodology and consists of two sections. The first section presents an outline of the different underlying philosophical paradigms that could be employed in information systems (IS) research. The second section explains and justifies the choice of the research method used. I selected the interpretive/constructive view for this qualitative case study research. The main reason for this choice is that it enabled me to explore employees’ behaviours and attitudes towards the adoption of the e-government phenomenon in their context.

5.2  Different Underlying Philosophical Paradigms

When conducting research it is significant to consider different philosophical views. The term *worldview* refers to the basic beliefs that direct actions (Guba, 1990); other terms include *paradigms* or *research paradigms* (Blaikie, 2000, Lincoln and Guba, 2000), *epistemologies* and *ontologies* (Crotty, 1998), and *research philosophy* (Saunders et al., 2009). Chua (1986) suggested three paradigms that are based on research epistemology: *positivist, interpretive and critical*. These paradigms were endorsed by Klein and Myers (1999); Myers and Avison (2002); Neuman (1999); Oates (2006); Orlikowski and Baroudi (1991). Thus, if a researcher follows Chua’s classification then qualitative research can be carried out with a positive, interpretive, or critical stance, which means that a case study can be positivist (Yin, 2009), interpretive (Walsham, 1993) or critical, just as action research can be positivist (Clark, 1972), interpretive (Elden and Chisholm, 1993), or critical (Carr and Kemmis, 1986). However, this depends on the research philosophy chosen. An overview of the three research philosophies follows.
5.2.1 Positivist Research

The positivist paradigm is considered to be the oldest of the three paradigms. According to (Burrell and Morgan, 1979), it seeks to clarify and anticipate what occurs in the social world through the search for regularities and relationships between constituent elements. Positivism is founded on the values of reason, truth and validity and the focus on facts that are collected through observation and experiences via the employment of quantitative methods such as surveys and experience (Blaikie, 1993, Easterby-Smith et al., 2008, Eriksson and Kovalainen, 2008, Hatch and Cunliffe, 2006, Saunders et al., 2007).

Positivism is called ‘the scientific method’ due to its connection with research in the natural sciences, and it is used to search for and test regular laws or patterns in the universe. These laws and patterns are tested objectively and isolated from the phenomenon by the use of positivism (Oates, 2006). Similarly, (Dyson and Brown, 2006) pointed out that science offers the observer an objective view of the world that is separated from the purpose of human intention which has a concrete existence. This is in line with (Myers and Avison, 2002), who pointed out that this approach asserts the problem or phenomenon with numerous observations on the matter that is studied in isolation. They added that the basis of positivist research is to investigate a problem objectively.

Furthermore, for this method, the researcher employs scientific tools and uses measurement for testing the theory. By the adoption of this approach the researcher will be able to explain and understand the scientific phenomenon. Some characteristics of the positivist paradigm are: the notion that the universe exists in isolation from humans; emphasis on measurement and modelling; objectivity; hypothesis testing; qualitative data analysis; and universal laws (Oates, 2006).

However, positivism has been criticized for being remote from the problem under study and is therefore not appropriate for investigating and studying problems in the social world. This is supported by (Hirschheim, 1992) who argued against the purported benefits and appropriateness of the positivist paradigm for social sciences. In other words, when the research problem has several elements that are associated with
sociological factors, this approach is not considered to be ideal since it does not clarify and explain aspects of social life (Kaplan and Duchon, 1988).

This approach is more appropriate for investigating problems or hypotheses in the natural world (Oates, 2006). Nevertheless, as (Walsham, 1995) mentioned, the positivist approach has been used in substantial publications in information systems research. However, (Galliers, 1991) has pointed out that use of the positivist paradigm has resulted in some aspects of social life that have not been investigated, because social and human aspects could not be measured using this approach.

5.2.2 Interpretive/Constructivist Research

As opposed to positivism, the interpretive (post-positivism) approach does not assume that the world exists independently of social events and humans. Interpretive research in IS and computing is focused on acknowledging and understanding the social context of information systems and the social activities that are created and developed by individuals and through which it influences, and is influenced by, its social setting (Oates, 2006). This paradigm is described as anti-positivist by (Hatch and Cunliffe, 2006) and as post-positivist by (Blaikie, 1993) since it is argued that there is a difference between the subject matters of the social and natural sciences. Meaning is constructed from the different experiences, memories and expectations of individuals or groups in the social world, and therefore through the different experiences that result from various interpretations (Denzin and Lincoln, 2003). It derives the name post-positivism from the thinking that followed positivism, which challenged the traditional idea of the truth of knowledge (Phillips and Burbules, 2000). The post-positivist views knowledge through careful observation and measurement of objective reality that exists in the world (Creswell, 2009).

Therefore, researchers adopting this method try to comprehend social events in a certain situation and understand how these events impact on human characteristics. This is in line with the views of (Baskerville and Wood-Harper, 1996, Klein and Myers, 1999), who recognized the growing approval of social and psychological aspects in the field of information technology. The objective of interpretive research is to identify and explore how all different aspects in a particular context are associated, and not to prove or
disprove a hypothesis (Oates 2006). Furthermore, interpretivists believe that knowledge of individuals in the world is obtained from social constructions (language, consciousness, shared meanings, documents, tools, and other artefacts).

This approach develops a rich understanding of how humans perceive the world around them and how these perceptions change over time and differ from one individual to another (Checkland and Holwell, 1998). (Walsham, 1993) agrees that interpretive research methods in IS are intended to comprehend the setting of information systems and how they have an impact on this context. Generalization to a sample or population is not the goal, however; the intent is to capture a deeper understanding of the phenomenon which could be employed to inform other contexts. Interpretive researchers try to make sense of the way research participants understand and conceptualize events; these different aspects are assumed to impact on individual behaviour (Kaplan and Duchon, 1988). Examples of this approach to qualitative research include (Boland, 1991, Walsham, 1993). Interpretive researchers implement a range of philosophical thought such as: phenomenology, hermeneutics and critical social theory in an attempt to explain and understand the social world. Interpretive research methods include: case studies, action research, hermeneutic analysis, ethnography, semiotic analysis, narrative analysis and grounded theory.

5.2.3 Critical Research

This is the third philosophical paradigm, and the best known practitioner of contemporary critical social theory is Jurgen Habermas (Lyytinen and Klein, 1985). Critical research is described in the field of IS as an alternative approach to positivist and interpretive research (Trauth, 2001). This is founded on Orlikowski and Baroudi’s work (1991), which is based on Chua’s (1986) work. (Guba and Lincoln, 1994) pointed out that critical theory is where reality is formed over time by the influence of social, political, cultural, economic, ethnic and gender values. Similarly, (Oates, 2006) defines critical research in IS and computing as the consideration of identifying power relations, conflicts and contradictions, and empowering people in order to eliminate them as sources of alienation and domination.
In addition, in this approach the aim of the critical researcher is to concentrate on power relations, conflicts and contradictions in the modern world, and help to remove them as grounds of alienation and domination (Oates, 2006). This view is supported by (Kincheloe and McLaren, 2002) in order to better understand critical research by acknowledging the individual’s setting. Critical researchers state that the history of individuals makes up and creates the social reality which results from what people produce and reproduce in their world (Meyers and Avison, 2002). However, there is a resemblance between interpretive and critical research, clarifying some of the main aspects of the interpretive field which could be applicable to critical research (Klein and Myers, 1999). These similarities and overlaps between the two approaches explain why a number of researchers prefer the name ‘critical interpretive research’ (Pozzebon, 2004). Examples of a critical approach to qualitative research include the work of (Forester, 1992, Ngwenyama and Lee, 1997).

Thus it is possible for the researcher to employ one of these paradigms, depending on the method chosen and the research design. In addition, the type of problem and questions to be investigated, and the data collection and analysis, will guide the researcher to the best method to use. The differences between these three paradigms will inevitably lead to variations in the research design, methods of data collection and in the analysis (Hirschheim, 1992, Lee, 2004).

### 5.3 Research Approaches

The term *research* refers to the act of reaching and establishing new facts and knowledge through the use of proper procedures, to gain, in the end, the satisfaction of the researchers and a conclusion to the research under study (Oates, 2006). In addition, the research method is an approach used by the researcher conducting an investigation to move from the underlying philosophical assumption to the creation of the research design and on to data collection (Myers, 1994, Myers and Avison, 2002).

Two research methods are commonly employed in the field of IS, quantitative and qualitative; in addition, there is the mixed method that is used and supported by some IS researchers. On the one hand, quantitative research methods emerged from the study of
natural sciences and are applied in the deductive approach. On the other hand, qualitative research methods are commonly used in social sciences to permit researchers to study social and cultural phenomena; these researchers prefer the inductive approach (Myers and Avison, 2002).

5.3.1 Quantitative Research

Quantitative research, according to (Creswell, 2009), is a method for testing objective theories by investigating the relationships among variables. Quantitative data are data or facts that are related to statistics. This research method is based on the assumption that research designs should be founded on an objective view of the world. The major type of data is generated by experiments and surveys even though other research strategies are possible (Oates, 2006).

Furthermore, the quantitative approach is one in which the investigator mainly uses post-positivist claims for developing knowledge (i.e. cause and effect thinking, reduction to specific variables and hypotheses and questions, use of measurement and observation, and the testing of theories) (Creswell, 2003). A number of quantitative methods are used in the social sciences and they include survey methods, laboratory experiments, and numerical and formal methods such as mathematical modelling (Myers and Avison, 2002). The advantage of quantitative research is that it has strength in numbers. Statistics can answer the question of ‘how many’. Quantitative research can statistically measure customer behaviour and attitudes. Subsequently, all the data can be gathered and translated into graphs and charts. In fact, quantitative methods stress the importance of the measurement and analysis of causal relationships between variables, while qualitative methods place more emphasis on the values of rich descriptions of the social world (Denzin and Lincoln, 1994, Denzin and Lincoln, 2007).

However, quantitative research has some limitations. Large samples have to be taken to ensure reliable outcomes, requiring more time to collect the data, and are costly. Furthermore, quantitative research ignores social interaction and the cultural environment. It also ignores the outcomes of the studies in question and the aspects that affect the development of the outcomes (Silverman, 2005). Quantitative research may
also neglect other aspects such as political, cultural and social construction of the variables under research (Mills, 2000).

5.3.2 Qualitative Research

According to (Creswell, 2009), qualitative research is a method used to understand and explore the meaning of individuals or groups and to describe human and social matters. Qualitative research is based on the study of aspects in their natural settings in order to make sense of phenomena in relation to the meanings individuals bring to them. Qualitative researchers believe that by the use of detailed interviewing and observation they can get closer to the subject’s perspective (Denzin and Lincoln, 2003). Qualitative research methods were developed in the social sciences in order to investigate and study social and cultural phenomena (Neuman, 1999, Baskerville and Wood-Harper, 1998). In the qualitative approach the researcher or investigator frequently bases his/her claims on constructivist perspectives (i.e. the numerous meanings of individual experience, meanings socially and historically constructed, with the intention of developing a theory or pattern) or advocacy/participatory perspectives (i.e. political, issue-oriented, collaborative or change-oriented) or both (Creswell, 2003).

The term qualitative lays stress on the quality of entities, on processes, and meanings that are not based on laboratory work or experiments measured in terms of quantity, frequency or intensity (Denzin and Lincoln, 2003). In addition, users of this method often argue that quantitative researchers are rarely able to grasp the subject’s perspective due to their dependence on remote inferential empirical materials. Furthermore, qualitative researchers believe that the detailed and rich descriptions of social life are significant. Conversely, quantitative researchers are not concerned with detail and rely on nomothetic commitments (Denzin and Lincoln, 2003).

Qualitative research is valuable and important in answering the questions ‘why?’ and ‘how?’ due to the dependence on in-depth research. In addition, when conducting interviews the researcher is able to obtain in-depth feedback about the nature of the problem in a social context. Qualitative research allows a better evaluation of the problem under study and that is done mostly by exploring issues related to the setting.
Qualitative research does not rely on large sample size as does the quantitative method. It searches and investigates beyond the scope of numbers and acquires data about social settings in order to understand and perceive real life experiences of individuals in specific contexts. Qualitative data sources include observation and participant observation in fieldwork, documents, interviews and questionnaires, and the researcher’s impression and reactions (Myers and Avison, 2002).

However, qualitative research has its shortcomings. There are limitations in implementing this method that should be recognized. To quantitative researchers, the empirical data produced by the ‘softer’, interpretive methods are perceived as unreliable, impressionistic and subjective (Denzin and Lincoln, 2003).

5.3.3 Mixed Methods

Mixed methods is an approach which associates both qualitative and quantitative forms (Creswell, 2009). The term mixed method research describes the procedures in collecting and analyzing both quantitative and qualitative data in the context of a single study (Teddle and Tashakkori, 2003). The use of mixed methods research offers the researcher the practicality of different techniques and can be a link between quantitative and qualitative research.

The main aim of mixed method research is to gather the strengths of both methods and minimize the weaknesses (Johnson and Onwuegbuzie, 2004). (Creswell and Clark, 2007) support this view, pointing out that the use of both approaches provides a general strength to the study that neither the qualitative nor the quantitative method could provide alone. Furthermore, some research demonstrates the need for the mixed method in order to answer research questions that involve both qualitative and quantitative elements (Tashakkori and Creswell, 2007).

Mixed methods research is relatively new in the social and human sciences (Creswell, 2009). In 2003 the first comprehensive overview of the method was introduced in the Handbook of Mixed Methods in the Social and Behaviour Sciences (Tashakkori and Teddlie, 2003). Later on, these same scholars argued that when used separately, these methodologies cannot produce the complete taxonomies that can be obtained from
mixed methods (Teddlie and Tashakkori, 2006). (Maxwell and Loomis, 2003) support this approach which provides more diversity to the study.

5.4 Qualitative Research Methods

There is a range of qualitative research methods that could be applied to different studies. A research method is an approach that helps in transferring philosophical assumptions to proper research design and data collection techniques (Myers and Avison, 2002). The different research methods used are related to different assumptions and require various skills in the research process. The different qualitative methods that could be used for the research study are: action research, case study, ethnography, and grounded theory.

5.4.1 Action Research

Action research is mostly used with qualitative methods and it uses the interpretive view to analyze observations (Iversen et al., 2004). Action research has various definitions, but the definition by (Rapoport, 1970) is widely accepted and frequently cited. The goal of action research as explained by (Rapoport, 1970) is to contribute to the practical considerations of individuals’ related and close issues, and to contribute to the goals of social science by joint cooperation within a mutually acceptable ethical framework. Action research is described by (Myers and Avison, 2002) as appropriate for the researcher who wants to evaluate the adoption process while taking part as a participant in the implementation system.

Authors tend to view action research as interventionist, but nonetheless inclusive of theory formation, analysis, collaborative alteration of the activity and review (Baskerville and Wood-Harper, 1992, Wuest and Merritt-Gray, 1997). This is in line with (Oates, 2006) who suggests that the researcher studying the problem would be part of, and participate with individuals in the context of situation. In addition, (Baskerville and Wood-Harper, 1998) explained that all action research shares the basis of being involved in the aspect under study, even though there are many types of action research.
Therefore, action research can be perceived as a valid research method that is used in the IS field (Baskerville and Wood-Harper, 1998, Myers and Avison, 2002).

As a result, this research method gives the researcher the opportunity to be part of the study and have an insider’s perspective of different aspects occurring in the situation under study. This allows more in-depth and richer studies to be conducted. However, the lack of objectivity is a limitation since the researcher is involved in the situation, which could result in bias or not being completely clear on other aspects of the research under study.

According to (Rapoport, 1970), three dilemmas in action research are apparent: ethics, or personal over-involvement with the research; goals, which are the two taskmasters in social science (subject and science); and initiatives. Finally the greatest difficulty associated with adopting the action research method is not the poor understanding of the method by individuals who review the method, but the poor understanding of the method by the individuals who conduct the research (Baskerville and Wood-Harper, 1996).

5.4.2 Case Study

There are different definitions of case studies, but one definition that is presented in a number of sources is that the case study examines a phenomenon in the natural context, and uses several methods of data collection to gather facts from different units (Bonoma, 1985; Stone, 1978; Yin, 1984; Benbasat, 1984; Kaplan, 1985). The main goal of a case study is the description of the reconstruction of a case (Flick, 2009). The limits and boundaries of the phenomenon are not clear, and there is no experiment and no control over the phenomenon. (Denzin and Lincoln, 2000a) have pointed out that in the case study, qualitative researchers can investigate aspects in their normal setting in order to be able to understand the event in relation to meanings people bring to them.

(Benbasat et al., 1987) identified various key characteristics that are related to case study research: the phenomenon is examined in the normal setting, collection of information is by multiple means, one or few entities are examined, the complexity of units is studied carefully, no controls are imposed on events as they happen, the
researcher may not specify the set of independent and dependent variables in advance, the outcomes and findings rely mostly on the researcher, the researcher could change different aspects such as site and data collection methods if he/she develops a new hypothesis. This approach is most suitable for the exploration of contemporary cases or events and is primarily useful in the study of ‘why’ and ‘how’ questions.

Types of Case Study
There are three basic types of case study: exploratory, descriptive, and explanatory (Yin, 2003).

- **Exploratory case study**: conducted by the researcher who wants to define the research questions and hypotheses (Oates, 2006, Yin, 2003). This type of research allows the researcher to understand a research problem when there is little literature on the topic (Oates, 2006).

- **Explanatory case study**: the search to connect an incident with its effects, which makes it appropriate for studying causality (Yin, 2003). The explanatory case study goes into more detailed analysis than the descriptive study. This type of research explains the reasons for different events and their results (Oates, 2006).

- **Descriptive case study**: explains events and their specific context (Yin, 2003). Researchers employ this type of in-depth research in order to conduct a rich analysis of the problem under study using a story approach that explains the various stages of the research (Oates, 2006).

5.4.3 Ethnography
Ethnographic research originates from social and cultural anthropology. It requires a large amount of time to be spent in the field. Researchers become involved in people’s lives and investigate phenomena in their real setting, seeking to place the phenomenon under study in its social and cultural context (Avison and Wood-Harper, 2002, Lewis, 2003, Miles and Huberman, 1994). Ethnography is the explanation and interpretation of a cultural or social group or system. In this method the researcher studies and observes the people’s patterns of behaviour, and their way of life. (Oates, 2006) pointed out that
this research is a description of individuals or cultures, which is why researchers spend a long time in the field studying the problem.

According to (Myers, 1999), this type of research is the most in-depth, due to the long-term involvement of the investigator and the observation of people’s activities and lives, in order to understand the phenomenon and people’s lives in the natural and broader context. Although there are different types of ethnography, there are, nonetheless, a number of common characteristics between them, i.e. spending time in the field, the tendency for the research to take place in a natural setting and not in an artificial or experimental setting, becoming the research instrument, attempting to describe the world as seen by individuals in their own familiar setting, and trying to produce a holistic description of a culture (Oates, 2006).

5.4.4 Grounded Theory

According to (Glaser and Strauss, 1967), grounded theory is an inductive theory that helps the researcher to create or generate a theory (from qualitative data) of the general characteristics of a topic, while at the same time grounding the account in empirical observations or data. (Martin and Turner, 1986) agree that grounded theory is inductive research that discovers a theory in a way that permits the researcher to create a theoretical account of the general features of the problem and at the same time ground the account in empirical observation or data. The distinctive characteristics of the grounded theory are the commitment to discovery and research via the social world with the elimination of prior knowledge and a priori theorizing (Locke, 2001).

The social researcher sometimes studies an area of concern with a previous and well-formulated theory to explain and describe the research under study. However, as (Martin and Turner, 1986) have pointed out, in many cases there is no related theory to go by for many inquiries or if a theory does exist, it may be too remote to offer guidance. Grounded theory is a qualitative research approach which aims to conduct field research and subsequently to analyze the data that will guide the generation of the grounded theory (Oates, 2006). IS research commonly employs grounded theory, with its three data sources: observation, interview, and assessing archival records (Myers and Avison, 2002, Orlikowski, 1993, Shah and Corley, 2006).
5.5 Qualitative Techniques for Data Collection

There are different techniques for obtaining the required empirical data for the research. The data collection techniques in qualitative research are similar in the IS field to those in other fields (Avison and Myers, 2005). The researcher can use one or a variety of data collection techniques, depending on what would be appropriate with consideration of the quality of the data, the time frame for data collection, the estimated cost, and other aspects. According to (Parikh, 2002) the data collecting stage of the case study is time consuming and intensive.

The data collection techniques range from interviews to observations. For instance, (Yin, 2009) suggests six main sources for the case study: documentation, archival records, direct observation, interviews, participant observation, and physical artefacts. In addition, the researcher should be aware of other sources such as films, photographs, and videotapes; projective techniques and psychological testing; proxemics; kinesics, ‘street’ ethnography; and life histories (Rossman and Marshall, 1989). (Silverman, 2006) presented four main methods for qualitative research: observation, analyzing texts and documents, interviews, and recording and transcribing.

5.5.1 Interviews

The interview is considered to be one of the most significant sources of case study information (Yin, 2009), and is the favoured ‘digging tool’ to collect data in the social sciences (Kvale, 1996). In the case study, interviews are a line of inquiry that is flexible and fluid, and not rigid (Rubin and Rubin, 2005). This gives the researcher an opportunity to ask questions freely and get answers to the different questions needed. According to (Yin, 2009) there are three types of case study interview: in-depth interview, focused interview, and formal survey (structured questions). Furthermore, qualitative interviews are divided into three major types: structured interviews, unstructured interviews, and semi-structured interviews (Parikh, 2002, Tellis, 1997).

In general, interviews are a significant case study collecting technique since they can capture and study the problem of human affairs or behavioural events. The importance of interviews is that they can provide essential information and insight about specific
events and can offer relevant information in a short time (Yin, 2009). In addition, the researcher plays a major role as an outside observer in interpretive case studies. In the interview the researcher can ask participants their views on different issues and events regarding the phenomenon that is taking place (Walsham, 1995).

5.5.2 Documentation

Documents are another source of data that can be used to supplement interviews. They include letters, memoranda, email correspondence, agendas, written reports, administrative documents, formal studies, and news clippings. In case studies, documents are important for supporting and augmenting evidence from other sources. They play a significant role in data collection and can be useful in verifying data that is mentioned in the interview as well as providing specific details, and it is possible to make inferences from them (Yin, 2009).

5.5.3 Observation

To observe is to watch and be attentive. Observation involves the researcher in using his/her senses in addition to sight, such as hearing, smelling and touching. One important aspect of the observation of the actual setting is to pay attention to events and the actions that people actually perform, and not what they report they do (Oates, 2006). Observational information is useful in providing more data about the problem under study (Yin, 2009).

5.6 Philosophical Worldview Proposed in this Study

When exploring and describing a social phenomenon, it is crucial to think of the philosophical view that underlies the research. The philosophical perspective influences the research design process, and the results of the research study. Thus, researchers should be aware of their own beliefs in relation to the nature of the study or phenomenon under research and how to relate to them. The different ideas and perceptions of the various aspects of the study create the individual’s view of the environment and the world. Therefore, the correct paradigm is vital to the study since it influences the path of the phenomenon under study.
The philosophical view of my research is the interpretive/constructive position. Under this paradigm, it is my intention to discover and understand the contextual setting of the individuals in the organization. This philosophical view is suited to discovering the meaning that is constructed in the social world by individuals and studying the contextual elements that impact on and shape the behaviours and interpretations reached by individuals. An understanding of what individuals are feeling, thinking of and how they communicate in words, actions and non-verbal methods is significant (Easterby-Smith et al., 2008).

In addition, an understanding of how the different philosophies influence the research emphasizes the need to think of all the paradigms available that could improve the understanding and the solution of the problem under study (Dyson and Brown, 2006, Eigenbrode et al., 2007, Lélé and Norgaard, 2005). According to (Hatch and Cunliffe, 2006), attention to different paradigms encourages the researcher to study the problem from different perspectives. Although the philosophical perspective of positivism is the basis of major research in the natural sciences and is a widespread world view, in the social sciences there are other philosophies available (Dyson and Brown, 2006). The positivist view cannot explore human emotions and feelings and does not adequately interpret people’s perceptions and behaviours. What is more, its use could lead to a flawed understanding of the people in question and their social contextual element.

Furthermore, since the focus of this research is to explore people in the organization, the interpretive approach is appropriate. It focuses on understanding the meanings and interpretations of the social actors and their environment from their perceptions and points of view. This material is highly contextual and not widely generalizable (Saunders et al., 2009). In addition, I will have the opportunity to observe how people interact with particular events and how they perceive them. As a result, the study will add an original aspect to the issue under study and open up new possibilities for resolution. For this reason the interpretive approach is used, adding richness to the study and providing an explanation of how individuals deal with particular situations.

In addition, the interpretivist paradigm has emerged in the information systems field (Walsham, 1995) and has become accepted (Trauth and Jessup, 2000), so the use of the interpretive view here is appropriate since the study deals with the e-government
phenomenon. The interpretivist paradigm should improve the in-depth understanding of the problem under study (Chen and Hirschheim, 2004). The aspect of in-depth understanding is the main concern of this study and the use of the interpretivist paradigm would be an appropriate tool to enable an understanding of the people in their natural context.

In addition, the current research is interpretive in nature due to the interest in cultural drivers and barriers to the adoption of e-government by employees, and interpreting their behaviour is therefore essential. Therefore, the interpretive case study was chosen as the most appropriate methodology. Interpretive methods focus on creating an understanding of the context of the information and procedures, and the information system influences and is influenced by the context (Walsham, 1993). This is based on an understanding of the phenomena by individuals who attribute meaning (Denzin and Lincoln, 2000b, Orlikowski and Baroudi, 1991, Walsham, 1993).

**5.7 Research Method Selection and Justification**

For this research an empirical case study with a qualitative research approach has been selected. The methodology chosen has a relationship with the method’s objectives to meet the goals of the research. In addition, my own understanding and knowledge of the topic under study is a significant aspect to consider when selecting a research method. The choice of methodology should consider the associated validity issues and the anticipated results of the research.

The choice of methodology and methods depends on the research questions and goals, and on the researcher’s beliefs, values and skills. The time factor also plays an important part in the choice of the method used in the study. The three main aspects that influence the selection of the qualitative method in IS are the nature of the research problem, the researcher’s understanding and theoretical knowledge, and the amount of uncertainty surrounding the research problem (Rowlands, 2005).

No one research method is better than another and there is no right or wrong method; however, each method accomplishes different purposes (Silverman and Marvasti, 2008).
Therefore, the researcher should decide on the method that appears to be appropriate to the problem and at the same time be able to understand how to employ the method selected in a suitable manner that will result in findings that could resolve the problem. In addition, the research question and the focus of the research influence the choice of method used.

In this research it is my intention to discover and explore the cultural drivers and barriers that emerge during the adoption of e-government by employees in the public sector in the Kingdom of Saudi Arabia. Hence, in employing a research method, the most important consideration is what the researcher is trying to investigate (Silverman and Marvasti, 2008). For this research an empirical case study was conducted to explore and describe the problem. A case study is useful in researching a phenomenon in its natural context. In addition, the study explores and suggests ways and recommendations for the area under research. In this research a qualitative interpretive research method was used, which was best suited for study since it relates to cultural and social aspects in the public sector. This case study research was a combination of an exploratory and descriptive case study. It involved me in conducting in-depth interviews with thirty-two participants in the KSA. In the following sections, I will explain the choice of research method and justify the suitability of the selected method.

5.8 The Rationale of the Qualitative Approach

At the outset, a suitable research method should be selected and explored; the research methodology should be appropriate for the problem under research. Qualitative approaches permit the researcher to examine a range of aspects and key issues that affect the overall results and outcomes. With regard to this particular research, this method offers the best possible opportunity to explore the issues that I identified and experienced.

The qualitative approach allows me to answer the questions ‘why’ and ‘how’ which the in-depth questions address. In addition, the use of this particular research method offered me the opportunity to gain a more in-depth understanding of the e-government adoption phenomenon in the public sector in the KSA. Also, this approach accounts for
any complications present in the social environment since it deals with the human aspect. This method is appropriate for the research under study since the research has no variables and the goal is to explore and describe the world in a specific context and how individuals perceive it.

The originality of this research is signified in the qualitative research method that I conducted in gathering the primary data through in-depth interviews with members of the government workforce. As a female researcher conducting interviews in a male-oriented environment in a conservative society, I undertook this study with some feelings of uncertainty about the consequences of working in the field. This is because these public sectors are male-oriented and females are not allowed to enter most of the public sectors without a male guardian (explained earlier in context chapter and in section 5.14). Only some public sectors have separate female sections where women can make enquiries.

I explained the study to the gatekeeper in order to identify suitable employees for interview. A number of employees were suggested who might be willing to take part in the study. After a number of employees agreed to participate in the study, I contacted them directly via the telephone to arrange to meet them. Organizations were approached via three main routes: through the gatekeeper, through phone calls, and through emails.

Various authors have pointed out several important characteristics of the qualitative research method that should be accounted for when employing this approach. (Bryman, 1989) mentioned some major features: the method allows examination of events from an insider position, offering a strong sense of context that has impact on the outcomes, and placing importance on events that happen over time. Another significant aspect to justify the use of this method is the ability of qualitative data to offer an extensive and rich explanation of the problem under study (Hoepft, 1997, Yin, 2009). In addition, the qualitative method studies the phenomenon in its natural setting. The researcher using this method collects data from participants in the field where they experience the problem (Creswell, 2009).

Therefore, since the current research goal is to study the cultural and social aspects of e-government adoption in the public sector (and not scientific or technical aspects), the
A qualitative method is appropriate. In fact, the key motivation in applying the qualitative as opposed to the quantitative method is the nature of qualitative research which is concerned with developing explanations and descriptions of cultural and social phenomena (Flick, 2009, Miles and Huberman, 1994). Therefore, it is crucial to study the e-government phenomenon in public organizations in its real setting and context (Denzin and Lincoln, 1994, Harvey and Myers, 1995, Myers and Avison, 2002).

Therefore, it can be stated that the qualitative approach is better able to serve this research in a way that quantitative methods could not. The qualitative approach assists in providing and depicting a real picture of life in the organization when adopting new technology such as e-government. Furthermore, it enabled me to obtain in-depth insights into employees’ lives and how they perceive various parts of their environment. Also, I was able to clarify some elements in the organizational culture that were ambiguous in the work culture. Furthermore, this approach enabled me to get closer to the hearts and minds of employees working in the organization. This provided the project with rich, in-depth views and data that would not be possible to ascertain with any other method. In addition, data relating to human feelings and perceptions is highly subjective and the best way to get such data is by employing the qualitative method.

Moreover, in order to implement a successful e-government project within an organizational culture and make the project part of the employees’ daily work routines, it is crucial to understand both the technical and non-technical aspects of the adoption process. In this research the aim is to understand the non-technical or human aspects that influence employees in the adoption process, which entails understanding and exploring the cultural drivers and barriers that emerge, since culture has a strong impact on employees.

Therefore, this issue can be explored and understood effectively by applying a research method that can address the perceptions and behaviours of employees (users of the e-government system), i.e. the individual context, values, background and experiences in relation to e-government adoption. The organization is the site selected to employ the research with the employees of the sector being the unit of research. Qualitative research is a common approach in studying social and cultural phenomena, exploring human activities and shedding light on the understanding of individuals in a particular
context. Therefore, the qualitative method was chosen for this research through the use of the case study.

For all the above-mentioned reasons, I chose to work with a qualitative research methodology rather than the quantitative research method. Quantitative research is used when one wants to work with variables or anything that is related to numbers. Surveys are used to extract data needed for such cases and experiments. However, in my case the use of surveys will not serve my purpose or enable me to attain my objectives and goals concerning this research problem. I could have conducted surveys as part of my research but this would not have helped to serve my purposes for this study. Surveys would not have allowed me to get closer to the participants and so would not have helped me to obtain the in-depth responses I needed to provide valuable detailed information.

Moreover, the survey method does not provide open-ended responses as it is a more closed method. It lacks personal perspective and seems very detached from my area of concern. Although it can be said to be data rich, it does not provide any personal accounts and it does not help me to gain an understanding of social context. In this particular study I needed more personal, open-ended responses to gain a better understanding of the participants' culture in the work space.

Apart from the unsuitability of the quantitative method for the purposes of my study, it would also be difficult to conduct a qualitative analysis. As a female in Saudi Arabia, I was at an immediate disadvantage (Gardner, 1988, Martin, 1980). Had I chosen to carry out a quantitative research study, my survey would not have been given due consideration by the male respondents if they had been aware that it was a female who was conducting the survey. It is possible that my survey would have been overlooked, or if completed, would have lacked sincerity. Although, this would have given me abundant data, it would have failed to bring forth the cultural aspect that I was trying to explore.

However, through personal in-depth interviews, I had the opportunity to explore the social aspects surrounding the question under research. Detailed in-depth interviews allowed me to elicit a deeper understanding of my participants’ perspectives of the
issues related to the phenomenon, which a mass survey would not have done. In my study I was mostly concerned with the human aspects of the workplace and wanted to explore the raison d’etre of individuals and observe their feelings.

Furthermore, as a female, opportunities to gather information in a male environment were very limited as explained previously. In fact, the social status of myself adversely affected the process of gaining access to and maintaining relations with the male participants in the context. On another note, female researchers who study male-oriented or dominated individuals tend to encounter problems of not being able to gain entry into certain male-dominated settings (Gurney, 1985). This matter is highly pronounced in my culture as females are prohibited from entering such places in the government. As a result, the female participants in my field research did mention this matter, especially a particular Saudi female businesswoman who faces this problem every day when doing her work. In addition, this problem is a growing concern since there are now several Saudi women who have recently entered the business world (Alsheryan, 2010).

In addition, in my in-depth interviews, as explained previously, there were diverse responses from different male participants. Some male participants were more amenable, hospitable and supportive than other participants in my field research while others were tense and not as supportive during the in-depth interviews. These participants appeared to be significantly affected by my gender (Gurney, 1991) as well as the very specific culture of Saudi Arabia. However, despite the attendant difficulties, being able to conduct in-depth interviews enabled me to gather significantly detailed information in the limited time and opportunity that I had.

As I have already explained in this study, the male ego played a significant role in preventing me from carrying out a large number of in-depth interviews. This is another reason why I chose to use a limited number of data-rich in-depth interviews as opposed to mass surveys. I also felt strongly that due to the problems of dealing with the male egoistic characteristic, a survey conducted by a female would have been completely ignored. Furthermore, women traditionally in the workplace would be considered inferior or would occupy low—status positions (Gurney, 1991). Therefore, by putting
myself forward as the person conducting the interview, I was able to take control over the different aspects related to that.

5.9 The Rationale of the Case Study

This research study adopts a case study approach necessitating the raising of certain appropriate questions, such as ‘how?’ or ‘why?’ In addition, a case study is preferred when the researcher wants to study a contemporary phenomenon within a real-life context (Yin, 2003). The problem under study is complex since it deals with people and the impact of their culture on them in their adoption of new technology. Thus a case study is more likely to be used when understanding of a complex phenomenon is needed (Yin, 2009).

E-government is a new phenomenon that is constantly changing (West, 2004a, West, 2004b) and therefore there is little control over it. As a result, a case study would be a suitable strategy to employ in this research. It is appropriate because I want to understand the phenomenon and ‘how’ or ‘why’ employees deal with it in terms of accepting or rejecting the e-government system; in short, the point is to understand why employees in the public sector react in a particular way and how their behaviour affects the adoption process. For this reason the case study is likely to be the most appropriate method to use since it could cover the various concerns of the research study.

The purpose of the case study is to present a case appropriate to the research and not to represent the world at large (Stake, 1995). Nonetheless, this research focuses on the culture inherent in society and its impact on the organization, and not on the dimensions or properties of the organizational culture itself. Culture as a whole (national culture and organizational culture) is explored as a background to understanding its impact on the technological adoption process.

Therefore, this research problem should be explored in its natural setting and real social context in order to gain a better understanding of all aspects of the phenomenon and highlight the important points. In addition, the cultural aspect is a vital component in this research. To be able to understand culture and its impact on employees, the best
method would be to explore it through its natural setting. Furthermore, the research problem is focused on ‘why’ and ‘how’ questions in order to shed some light on the behaviour of employees in an area where few studies have been conducted. This is why a case study is suitable for this research: the problem revolves around the contemporary phenomenon of e-government implementation over which the researcher has no control (Benbasat et al., 1987, Yin, 1994).

The question under study should be conducted, explored and described in its real social context. The case study approach will do this and enable me to learn about the culture in the organization and how employees feel and behave in terms of the adoption of e-government in the workplace. Moreover, I will try to gather reasons why the employees behave in a particular way when dealing with certain events. A case study, in addition, will allow me to shape ideas and frameworks about the problem under study, and allow me to research in an area where few studies have been done. Since e-government is a new project in the Kingdom of Saudi Arabia, very few studies have been conducted, making this case study an appropriate method of research.

Both (Bonoma, 1985, Yin, 2009) discuss the usefulness of the case study approach in various phases of research. Case studies describe relationships that occur in reality. Reality can be observed in greater detail in my case study by capturing more aspects of the problem than any experimental quantitative approach. This case study aims to answer the question: “What are the key cultural drivers and barriers that emerge from employees during the adoption of e-government in the KSA?”

However, there are some limitations to the case study research method. The weakness of the case study is that typically it is restricted to only the employees’ perceptions of the problem, making it hard to generalize the outcomes to other similar cases. In addition, one researcher could analyze data differently from another researcher. Furthermore, one of the major concerns is the lack of rigour of the case study, because the researcher does not follow systematic procedures and may allow equivocal evidence or biased views to influence the conclusion. Another concern is that case studies offer little basis for scientific generalization. Finally, case studies usually take a long time to complete, and may result in a long or overdue document (Yin, 2009).
The aim of the case study is the description or reconstruction of the problem under study (Flick, 2009). Therefore, this research used case study research with a combination of exploratory and descriptive approaches. The research used the exploratory case study in order to comprehend the research problem, since there is very little literature on the topic; the descriptive case study explains the events in their particular context, and enables me to get in-depth and data-rich analysis of the matter under research by employing a narrative-based approach to give details of the circumstances of the study. This is compatible with (Parikh, 2002, Yin, 1994) who pointed out that the use of one or a mixture of case study types (exploratory, explanatory, and descriptive) could add more depth.

Furthermore, a method such as the *ethnographic* approach could also be a suitable method to use for this type of research study since it deals with humans and their context. In addition, this method would be a logical one to use due to the nature of the study involving the study and research of different human characteristics through a socio-cultural perspective. In addition, this method would allow the researcher to become involved in people's lives and investigate the problem in its real context. What is more, ethnography assists in explaining the people's lives and their behaviour (Avison and Wood-Harper, 2002, Lewis, 2003, Miles and Huberman, 1994). Although this type of research can provide much detailed analysis, it requires a lengthy amount of time to be spent studying the participants' behaviour and recording every aspect of their work environment. This would have been very difficult for me to carry out as there are significant restrictions that would have prevented a female spending too much time in a male-dominated environment (Gurney, 1991).

Furthermore, being part of the research as is often the case in Action Research would have proven very difficult due to the lack of opportunity available for a female (Gardner, 1988, Martin, 1980). Arranging to gain research access and permission to carry out action research *in situ* would have been profoundly difficult for a female in an all-male workplace. Had I been given the option to access the work environment, I felt that the participants would not have collaborated willingly due to the cultural restrictions and obstacles associated with working in a mixed gender environment. Even to arrange in-depth interviews was a challenging process and done via the help of the gatekeepers. This further convinced me that action research would have been too
problematic; as the prospects of obtaining full cooperation from unfamiliar male workers was highly unlikely. It was difficult enough to find participants through my gatekeeper so it was doubtful that I would be able to interest any willing participants in action research.

5.10 Choice of Unit of Analysis

The researcher should decide on the unit of analysis that is most suitable and accessible for the purposes of the research study and will therefore be of benefit in resolving the research problem. The researcher should then determine the unit of analysis (stakeholder), and whether the focus will be on individuals, groups or the entire organization (Benbasat et al., 1987). For the purpose of this research, the focus of study will be on employees (individuals) in the public sector in a particular organization in the KSA. The research aims to obtain data from individuals in the public sector obtained from asking the questions ‘how’ or ‘why’ in terms of the ways in which they are acting in the workplace context towards the adoption of e-government. By examining and learning how employees act in organizational culture, I will be able to determine the key cultural drivers and barriers that exist.

5.11 Choice of Single-Case vs. Multiple-Case Designs

The next step the researcher should decide on is whether to set up one or several cases in the study. Generally, multiple cases should be carried out; however, a single case can also be made (Benbasat et al., 1987). According to Yin (1984) the use of a single-case study is beneficial, and useful and appropriate when the case is revelatory (it is a situation previously inaccessible to scientific investigation), or when it represents a critical matter for testing a theory, or it is an extreme or unique case (Yin, 1984).

In this research a multiple-case study design is used in order to gather data from several sites to enable a proper description and explanation of the problem. The evidence from multiple cases is considered to be more convincing and robust (Yin, 2003). In addition, I will be better able to describe and explain the ‘why’ and ‘how’ of the research.
Furthermore, multiple designs should go by a replication and not a sampling logic, as the use of the ‘replication logic’ increases the external validity of the research (Yin, 2009). In this research study I employed a multiple-case design and followed a replication strategy to explore the phenomenon. As a result, the multiple case design could give the research more strength, as pointed out by (Tellis, 1997), and the replicating pattern-matching could increase the assurance of robustness.

(Benbasat et al., 1987) suggest that multiple-case studies allow for cross-case analysis. In addition, according to (Yin, 2009), the multiple-case study is useful when the intent of the research is description, theory building, or theory testing. Here, I wanted to describe aspects that occur in the organization with the adoption of e-government, employing a combination of exploratory and descriptive case study research. According to (Parikh, 2002, Yin, 1994), one could use one or a combination of exploratory, explanatory and descriptive methods. Thus, in order to describe the case properly, the researcher chose to utilize the multiple-case study research method.

For this reason I chose to work with a multiple-case study to explore the new e-government project and how employees perceive and deal with it. How culture impacts on the employees in accepting or working with such new technology is a new phenomenon that has not yet been investigated. In addition, I decided to employ a multiple-case study due to the low number of participants from a single site in the public sector. The number of interviews conducted in one public sector was not enough to cover the data needed for the research study, so other public sectors appropriate for conducting the field study and gathering important primary data were identified. Data was gathered from three different governmental organizations in the KSA where access was available. The total number of employees interviewed was twenty-five, and the three public sectors were the Saudi Geological Survey, the Ministry of Higher Education and the Ministry of Foreign Affairs. In addition, I conducted several other in-depth interviews with female participants which added up to a total of thirty-two interviews.
5.12 Choice of Site

The researcher should carefully consider site selection and not depend on chance or opportunity (Benbasat et al., 1987). Looking at the research, certain aspects had to be in place in order to complete the project successfully. In addition, getting answers to the research questions, which was the goal of the study, meant obtaining data that would give valuable findings and outcomes. The nature of the topic under study is the key aspect that needs to be considered while searching for an appropriate site, in this case, the implementation of IS systems in the public sector in KSA. Once this has been achieved, it is possible to research how culture impacts on the adoption process of e-government by employees on a particular site in the public sector. Here, the emphasis is on the human aspects of the adoption of e-government, rather than on technology issues and problems associated with the adoption of e-government.

The major concern of this research is to study the employees in the organization and how they perceive this new IS system in the workplace. This requires exploring the culture of the organization to understand the employees in their work surroundings and collect the empirical data required for the project. However, it is important to keep in mind that the research should be conducted in a public sector organization that is adopting e-government. Therefore, the criteria required for selecting a site to accomplish this research are: to find a public sector implementing e-government; to be able to access the workplace; to examine employees; to discover how culture impacts employees in the organization. These will help to identify the key cultural drivers and barriers to e-government adoption.

Nevertheless, the researcher should be aware of the limitations and restrictions that might be encountered before, during and after the empirical data collection. Determining these allows the researcher to make an informed selection of the site. Different aspects could be searched before starting; for instance, access, gender, time (appropriate or not), length of interview for participants, and any other issues that would help or hinder the field research. The next step would be to identify a site that could be appropriate for exploring the problem. An important aspect for performing research in any organization is to have access to the organization and to be given permission by authorized individuals to conduct the field study.
I contacted by phone the three chosen public sectors for permission to conduct the research. Afterwards, I sent a formal document explaining the nature of the topic, the research problem and its objectives. In addition, the document made clear the information that was sought and the required empirical data to be collected. The research proposal was accepted by the respective governmental officials (the access element is explained in more detail in section 5.14).

### 5.13 Briefing the Three Organizations

#### 5.13.1 Saudi Geological Survey

SGS is the national geologic survey of the Kingdom of Saudi Arabia, established in 1999. It is one of the youngest national surveys in the world, although it is fortunate to have been built up from other governmental agencies that have studied the geology of the Kingdom since the 1960s. The headquarters is based in Jeddah, on the Red Sea, the second largest city in the country. Jeddah is adjacent to the western margin of the Neoproterozoic Arabian Shield, whose study is one of the primary foci of the Saudi Geologic Survey. There is a branch office in Riyadh, the capital, that houses facilities for making and printing topographic maps.

#### 5.13.2 Ministry of Higher Education

Concerted progress in education in the KSA started between the years 1970 and 1980 and educational development went hand in hand with economic and social development. During this stage the Ministry of Higher Education (MOHE) was established. The Ministry was developed and new universities were opened. Currently, the Saudi Ministry of Education is working hard to develop the Information and Communication Technology Infrastructure and embrace education and learning. In addition, MOHE and other educational authorities in Saudi Arabia are establishing new schools offering ICT degrees (UnitedNations, 2007).
5.13.3 Ministry of Foreign Affairs

In 1926 King Abdulaziz established the General Directory for the Ministry of Foreign Affairs. The ministry is the Kingdom’s headquarters for diplomacy and the advancement of international relations. King Abdulaziz based the guidance for the Kingdom’s international relations on Islamic Sharia: mutual respect, non-interference in the national affairs of other countries, living peacefully with neighbouring countries, avoiding violence and persisting with peace talks to solve international conflicts on the basis of international rules, regulations, international and bilateral agreements. All of the above principles were based on the fact that diplomacy is the main driver in the foreign affairs of the Kingdom. The ministry plays a major role in strengthening relations between the Kingdom and other countries at the regional, Arabic and Islamic levels. The Kingdom’s foreign policy is based on firm principles of establishing peace, security and stability. The KSA is keen to participate effectively in all the issues and challenges that confront the Gulf region.

I chose to work with these three organizations, even though they perform different functions, because they were all starting to implement e-government; in addition, I had access to them. Since my aim was to explore the perceptions and attitudes of employees to the adoption of technology (since they were the unit of analysis) the employees were a significant element in the study. I needed to gather data from them in order to describe and explore how culture impacts on their acceptance and adoption of e-government. Consequently, the focus was on the employees themselves and not on what the different sectors do or provide.

5.14 Difficulty of Research and Access Issues

5.14.1 Difficulty of Research

This research study faced various difficulties due to the nature of the context and my gender as the researcher (Gurney, 1985). These various difficulties limited the number of interviews conducted in the research field. The research was done in a conservative society by me as a female researcher who was trying to gain access and obtain enough data for the study. I wanted to understand the phenomenon in its natural context and
have a deeper understanding of the problem. In-depth interviews were conducted with both male and females to highlight the issues related to the adoption of e-government. However, pursuing these in-depth interviews, especially with male participants, was fraught with difficulties. I conducted a total of thirty-two interviews, twenty five in-depth interviews with males and seven in-depth interviews with females. Five females were from the Ministry of Foreign Affairs in Riyadh and the other two were associates of the researcher (a college instructor and a business woman). I wanted to get the female perspective and collect data that could enrich the research study.

I covered some of the cultural aspects in the research context chapter (chapter two) to provide an understanding and show how religion and culture play a significant role in this research. The source of the various barriers that women encounter in the Middle East is the traditional attitude of “Islamic gender order” which shapes the roles of gender vis-à-vis social relations in unique ways (Metcalf, 2007). Furthermore, the importance of Islam and traditional customs in Saudi Arabia is evident in everyday life. Islamic law and traditions provide a framework for individuals to follow in social and professional life.

As I explained previously in the context chapter, the segregation issue is deep-rooted in the country. In Saudi Arabia, the workforce of men and women is usually segregated. The practice of segregation, which is based on Islamic cultural norms, makes it difficult for women to make contact or develop significant relationships with males. Women tend to work in places where no men are around which makes it difficult for this researcher as a female to enter a completely male-operated section. In a society like Saudi Arabia it is accepted that men and women have different and distinct roles in life, with the man protecting and providing and the woman handling domestic issues (Buchele, 2008, Long, 2005). This classical pattern is changing nowadays, due to the high cost of living, greater demands of the household, and the increase in unemployment rates for men. Women are becoming a significant element in supporting the family unit and providing greater financial stability, despite their preferred role of taking care of domestic responsibilities, especially when having young children. However, segregation of the sexes is difficult to implement in some workplaces, such as hospitals and some banks. Nevertheless, the segregation issue in the public sector is a
significant element that has limited the number of in-depth interviews conducted by myself.

Therefore, Saudi women are not allowed to enter the different public sectors. Every woman must be accompanied by a male guardian to be able to finish her work there. Most of the public sectors have no female sections that enable females to pursue their work. This problem is highlighted by the existence of Saudi business women nowadays (Alsheryan, 2010). For this reason, I was not able to access the public sector to conduct in-depth interviews. I had to overcome this obstacle by trying to find a way to conduct the interviews; therefore, most of the interviews were carried out in public places. However, this solution is also considered to be difficult since it is not usually possible for females to sit with unrelated males in public places. Thus, the decision to work in this way was not made lightly. The segregation of the sexes is enforced and expected in public places. This issue adds to the barriers and obstructs Saudi women from participating completely in public life (Deif, 2008, LosAngelesTimes, 2009). In short, women should not meet with non-mahram males and must minimize social interaction (Murphy, 2010). If this principle of sex segregation is not followed and is indeed violated, the charge of khalwa can be brought against the perpetrators. Khalwa can be defined as the close proximity of non-relatives of the opposite sex. It is regarded as a crime and people can get arrested by the religious police because it is seen as illegal mingling between men and women (Andersson and Togelius, 2011). For example, sharing the same table at a coffee shop with an unrelated man would be risky for me since I could be arrested (LosAngelesTimes, 2009). Therefore, the culture of Saudi is based on a restrictive Islamic belief system which constrained the opportunity and time available for me to conduct in-depth interviews. Therefore, I had to ensure that I was able to gain a clear insight through my questioning in a limited time.

Therefore, this undertaking was very difficult to effectuate both for myself and for the participants who agreed to be interviewed as a favour since they knew the gate-keeper. Therefore, to overcome this problem I had to be with a male-mahram in order to avoid problems and be able to collect the data needed for the study. Another problem is that the male-mahram is not always available since they may have other engagements. I had to arrange a time when one of my mahrams was available. My mahram was a choice between my father, husband and brother. These are the problems in the field work that I
tried to overcome; however, according to (England, 1994) “fieldwork might actually expose the researcher to great risk and might be more intrusive and potentially more exploitative than more traditional methods”.

Hence, simply being a female was a problem in itself, which was enough to raise difficulties for myself in conducting interviews. The KSA is a male-dominated society and government organizations are still mostly operated by males, who are not used to female presence at close quarters and so very few females exist in the workplace. (However, this is gradually changing due to the vision of King Abdullah). Furthermore, the KSA is a male-dominated society. The situation for Saudi women is unique and determined by a culture in which women are rarely present in public. The Saudi labour market is composed of 85.6% men where the participation of females in the labour market since 1992 has risen from 5.4% to 14.4% (Booz&co., 2010b, SaudiGazette, 2010). The majority of women are in the education field in teaching and administrative positions. Therefore, most of the public sectors are male dominated and females make up a small percentage. The three public sectors that were selected for this research are the Ministry of Higher Education, Ministry of Foreign Affairs, and Saudi Geological Survey. All of these sectors do not have any females working in the organization where the research was conducted in Jeddah. In addition, all of the three sectors do not have any section dedicated to women. I asked if any females would be assigned in the future to these sectors. The response was that there were no plans to include females. However, there is one sector that employs females, which is the Ministry of Foreign Affairs, located in the capital city, Riyadh. Therefore, I travelled to Riyadh and was able to conduct five interviews with females in the sector.

For a female to be able to conduct research in a male-oriented culture is a completely new phenomenon in my society. As a female of Saudi origin, I had the advantage of being able to decipher meanings that were deeply embedded in the conversations I had with my participants (Hall et al., 1996, Hall). However, living in the same society as my participants may have been more of a hindrance than a help. As the integrity of females in Saudi is based upon Islamic principles, I as a researcher had to be mindful of not placing myself in situations which could have been detrimental to my own reputation. Therefore, conducting my research could have theoretically posed a threat to my own integrity as a Muslim female.
Writing this paper from an objective point of view has posed some challenges as having experience of many of these situations during the course of my research, has given me a direct insight into these different aspects of the context the participants live in. I have written this paper with as much objectivity as possible, considering the fact that I have been directly involved in these complex issues. As a Saudi, I am aware that I might not be as objective in my perceptions as somebody who does not live in this culture.

In addition, it is important to note the various constraints that females have to deal with in their everyday lives. As explained in the context chapter, women in Saudi Arabia face social, legal, educational, and occupational constraints. As a result, these constraints play a major role in the difficulties that I found in order to collect the data required for the research study. Consequently, these constraints created massive challenges that I had to deal with in order to pursue this research study.

Another aspect that made the interviews difficult was the male ego/pride issue. This could be evident in some men who will not take the trouble to make sense of a situation in which a woman is interviewing them and largely has control over the conversation. In a society like Saudi Arabia, even though it is slowly and gradually changing, men still unconsciously feel that they should be in control of events and women should be subordinate and follow them; in this way, the gender roles are strictly defined. This had an impact on the number of in-depth interviews done in the public organization.

5.14.2 Access Issues

The problem of access was also significant for the completion of the project, especially in terms of qualitative research (Flick, 2009), and a serious issue for the researcher (Silverman and Marvasti, 2008). In addition, the qualitative research literature pointed out the importance of gaining initial entry to various research sites; overcoming difficulties of access is a significant matter in the fieldwork (Hammersley and Atkinson, 2007, Noaks and Wincup, 2004). (Gummesson, 1988) discussed the access characteristics and raised the important question of the ability of researchers to gain satisfactory access to an organization. This is a significant aspect that should not be taken lightly in the planning process of the research study, since having access will allow the researcher to obtain the required data, and not having access will result in
acquisition of partial or limited data. Thus, limited access could result in insufficient understanding of the organization.

In the field, I relied on the gatekeepers (Silverman and Marvasti, 2008) who would facilitate entrance to the organization, institution and individuals. According to (Flick, 2009) there are two types of access: access to institutions and access to individuals. For access to the public sectors (institutions) I had to contact the persons responsible for authorizing the research. Gatekeepers facilitated entrance to the field and assisted me in obtaining the proper approval of the authorities. In addition, the gatekeepers from the three sectors provided assistance in organizing the meetings needed for the interviews.

At this juncture, an overview of the current situation concerning women will be given, to enable an understanding of the matter of access for me to the government sectors in the KSA. Currently, Saudi Arabia is considering various changes in its policies to include women in the country’s economic life (Entrepreneur Media, 2005). King Abdullah announced his support for female matters in the Kingdom and wants more opportunities to be provided for them. Some of the goals that were expressed by Saudi Arabia’s 8th Five-Year Plan (2005-2009) were to provide a wider role in the economic activities that are available for women and to encourage their participation in the labour market (Entrepreneur Media, 2005).

Saudi women have progressed on many levels, especially in terms of educational opportunities and the growing access to the labour force. This is evident in the various scholarships that females have been able to gain from the government of Saudi Arabia in its efforts to expand female education and higher education opportunities locally and abroad. Furthermore, since his accession in 2005, King Abdullah has been working to reform and reshuffle the government. As a result, the first female minister in Saudi Arabia was made deputy education minister, in charge of the female students’ department (Guardian, 2009) that was formerly fully operated by men. In addition, the encouragement of women to think about science as a career was seen clearly in the opening of the King Abdullah University of Science and Technology, where males and females were admitted side by side to study science and technology. Other examples of current changes in the role of women in Saudi Arabia are provided in the discussion
chapter under the subtitle “The impact of globalization on Saudi Arabia: women’s issues”.

With regard to my own case, I was sponsored at the University of Manchester by the Ministry of Higher Education, which assisted in the access process since I was represented by a government department and was able to provide the required documents. As a result, I was able to access the organizations to collect the data required. In addition, to attain the data required for the research I needed access to individuals as well as to the institutions (Flick, 2009). The gatekeepers in the three organizations were able to obtain access to the targeted employees to conduct the interviews. I then had to contact participants by phone and email to arrange for suitable times for conducting the interviews. However, these interviews were not conducted in the workplace itself but in different public places such as hotels and restaurants for reasons mentioned previously in the context chapter and in the ‘difficulty of the research’ section (5.14.1).

At this point, it should be pointed out that in the context of this research and of the interviews, the reader should keep in mind the position of the researcher. The fabric of everyday life in Saudi Arabia is controlled by specific social structures. The structure of this social context meant that I had to take care to use methods that were suited to the context, bearing in mind the participants in the field. At the same time, I tried to achieve what I had set out to do; given the framework available and respecting how the social life was constituted. Thus, an understanding of this matter was needed to engage in real dialogues with participants. Using the qualitative approach offered an opportunity to recognize the inner social life in order to discover the influence of culture on individuals in the organization. In social research, the procedures followed should be suited to the social context which in turn is shaped by culture and social values. In addition, since social life influences the respective positions of women and men in society, this will clearly have an impact on the gender relations in the research process (Herod, 1993).

Therefore, upon entering the field, I had to bear in mind the culture and social aspects of the country. According to (Wolff, 2004), research is constantly an interference in the social system, so I needed to be considerate of the different aspects within the field. For instance, the gender difference between myself and the participants was a challenging
element which had to be considered in this research, since the organizations were dominated by masculine values and behaviours (Hopkins, 2000, Jones, 2000, Kimmel and Aronson, 2004). (Martin, 1980) points out that in masculine environments the female researcher would have to adopt avoiding strategies to be able to deal with aspects like prejudice or unwelcome advances. Similarly, (Gardner, 1988) considered the problems of gender and stigma in public spaces. This matter is crucial to this research, especially for a female researcher conducting a study in a male-dominated environment. However, being a female in this case study did not prevent me from being able to gather data. I found that the gatekeepers were helpful and supported the goals of the research. In addition, the participants in the field were understanding of my goal and offered assistance. Some of the participants were uneasy at the start of the meeting, but as time passed they became more relaxed and accepting of the questions, answering in a more open manner. As a result, I had sufficient time to discuss the matters and issues of the project and get feedback from the participants. The interviews took from one to two hours to cover all the prepared questions.

5.15 Choice of Data Collection Techniques and Procedures

In this section the data collection techniques and procedures used in this research are discussed. In-depth interviews were the main technique, supplemented by document reviews and observation to obtain a better understanding of the problem under study and also to include multiple source data that would offer more strength to the research. According to (Yin, 2009) the use of many different sources (data triangulation) adds strength to the case study. In addition, with the use of data triangulation the validity of the research is enhanced since multiple sources of evidence provide multiple measures of the same phenomenon. Furthermore, the multiple sources offer more reliable research findings (Parikh, 2002, Yin, 1994). Similarly, multiple data collection methods are used in case research studies and the evidence from two or more sources will unite and support the research findings (Benbasat et al., 1987).

However, whatever method the researcher employs, the goal should be to gather data that will answer the research questions within a real social context. The use of various methods allows the researcher to collect more varied and comprehensive data on the
research problem, giving the researcher a richer and more in-depth understanding of the phenomenon.

5.15.1 In-depth Interviews

The aim of this research is to explore how culture influences employees in the adoption of new technology, i.e. e-government. Employees who use the system are stakeholders in this research in that they are interviewees. Prior to meetings with different participants, I studied various related websites in order to gain required information about the three governmental organizations. Through the Internet, I looked for information about e-government in Saudi Arabia and searched for any related major documents, articles in newspapers, other articles, events, and seminars. By doing this I obtained a valuable perspective of the current situation of e-government in the KSA. This search resulted in acquiring many facts and figures relating to the adoption of e-government, such as the planning stages, strategies, action plan, framework, and national initiatives and projects.

The next step was to schedule the interviews by making several phone calls and sending emails. The use of interviews permitted me to discover how employees perceived the adoption of the new e-government programme, and to discover the main cultural drivers and barriers in the workplace. The different concepts collected from the literature helped in highlighting the important concepts and ideas to be looked for in the interview.

In order for me to delve deeply into the employees’ environment, a small sample was chosen to enable more in-depth, higher quality interviews, allowing me to spend an adequate amount of time with every participant and collect enough empirical data within the limited time of the field study. On this note, I was constrained by the time available for completing the field research which amounted to three months to obtain the data needed for the qualitative research. The interviews were conducted in different public places such as hotels and restaurants which were identified as possible places to meet with male participants. Female interviews were conducted in the public sector since there is a separate female section in the organization. In conducting the interviews, I tried to get inside the minds of employees and discover how and why they perceived
aspects as they did. Interviews were lengthy and it took from one to two hours to complete the questions and discussion. This produced quite a good insight into the organizational life of participants and shed light on some ambiguous aspects of the work culture.

At the start of each interview I explained the purpose and goals of the study, obtained permission to record the interview for easier retrieval of the data, and gave assurances of confidentiality and anonymity. During the interview I took notes of the different ideas, concepts and themes that emerged in the conversations. The interviews were semi-structured to allow me to cover themes and concepts related to the problem and at the same time have a conversation. This type of interview encourages the flow of ideas and gives the participant the opportunity to provide more detail on the issues related to the research (Oates, 2006). Using this method I was able to benefit from the participant’s description of different matters and how I experienced and perceived them. As a result, I was able to understand matters existing in the sector and to comprehend the cultural and social influences on the adoption process of the e-government phenomenon as the participants experienced them.

The interview questions consisted of eleven themes that covered different aspects of the research study. The themes were personal information, computer experience, Internet experience, e-commerce experience, e-government experience, training experience, work environment, culture, organizational culture, and communication. Thirty-two in-depth interviews were conducted and all participants were asked identical questions in the same sequence. However, a number of other questions were asked based on the different participants’ responses. The data were collected during a period of three months and recorded.

Interviews with the different employees were a suitable and quick way to collect data from the participants and learn about their experiences with technology in the workplace. I would also be able to understand how they behaved and whether they accepted the new technology. However, another way to collect meaningful data would be to closely observe the employees in their natural context, examining how they performed in the workplace. Nevertheless, this was not possible since I (a female) could not be physically in the workplace. Indeed, as explained previously, this would have
been difficult and challenging since I was a female and could not have access to the field. Therefore, I tried to gain from the participants as much information as I could in order to collect the required data.

Another method of collecting data would have been the use of questionnaire surveys, allowing me to gather large numbers of replies with many different participants’ points of view. However, this method would not provide the in-depth data required for this research. In this study the aim was to gather employees’ personal experiences and behaviours when dealing with the e-government programme. Therefore, the interview method was conducted for this research. Furthermore, the in-depth interview provided the opportunity to gather richer and more in-depth data about the questions under investigation. This technique enabled me to acquire knowledge and understanding that could not be done in any other way.

5.15.2 Documentary Data

The interview approach was employed to collect primary data; however, in addition to the main data source I acquired additional complementary data. Documents offered more insights into the problem under study by providing extra information. Various documents were reviewed, relating to the e-government project in the KSA, including web pages, newspapers, publications, providing additional evidence that enabled me to build a greater understanding of the problem under study. The varied range of documents covered diverse e-government information such as e-government stages, the planning process, strategies and methods, regulations, and national initiatives and projects.

5.15.3 Observation

Observation is a significant tool in qualitative research since the researcher can actually capture what individuals are doing and pay attention to their behaviour and attitudes. (Walsham, 1995) supports this method to supplement interviews and access the interpretations of different participants. Observation helps the researcher to find out how certain processes take place and work. It is an everyday skill that can be used in
qualitative research and involves all the senses (Flick, 2009). Therefore, I tried to observe the workplace wherever possible, in order to better understand the interpretations of different participants. At that time the field notes that were taken drew a picture of what was happening. I was an outside observer who was in a position to maintain a distance from the observed events and was not directly involved, but was able to make notes and avoid influencing the participants (Flick, 2009, Walsham, 2006). In addition to observing the workplace, I talked directly to employees.

5.16 Ethical issues

Ethical issues should be taken into consideration when conducting a research study. The researcher should be able to predict and address the various ethical issues that could emerge (Hesse-Biber and Leavy, 2006) (Berg, 2001, Punch, 2005). In addition, the researcher needs to preserve the confidentiality of the participants (Creswell, 2009) in the interviews since this involves collecting data from individuals about individuals (Punch, 2005). There are some ethical guidelines that should be addressed at the start of an interview study. The four that are traditionally considered are: informed consent, confidentiality, consequences, and the role of the researcher (Kvale and Brinkmann, 2008b).

Informed consent is done by informing the participant about the overall purpose of the research and the major features of it. Therefore, I briefed the participants and described the purpose of the research and the procedures and benefits. The notion of confidentiality includes issues of private data that might identify the participant, and assurances should be given that this will not be disclosed. This aspect was discussed by me and the participants, with assurances that all information about the identity of participants would be secure. The consequences of qualitative study were also discussed; any shared information should not harm participants (Guidelines, 1992). The last guideline requires the researcher to adhere to scientific approaches to the publication of knowledge. In this study I tried my best to publish findings that were as accurate to the field of inquiry as possible (Kvale and Brinkmann, 2008b).
Qualitative researchers are considered to be visitors to some very secret and private spaces in the world so their behaviour should be regulated by a rigorous code of ethics. Furthermore, the issues of boundaries and limits should be presented in advance and agreed on, to reduce the element of risk and to protect the participants in the research (Stake, 1994). According to (Bulmer, 1982) ethical codes should protect the privacy and identity of individuals in the research; he added that identities, locations of participants and places should be concealed in the production of the research and everything should be secure and confidential. I support this point and applied the same to this research. The confidence of participants was a priority for the research.

5.17 Conclusion

The objective of this chapter was to consider possible research methods that might be used to address the problem under study. The qualitative research approach was chosen and in-depth interviews were used for the collection of data. In addition, this chapter presented the difficulties inherent in the research, including the access issues for me, and explained the procedures taken to attain access. In the following chapter I will describe the general procedures for data analysis and then explain the data analysis approaches that were employed for the current research problem.
Chapter Six: Data Analysis

6.1 Introduction

In the previous chapter the research methodology was described and explained. The intention of this chapter is to describe the various data analysis approaches available in the qualitative research method, the method chosen and the justification for selecting this particular method. (In this study, the ‘meaning condensation’ approach was employed to interpret and analyze the in-depth interviews from the field research). The rationale for data analysis approaches is then explained. Finally, the evaluation criteria of the qualitative data analysis are discussed.

6.2 Different Approaches to Qualitative Data Analysis

There are various ways available for the researcher to analyze and interpret qualitative data. Qualitative data includes non-numeric data, words, images, interview tapes, researchers’ diaries, documents, websites and developers’ models (Oates, 2006). All of the different types of data collected from the field need to be reduced to enable the researcher to work with them. Different approaches to qualitative research methods permit the researcher to achieve this and handle the data collected. As a result, transferring the data in a manageable manner will help the researcher to focus on the significant elements of the research problem. As (Myers, 2009) stated, the purpose is not to reduce the quantity of data as such, but to extract the important ideas that guide and aid the researcher and other interested parties to comprehend the problem under study. In addition, the data should be meaningful and the problem explained and understood by others. The different types of analysis assist in achieving this and allow the researcher to concentrate on what is significant and related to the research problem.

Furthermore, many researchers call for analysis to get started from the early stages of the collection of data. (Silverman, 2005) stated that it is better to analyze data as soon as the researcher collects it. (Miles and Huberman, 1994) also support the idea of analyzing the data from the start, to assist the researcher in making headway and in thinking about the existing data. They described a summary sheet for every interview to
extract significant details relating to the data collected. Consequently, this researcher used summary sheets for all the interviews conducted and outlined all the significant information. This made it easy to retrieve significant data. In short, these sheets were used as a snapshot and summary of the field research interviews.

6.3 Different Approaches towards Analyzing Qualitative Data

Before attempting to analyze the data collected in the field, I ought to pay special attention to the specific aspects of the research in hand. In my case, I had to think about various issues related to my research and have them in mind before, during and after the field research; for example, issues such as any restrictions that might limit me from pursuing the objectives of the research. As I have made clear, I am a female living in Saudi Arabia and am bound by the system and rules of the society. Therefore, I had to respect the culture and follow the accepted system and at the same time make the most of what was available to me. In the following section the various approaches to qualitative data analysis are discussed.

There are a range of approaches that can be applied to the interpreting and understanding of qualitative data. For instance, (Miles and Huberman, 1994) outlined three approaches to qualitative data analysis: interpretivism (for deep understanding of social interaction), social anthropology (description of individuals’ perspectives and interpretation of their world) and collaborative social research (undertaken in the social setting). In addition, three activities are defined for the analysis of data: data reduction which is the process of decoding, simplifying, abstracting, and collecting the data in transcriptions; data display to organize and reduce the data for analysis; and conclusion of drawing and verification which involves deciding what the data means.

Four qualitative approaches are widely used by researchers for interpreting and analyzing data: grounded theory which is based on comparative analysis; the phenomenological approach which condenses the data and describes the structure of the research; ethnographic methods which translate and represent the culture; and narrative analysis which represents the data in a narrative form (Throne, 2000).
In the following part, I describe some of the different approaches available for researchers to employ in their studies. However, there should be consideration of the nature of the problem, the purpose of the research, the skills of the researcher, and the philosophy behind the investigation. The first three approaches are explained below with the focus on meaning.

6.3.1 Meaning Coding

This type of analysis focuses on meaning and the coding of units. For coding, the researcher assigns keywords to the different units, for simple retrieval later on. The coding system is a major aspect of the grounded theory approach to qualitative research that was introduced in 1967 by Glaser and Strauss (Kvale and Brinkmann, 2008a).

6.3.2 Meaning Condensation

This type of analysis focuses on meaning and brief formulations. The researcher takes the statements from the interviews and summarises them in shorter sentences. The original interview’s long sentences are condensed into shorter sentences using fewer words (Kvale and Brinkmann, 2008a).

6.3.3 Meaning Interpretation

This approach focuses on meaning that goes beyond the text. The researcher goes further in explaining what is said in a critical and deep manner, interpreting the interviews and usually producing longer statements from the original text (Kvale and Brinkmann, 2008a).

6.3.4 Critical Incidents

With this approach the researcher asks questions of individuals about events related to the problem under investigation (Miles and Huberman, 1984). The critical approach is an appropriate tool for gathering significant information in a systematic way. Researchers can include summaries and conclusions and analyze any models that are
seen in the data. In addition, the critical incident technique could be used in both positivist and interpretive research (Kain, 2004).

6.3.5 Hermeneutics

Hermeneutics is used to gain an understanding of textual data. The central aspect and purpose of hermeneutics is to ascertain the meaning of the text (Kvale and Brinkmann, 2008b, Radnitzky, 1970). This approach is used in management and business for in-depth analysis of social activities. The major aspect of the approach is the understanding of people’s lives and what they say and do, and the reasons why they are doing what they do. In the past it was used to interpret the Bible and other sacred texts, but it was adapted by the social philosophers in the twentieth century (Myers, 2009).

6.3.6 Conversation Analysis

This approach addresses the language people use as a medium for action. Verbal interaction in this sense is significant and usually conversations are informal, with regular changes of subject, so conversation analysis is not as straightforward as content analysis (Myers, 2009). Here the meanings of concepts are not obvious and the researcher needs to be involved in verbal interaction to capture the full meaning of the data (Klein, 1995).

6.3.7 Computer Analysis

Nowadays, the majority of qualitative researchers use the computer in their research, with software such as Microsoft Word or Endnote. Such applications make it much easier to organize data and transcripts, and also provide a way of writing and editing work (Oates, 2006). Advantages of CAQDAS include speed, improvement of rigour, text searching, coding, data organization, writing tools, visual displays, and export. However, it should be remembered that computers are only a means of assisting in the analysis of data and does not replace the human aspect. The software cannot think for the researcher or explain concepts and relationships. The disadvantages and limitations
of CAQDAS should also be considered, such as the narrow approach to analysis and the issue of small data extracts (Silverman, 2005).

6.4 Criteria for Choosing Data Analysis Approach

(Myers, 2009) states that no particular data analysis approach is better than any other approach, which I support since every problem is special; no two research problems are exactly alike and every research study has its own considerations and concerns. In addition, every problem requires a specific analytical approach which is suitable to the particular aims and objectives of the study. However, restrictions and limitations for each approach should be considered.

According to (Myers, 2009), the analysis will affect the data and vice versa in various important ways. This is why it is not always helpful and logical to think of the data analysis phase as coming solely after the data collection phase. The argument here is that although the analysis and interpretation of data are usually at the end of the research project, the obvious distinction between the data collection and analysis phases in quantitative research is considered problematic in qualitative analysis. Frequently, during the data-gathering phase, when the interviews take place, the researcher builds some analysis into each interview. That is, the process of analysis and data gathering do sometimes overlap in qualitative research. During my fieldwork I did certainly formulate ideas and concepts from the beginning of the data collection. This is because there is a tendency during the interview for a picture to start to emerge, consisting of ideas and concepts that the participants draw on while having the conversation. Some themes emerge that I noticed during the conversation and records in field notes. Therefore, data collection and analysis do get intertwined, which makes it difficult to separate the two steps of data collection and data analysis.

6.5 Qualitative Research Evaluation

There is confusion over the evaluation of qualitative research, as quantitative criteria may be used (Leininger, 1994). This results in a substantial problem if the quantitative and qualitative approaches attempt to employ the same criteria for evaluation (Mays and
Pope, 2000). (Leininger, 1994) pointed out that researchers must develop and use criteria that would fit the qualitative paradigm instead of using the quantitative criteria for qualitative studies. They should not depend on the use of quantitative criteria to attain validity and reliability of the qualitative research and to explain and justify their outcomes (Leininger, 1994). They should use approaches that are particularly employed for qualitative research and not rely on quantitative approach methods since the two have totally different perspectives and come from different backgrounds. However, while looking for a suitable qualitative research evaluation, I found confusing information; there is no clear proposed approach. There has been debate over the use of quantitative criteria approaches and confusion over what is available for qualitative researchers, in an attempt to differentiate between good quality and poor quality qualitative research (Mays and Pope, 2000).

There has been criticism of the quality of qualitative research because of the lack of the ‘scientific’ rigour and the credibility that is linked to the rationalistic quantitative approach. In addition, qualitative research seems to be a value-laden framework that focuses on the relationships between different variables (Horsburgh, 2003). As (Morse et al., 2002) state, research that lacks rigour is insignificant research; rigour is found in the statistical aspect of quantitative research. Furthermore, the issue of validity and credibility is a challenge for qualitative researchers as there is no foundation on which to justify their findings. For instance, qualitative researchers face problems with getting funding and difficulty in being published, since their findings are not considered to be solid empirical research (Morse et al., 2002).

(Morse et al., 2002) have therefore identified significant areas and questions to apply to qualitative research, such as the significance of the research, the methods used and the ethical standards of qualitative research. Nevertheless, there are no definite criteria to evaluate. Some articles have presented evaluation criteria but these were no more than lists of process and procedures for conducting qualitative research. Therefore, despite all the previous approaches to the evaluation of qualitative data analysis, there is still uncertainty when addressing various aspects of evaluation criteria. There is a legitimate need for qualitative researchers to develop evaluation techniques specially designed for use in qualitative research, and for evaluating the qualitative data and testing the credibility of the information. The availability of a special framework for evaluating
qualitative data will result in better support for, and rigour in the findings and outcomes of qualitative research.

6.6 Rationale of Data Analysis Approaches

The problem under investigation employed the case study approach as a qualitative method. Data collection was done through in-depth interviews with various employees in several public organizations in the KSA. There is a range of methods available for analyzing the data gathered in the field; however, I felt the need to select a method that was appropriate for the research problem, research design and philosophy, and which complemented my skills. In the following section I will explain the rationale for selecting the implementation of the meaning condensation approach.

6.6.1 Rationale for using the Meaning Condensation Analysis Approach

*Meaning Condensation*

Meaning condensation is the technique of extracting meaning from statements made by subjects, by forming the statements into shorter sentences to capture the essence and sense of what is expressed by the subject. This method provided me with a way of reducing the long research interviews to shorter formulations containing proper meaning in condensed text. The significant meanings and activities of subjects are interpreted based on their context. In addition, I wanted to extract the meaning and logic from the statements in order to explain what was happening in a conceptual coherent way (Miles and Huberman, 1984). As a result, this method helped me to demonstrate and explain what subjects were trying to say and how they perceived life around them.

The meaning condensation method is useful in analyzing long and extended interviews by subjects, by gathering the natural meaning units and forming their main themes. The themes can then be analyzed and interpreted in more detail. I reduced the extended interviews to summaries and reconstructed them into brief formulations. I used a form of ‘meaning condensation’ developed by Giorgi (1975), which is based on phenomenological philosophy. His study has a thematic and methodological purpose. The thematic purpose was to examine people in their everyday life activities. The methodological purpose was to have a system of organizing the data and conveying it in
everyday language in a rigorous and disciplined manner, without using quantitative expressions in the data analysis (Kvale and Brinkmann, 2008a).

**Rationale for using the Meaning Condensation Analysis Approach**

- **Number of Interviews**: I considered several aspects in choosing this approach. The availability of primary data from interviews was a concern; different data were collected from documents, field notes, and in-depth interviews. The richest data came from the in-depth interviews. However, the number of interviews was small (thirty-two) which confirmed the decision to use the meaning condensation approach. I wanted to extract the most out of the data available and this was achieved through the meaning condensation approach since it was used to target the meaning and extract a deep sense of the phenomenon in the public organization.

- **Type of research**: the nature of problem under investigation, handling cultural aspects in an organization, guided me to this approach. This study explores the natural setting of the public sector context and the objective is to understand what is happening in the context of the subjects.

- **Unique culture**: the Saudi culture is a unique culture that contains a range of contradictions and numerous perspectives. One would think that every culture is unique in its own way, but Saudi Arabia is especially distinct from other countries, and this is evident in social life. On the surface, it would appear to be a nation that bases its creed on Islam, which means that all its people are united and uniform. Seeing men in their white dress, the ‘thobe’, and women in their black dress, the ‘abaya’, would also suggest that everyone is similar. However, this uniform look should not mislead the outsider into thinking that people are much alike and have common ideas and values. (Buchele, 2008) described this image when examining the people and culture of Saudi Arabia, but there are various contradictions in the country which can confuse onlookers from the external world. The researcher in this book describes the culture of Saudi Arabia as a synthesis of extreme opposites on different levels of life, although these cannot be detected at first glance. The iceberg metaphor is a perfect description
of such a culture. Culture is extremely complicated and various aspects of society influence it. The people’s background, religion, values, and beliefs combine to affect how individuals in a society act or react to particular issues. The culture of Saudi Arabia is highly conservative, and has rich values and beliefs, often incomprehensible to outsiders. However, (Long, 2005), for example, has said: “On a more day-to-day level, visitors to Saudi Arabia are inevitably struck by the difference in the rhythms of daily life there from virtually anywhere else”. Therefore, the use of this method (‘meaning condensation’) is the most suitable since my task is extracting and explaining meaning from the cogitations of the subjects.

- **Researcher as part of the context:** I am part of the Saudi culture and is therefore in a position to convey fairly what is meant by the interview subjects. I live in the same social surrounding and context as the subjects. Understanding the context of Saudi Arabia involves understanding the whole, and not only immediate objects. This enables me to detect differences between what is expressed by individuals in the Saudi culture, and what is proclaimed by Islamic moral values. This means that mere interpretation of verbal communication at face value does not always work when extracting meaning from what is being said by the speaker or writer (Long, 2005).

- **Understanding the social setting/context:** The ‘meaning condensation’ approach is appropriate since my major aim is to seek an understanding of the social and cultural perspectives of the subjects. The research problem is deeply embedded in a specific phenomenon in Saudi culture (adapting to information systems in the public sector) and this phenomenon is very sensitive since it deals with social values and cultural beliefs. Culture in general is an extremely complex phenomenon and the organization is part of the whole social culture. Therefore, aspects like these which are very specific and sensitive, and which deal with social lives need to be approached by myself in a certain way that considers these elements. In addition, I would not benefit from an approach that coded conversations, or transcribed them word for word. Coding is often time- and energy-consuming and the researcher might become so focused on it that major, significant information might be missed (Miles and Huberman, 1984).
The extraction of meaning in this case is practical, since the study deals with the social surroundings of the subjects.

- **Language**: the language of the research interviews is another aspect to consider. The mother tongue of the country of Saudi Arabia is Arabic. The original research interviews with the subjects were not conducted in English. As a result, I could not extract the concepts and themes directly from the original interviews without working on the interpretation process. Interviews were transcribed in Arabic, and then translated into English. Then, I had to summarize the interviews in English and then analyze and interpret them. The best approach to acquiring the essence of the research interviews was carefully considered, given that Arabs use a language that has special verbal communication characteristics. As (Kim, 1988) explains, there is a veil or cover over the culture, and there is an agreement among users of how to see and understand different aspects. The communication style of the Saudis has special features that are used during conversation, such as the use of indirectness or repetition to express matters. For this reason, the ‘meaning condensation’ approach is the most appropriate for the analysis of the data.

- **High-context culture**: the Saudi culture is a high-context society, which has patterns that are not fully conscious, which means that it is hard to explain even if one is a member of that culture. This specific communication style is embedded in the society of Saudi Arabia. Saudis usually express themselves in short sentences and few words, which are packed with meaning. According to Hall (1976:79) high-context means that “most of the information is either in the physical context or initialized in the person while very little is in the coded, explicitly transmitted part of the message”. He goes on to explain, that within high-context (HC) culture an individual engagement results in the establishment of intimate relationships between people. In addition, a hierarchical structure is present; the inner feelings of individuals are kept under control, and information is spread by simple messages with deep meaning. Most of the message in a Saudi conversation is not expressed verbally; instead, conversation is condensed and a lot of information is buried in the individual’s attitude and behaviour. Therefore, as a member of this society, I would be best placed to decipher what
is meant by the words the subjects are using. Thus, any analysis of conversations should use an appropriate method of interpretation to tease out the meaning. With regard to the interviews conducted by this research, a lot of sense and meaning were embedded in the attitudes and behaviour of the subjects.

- **Culture**: investigating human lives and their activities, backgrounds, beliefs and values is a highly sensitive and difficult issue. I therefore employed meaning condensation to convey ‘what’ was said and ‘how’ it was said and how to get the subjects’ perspective and perception of their surroundings. In addition, I wanted to describe the world as experienced by subjects. This is why it is important to understand the culture and how it relates to and influences what the subjects mean in the interviews in order to make sense of what is said, avoid any misunderstandings and have knowledge of the context. The meaning of ‘what’ is said and ‘how’ it is said is crucial for interpreting and conveying the meaning of the conversation. A lot of the meaning is embedded in the context and the essence of the meaning is encoded in the communication patterns. Therefore, there is a need initially to examine the external pressures on the lives of people, which reveals aspects that are different from those discovered by examining them close up and personally. (Ulijn and Campbell, 1999, Ulijn and Kumar, 2000) also described the complexity of culture by way of the iceberg metaphor: the first layer is the visible part that is explicit and represents facts, and the second, an invisible layer that is implicit and represents emotions and unconscious rules. Therefore, understanding the culture from within is essential for explaining the key elements of the culture that emerge when implementing a new information systems programme in the organization. Acknowledging this fact, I was able to pay considerable attention to the context of the subjects in order to understand the cultural drivers and barriers involved in the adoption of e-government, since not all aspects will be explicit in the interviews.

- From the outset, I looked at various approaches to decide on which to employ. One of the data analysis approaches considered was ‘hermeneutics’, because this approach deals with the meaning of qualitative data and clarifies the subject of the study since the meanings behind the actions under study are interpreted in order to explain the problem. The research problem is an event or phenomenon in the KSA in which an organization is adopting e-government. My aim is to
explore how culture influences employees during the implementation of e-
government in the sector. However, in the event, the ‘hermeneutics’ approach
was found not to be completely suitable because it focused on textual data rather
than real living situations (Myers, 2009).

6.6.2 Rationale behind the Sample Size

I conducted thirty-two in-depth interviews, twenty-five interviews with males in three
different public sectors in Saudi Arabia: the Saudi Geological Survey, Ministry of
Higher Education, and Ministry of Foreign Affairs. Also, in-depth interviews were
conducted with seven females, five from the Ministry of Foreign Affairs and two
associates of me. This number is small compared to many other studies. However, there
are reasons for this small sample size of interviews. Reasons are mentioned in the
context chapter in section (2.3.5) explaining the social and cultural aspects and in
chapter five, section (5.14.), explaining the difficulty of research and gaining access. In
addition, there are other reasons in the following paragraph.

The number of interviews in qualitative research is not highly stressed since the very
nature of qualitative research is to look at the quality of the different aspects and not the
quantity and how much. The qualitative researcher could be satisfied with even one or
two interviews if they provide rich and enlightening data for the research study.
Therefore, the use of the sample size in qualitative research depends more on the quality
and strength of sources of data and not on the size of the sample taken by the researcher.
It is a matter of personal judgment in terms of deciding when enough data has been
collected. Also, understanding one’s philosophical position is an important matter which
reflects on the way data are collected and analyzed. For example, a person who uses
quantitative methods would see that whatever sample size is used might not be enough
in fulfilling the research inquiry. However, a person’s philosophical position is
significant since it is embedded in the way one thinks, which as a result will influence
the way different aspects are perceived.

In addition, Becker, the author of Tricks of the Trade replied to the question ‘How many
qualitative interviews is enough?’ by saying that every experienced researcher knows
that there is no sensible answer to this question. He added that there was no definitive
number to use which would put the researcher in a safe place. The only possible reply to
this would be that the researcher must judge when s/he has reached the point of what s/he wanted to know and believes it to be correct. Furthermore, he pointed out that one can obtain sufficient information from one interview which could serve as a guide for gathering evidence in a specific context. Moreover, the number of interviews that one wants to conduct will change from day to day depending on the data gathered since the researcher can continuously be drawing conclusions from the data as it is acquired. Therefore, there is no categorical consensus on exactly when or where to stop and that depends on the decision-making ability of the researcher (Baker and Edwards, 2012). Charmaz has also pointed out that a very small sample of interviews can generate in-depth and important data and that relate very strongly to the initial and emergent research question and the way the researcher did the study (Charmaz, 2006).

In a study by Guest, Bunce, and Johnson (2006), in which 60 interviews were conducted, it was found that saturation was achieved after 12 interviews. This supports my situation since thirty-two interviews were conducted enabling me to acquire enough information for the study. Thus, it can be said that qualitative research provides the opportunity to gather rich and more in-depth data about the question under investigation. In this research the qualitative method is used as a tool to obtain knowledge and understanding which could not be done using other methods.

In addition, the sample size attained was adequate in that it provided insights about a problem or matter that had not been tackled before with the use of interviews. The relationship between cultural matters and technology is a new research area in the country as little has been done in this field. Therefore, this study is considered to constitute an exploration into this matter to discover, understand, and describe what the situation is regarding this issue. In addition, I found that I had reached an understanding of the situation and had gathered the required data from this sample size; as a result, I reached saturation point. The concept of ‘saturation’ as described by (Guest et al., 2006) is the point at which no new information or themes are observed in the data. Furthermore, based on their data they found that the basic elements for meta-themes were present as early as the sixth interview. This is endorsed by Wolcott (2009) who, when asked what he could learn from the use of just one individual case study, replied, “All you can”.
In qualitative research the researcher has to consider various decisions in conducting the interviews and deciding on sample size. While the sample size is not mathematical or systematic, different choices about the number of individuals to include and the method of selection are important. However, the conditions under which these decisions are taken are significant as well (Onwuegbuzie and Leech, 2005). Therefore, the conditions that govern this research are made plain in order to understand the complexity of the different aspects that influence the size of the sample for this study.

Another important point is the amount of time needed to conduct the interviews. The time aspect is significant for qualitative research especially when conducting in-depth interviews. I wanted to get as much data as possible from each participant. This research looks into a new phenomenon that has not been attempted previously; therefore, the data collected from these interviews provides a basis for this study. Most interviews took from approximately one to two hours maximum. The questions contained many different ideas and themes that were identified in the literature and other concepts that I was looking for. The time was used in a proper manner and most conversations produced many interesting concepts and convincing points. Therefore, taking into consideration the adequate amount of time spent collecting primary data from each participant to obtain an in-depth understanding of the problem, the sample size was appropriate for the purpose of this study. Indeed, this research study is investigating a new field of enquiry that has not been explored previously and trying to highlight its different aspects.

Moreover, I was restricted by the period of time at my disposal to conduct my field research. I was given only three months by my sponsors to complete the field research study. Therefore, the limited time period was an important issue to consider in doing this research. To compound matters, one of the three months was the month of Ramadan. This month has its special character and atmosphere. Ramadan is a holy month in Islam and people perform fasting (abstain from drinking, eating, sexual relations, and from doing anything against Islam law) to fulfil one of the Five Pillars of Islam. The people fast from dusk to sunrise. Therefore, the social and work schedule changes accordingly. The working hours are shorter and after sunrise people perform many of their religious prayers. Therefore, little time was available to the researcher to work on interviews. Only a couple of participants agreed to do the interviews during
this month and the others asked for it to be done after Ramadan. This was also an aspect that affected the number of interviews conducted for the research.

Furthermore, one must keep in mind a number of other factors that influenced this research study. Thus, there are various elements that have a profound impact on society and which should be considered when conducting these interviews. The unique socio-cultural structure of Saudi Arabia coupled with the ways in which Islam and its traditions direct every aspect of everyday life is a major aspect in this research study. Different aspects such as the beliefs and values of individuals in the society, male-domination, gender difference issues, sex segregation, mahram issues for Saudi females, different social, legal, educational, and occupational constraints - all had to be taken into consideration. In addition, there were other aspects that added to the difficulty of conducting the research interviews and dealing with access issues. In my case, I was a female conducting interviews in a male-oriented and very conservative society. I also had to cope with issues surrounding meetings with non-mahram males in public as well as the problem of gaining access to the public sector where females are traditionally excluded. In addition, one can also understand the uniqueness of the Saudi Arabian society when comparing it to others who have the same religion and background. The context chapter outlined some of these aspects for the benefit of the reader in order to enable comprehension of the difficulties surrounding the research study.

Therefore, it can be said that after introducing to the reader all of these various aspects in regard to the study, the number of interviews conducted for this research was adequate. Indeed, I considered the number of interviews achieved with different participants a success. The reason for this was that I was able to undertake such a challenging and complex area in light of all the constraints and restrictions that I faced as a Saudi female (explained previously).

6.6.3 Rationale for Not Using Computer Software for Analysis

The limitations and disadvantages of CAQDAS have been reported in the literature (Silverman, 2005), discouraging myself from using the software. Most CAQDAS applications require data to be entered into a word-processing package; as this adds to
the amount of time allotted for reading and coding a large amount of data, it makes time
management very difficult.

Some of the strategies used in qualitative data analysis would not benefit from the use
of CAQDAS software, since it is essential to make a close, personal examination of
complex data. The implementation of CAQDAS narrows the analysis (Coffey and
Atkinson, 1996), ignoring the need for a careful examination of the context of the
problem under study. This study of the social life of individuals requires serious
consideration of the implicit elements not found directly in the data, and only found by
‘reading between the lines’. (Silverman, 2005) argues that it would be a waste of time to
enter small amounts of data to obtain answers that could be found more quickly by
hand.

6.7  Applied Data Analysis Procedures

6.7.1  Data preparation

The data collected from the in-depth interviews were gathered together for analysis and
put together in a similar format to make it easy to follow. In addition, the recorded
interviews were transcribed and organized for easy access (Oates, 2006).

6.7.2  Transcribing and Translation

All the in-depth interviews were recorded in Arabic and translated into English only
after being transcribed from the audio recording. During the data collection period I
listened to the interview after every meeting and prepared a summary sheet of the
complete interview’s main points. I used summaries to document the context of data
collection in the field and provide focus points (Flick, 2009, Miles and Huberman,
1994) for two purposes: to have an easily retrievable report of significant points, and to
clarify any ambiguous aspects in the data. In the latter case, the subject was asked
follow-up questions by telephone or email.

In addition, on the contact summary sheets I used the margin of the page to put down
ideas, comments and feelings that occurred to her during the interview or the writing of
the summary. This process assists me at an early stage of analysis in extracting important ideas and meanings. Towards the end of the project, these comments and ideas helped me to identify concepts and themes (McCormack, 2000a, McCormack, 2000b, Oates, 2006).

6.7.3 Data Organization

I produced a large body of data and papers that had to be organized for later use. They included field notes, documents, transcripts and audio recorded interviews. All of these were gathered and saved since they were irreplaceable. On this note, (Oates, 2006, Rubin and Rubin, 2005) advise having duplicates of data and working with the copies.

6.7.4 Data Familiarization

At this stage, I went through all the transcripts of the interviews separately to obtain a general idea of the data. This provided an overview of the significant themes, concepts, and different elements. In addition, I was able to connect the data to elements found in the literature review, or discover new ones from the data per se.

6.7.5 Data Analysis

During the in-depth interviews I was not only listening to the answers of participants, but also observing their attitudes and gestures. I had to employ all my senses to grasp the essence of what was said. Furthermore, I was looking for ideas that emerged during the conversation. In the interview I relied heavily on common sense and wrote down ideas that emerged directly. Another technique I used in the interview was to depend on the power of perception working as a sixth sense that allowed me to tap into hidden meaning as well as the obvious. This perception assisted me in realizing when some things or words were not what they seemed and alerted myself to dig deeper in order to access the true meanings. It is imperative in such in-depth interviews to ‘read between the lines’ and take hold of exactly what the participants are saying and not saying in the conversation. The in-depth interviews were a crucial starting point in reaching the data analysis stage. In addition, I started my analysis in the early stages of data collection. This assisted me in recognizing themes and concepts in the early stages of the research and helped me to think about existing data. Some themes emerged that I quickly noticed during the conversation and at the same time recorded in the field notes. Therefore, it
can be said that data collection and analysis do overlap, which makes it difficult to separate the two steps of data collection and data analysis.

Data analysis organizes the data into points, topics, and evidence. During the analysis process, I went through different stages of classifying, comparing, weighing, and merging aspects from the data. These stages assisted in capturing the meaning of the research interviews. While collecting the data, each interview was examined for themes, concepts, and evidence related to the research (Rubin and Rubin, 2005). (Oates, 2006) advised going through the interviews to identify important themes and concepts from the data. Similarly (Rubin and Rubin, 2005) pointed out that the first step in analysis is recognition, and the second step is to systematically investigate the interviews to explain the meaning of concepts and themes and combine them in an overall narrative. The next step would be to physically code the concepts and themes, and the final step is for the researcher, after examining the concepts and themes from the interviews, to merge them into a coherent whole that portrays the culture and suggests solutions to issues. The researcher then organizes everything into files and examines them for more ideas and concepts by relating them to the literature review, and develops new ones from the data (Rubin and Rubin, 2005).

In this research, several of the previous aspects were considered and employed in some way for the data analysis phase. However, the major steps used were those that dealt with the meaning condensation approach. The following five steps were performed in analyzing the data from field interviews:

- Review the entire interview and grasp the full meaning.
- Then the natural ‘meaning units’ expressed in the interview are decided.
- Then I identify themes based on the meaning units.
- The examination of the meaning units is related to the research under study.
- Finally, the themes in the interview are gathered and expressed by a descriptive statement.
The analysis process is a significant element that should be considered seriously. I divided and refined the units or categories into smaller units. Next, I read and examined the data repeatedly in order to find units and themes that could be related to other units and identify any patterns in the data.

The in-depth interviews were conducted with thirty-two male and female participants and the individual interviews produced data that were in the form of notes and a summary of the individual interview. Therefore, this qualitative data consisted of words, sentences, and different observations and not statistics. For that reason all these qualitative data had to be interpreted and analyzed in order to enable understanding. Consequently, I had to organize and review the data to get the full meaning and familiarise myself with the data. After recording the interviews, I listened to them several times and wrote down any impressions that came through. However, not all information is important so I only concentrated on data that were of value in relation to the purposes of the research study.

Thus, I had to keep in mind the purpose of the research in terms of what I was trying to find and the problem under investigation. In so doing, I was able to concentrate on the significant and not get overwhelmed by the large amount of data. I organized the data by theme and cross-referenced all the different replies from participants.

In the following tables, I will highlight some examples to show the analysis process and the evaluation of the different themes.
Table 7: Example of process of evaluating and analyzing themes and concepts

<table>
<thead>
<tr>
<th>Participant Response</th>
<th>Meaning unit &amp; initial coding</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think that loyalty is different from one employee to another. There are some employees who are loyal to a superior person who assisted them previously in some matter which make them loyal to them forever. Also, there are others who are controlled by the ‘grouping’ and their loyalty is towards the group.</td>
<td>Loyal to person Grouping</td>
<td>Loyal to person Grouping &amp; Loyalty</td>
</tr>
</tbody>
</table>

Table 8: Example of process of evaluating and analyzing themes and concepts

<table>
<thead>
<tr>
<th>Participant Response</th>
<th>Meaning unit &amp; initial coding</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, I do a lot. I rely on the Internet for paying all my bills through my bank system online. I do that because it is easy and fast; however, sometimes I find problems with accessing the Internet. We still have problems with the access where sometimes it is slow and sometimes it disconnects for no reason even though we pay very high prices for Internet access here compared to other countries.</td>
<td>Use of Internet since it is fast and easy Problems of Access to Internet High Internet prices</td>
<td>Technical Drivers Technical Barriers</td>
</tr>
</tbody>
</table>
Table 9: Example of process of evaluating and analyzing themes and concepts

**Questions:** Do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

<table>
<thead>
<tr>
<th>Participant Response</th>
<th>Meaning unit &amp; initial coding</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am not aware if there are any new regulations in the labour market that are related to women’s jobs; however, I know that there is a strong rejection of that. I will just give you one example of that. The Ministry of labour issued a new regulation for women to work selling women’s gowns and lingerie and that all these jobs should be occupied by women. However, this matter was rejected strongly and refused by many people from different levels. But I think it could be easy sometimes if these new rules and regulations were made according to the core of rules of Islam.</td>
<td>Not aware if there are new regulations to support women</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rejection of women’s jobs</td>
<td>Female constraints (Cultural and legal constraints)</td>
</tr>
<tr>
<td></td>
<td>Rejection for women to work at lingerie shops</td>
<td></td>
</tr>
<tr>
<td></td>
<td>New regulation from the Ministry of labour</td>
<td>Legal support</td>
</tr>
</tbody>
</table>

Table 10: Example of process of evaluating and analyzing themes and concepts

**Questions:** What are the advantages and disadvantages of using the e-government system or any electronic system?

<table>
<thead>
<tr>
<th>Participant Response</th>
<th>Meaning unit &amp; initial coding</th>
<th>Themes</th>
</tr>
</thead>
</table>
| The electronic system or Internet as I mentioned helped strongly in doing my work. The e-government system is helping me in some areas in my work. I could access the web-site and conduct some different aspects that I need, however, the services provided are very limited and we still rely a lot on the traditional ways to do our work. | E-government Initiative useful  
Limited e-government services  
Usage of old traditional methods | Technical Driver  
Technical Barrier |
### Table 11: Example of process of evaluating and analyzing themes and concepts

<table>
<thead>
<tr>
<th>Questions: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant Response</td>
</tr>
<tr>
<td>No, even though King Abdullah gave a lot of support to females, still there are a lot that should be done. First of all the society as a whole should understand the significance of women’s role in the society. For me as a business woman the environment is not encouraging and not appropriate for a female to be able to work and be successful. The cultural obstacles should be smoothed away in the society before she starts to work.</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Table 12: Example of process of evaluating and analyzing themes and concepts

<p>| Questions: What are the advantage and disadvantages of using the e-government system or any electronic system? |</p>
<table>
<thead>
<tr>
<th>Participant Response</th>
<th>Meaning unit &amp; initial coding</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>We still use the e-government completely in the workplace. Some were introduced to the project but not activated yet at the sector. In general it should offer a coherent and unified system that we can all refer to. However, it could take time before we can all use it in the job. In addition, most of the programs we adapt are meant for developed countries and I think there should be some modifications before we could apply them. Also, the organization should offer training in order for employees to know the different procedures of using the system since they lack the skills for application. In addition, we have a budget that is dedicated to the e-government project; however, the rigid procedures are stopping the advancement and implementation of the project.</td>
<td>E-government not employed and activated yet</td>
<td>Technological Barriers</td>
</tr>
<tr>
<td></td>
<td>High dependence on imported technology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advantages of e-government providing coherent system</td>
<td>Technological Drivers</td>
</tr>
<tr>
<td></td>
<td>Human resource barriers: no training and no required skills</td>
<td>Resource Barriers</td>
</tr>
<tr>
<td></td>
<td>Financial resource barriers arise due to strict procedures</td>
<td></td>
</tr>
</tbody>
</table>
### Table 13: Example of process of evaluating and analyzing themes and concepts

<table>
<thead>
<tr>
<th>Questions: How do you think that rules and policies enforced by the government would aid females’ role in the workforce?</th>
<th>Participant Response</th>
<th>Meaning unit &amp; initial coding</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>In addition, I have another problem, as a business woman I have to travel from one place to another and I cannot do that without written consent from my male guardian. I am divorced and my father is deceased. I have a 22 year old son who studies at the eastern province and every time I have to travel he has to be present to give his approval for his mother travelling. This matter should be considered because it is difficult to continue to work in such an environment.</td>
<td>Businesswoman not able to travel</td>
<td>The need of consent from young son</td>
<td>Female Constraints</td>
</tr>
<tr>
<td></td>
<td>Approval of son for mother to travel</td>
<td>Difficulty of conducting work and business in having many constraints</td>
<td></td>
</tr>
</tbody>
</table>

### Table 14: Example of process of evaluating and analyzing themes and concepts

<table>
<thead>
<tr>
<th>Questions: What are the advantages and disadvantages of using the e-government system or any electronic system?</th>
<th>Participant Response</th>
<th>Meaning unit &amp; initial coding</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Internet is a great tool if used properly. People could learn and find a lot through the Internet. However, the slow Internet services are a very annoying matter that we all get bothered by. I do not know why it is like that. Even if you pay premium which is very expensive you sometimes get bad service.</td>
<td>Internet is useful</td>
<td>Problems with Internet as slow Internet service and high price</td>
<td>Technical Drivers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Technical Barriers</td>
</tr>
</tbody>
</table>
Table 15: Example of process of evaluating and analyzing themes and concepts

<table>
<thead>
<tr>
<th>Participant Response: Phrases found in different participants’ statements</th>
<th>Meaning unit &amp; initial coding</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Her work is not needed and insignificant and she does not belong. Besides having the mix of the sexes is not good”</td>
<td>Wanting females to work privately away from men</td>
<td>Cultural Drivers</td>
</tr>
<tr>
<td>“I think that having a separate working area would be best for men and women”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“I would accept women working in the sector if the organization has an appropriate place dedicated for them only”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“In general, I think there is no problem since they have their own section and we do not mix”</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 16: Example of process of evaluating and analyzing themes and concepts

| Questions: To what extent do the computer and Internet influence the Saudi family? |
|---|---|---|
| Participant Response: Phrases found in different participants’ statements | Meaning unit & initial coding | Themes |
| “I personally enjoy sometimes logging on to the different social networks. I can communicate with different people online from both sexes with no consideration to our social constraints that exist in our everyday life in the country”. | Exchanging Ideas, Knowledge and Freedom Online | Cultural Drives |
| “My wife could communicate with her professor online with no restriction since it is difficult for her to be face-to-face at the university. She is studying at the business school and he teaches them through a closed-circuit TV at the school since the male teacher and female students cannot be face-to-face”. | | |
| “I can gain a lot of knowledge and enjoy communication with others who like sports as well. I was surprised to discover that a lot of girls have an interest in sports and are in these networks”. | | |

These different tables present an idea of the analysis process of uncovering various meaning units and devising the coding system for the data. These are data collected from the in-depth interviews from the participants’ responses that carried different themes and concepts. These qualitative data need to be interpreted and constructed in a manner that makes it comprehensible to the researcher and the reader. Therefore, in the evaluation and analysis process my first task was to recognize the meaning units and then categorize them according to the various themes that emerged from the data. These themes were related to the research problem and then gathered and expressed as outcomes from the field research. The significant themes that were related to the study were then gathered and combined into an overall narrative.
6.8 Presentation of the Results

The writing up process of qualitative research is as significant as conducting the research. In the social sciences, stress is laid on writing up the qualitative research, since by definition the researcher is a person who writes about people (Myers 2009). This is clearly illustrated by (Grills, 1998), who explains that the writing process is like telling a story and making choices about it, such as: how theoretically interesting the story will be, questions to raise, the aspects that will be or not be in the study, and the whole experience of the field study. In addition, according to (Sfard and Prusak, 2005), storytelling is integral to the understanding of people’s lives.

I decided to use the standard case study approach for composition which is the linear-analytical structure. The sequence of the sub-topics starts with addressing the research problem, followed by the review of the literature, the methods used, the findings from the collected and analyzed data, and the last section which is the conclusion and recommendations. This type of structure is used in many journal articles and by most investigators. In addition, this structure is appropriate for the use of exploratory and descriptive case studies. This is one of the six illustrative structures that (Yin, 2009) proposed (comparative structures, chronological structures, theory building structures, suspense structures, and un-sequence structures).

6.9 Evaluation Criteria

Since there is no specified method for evaluating the justification of findings and results, I decided to employ validity (by using triangulation and chain of evidence) and reliability (by use of a case study design).

- **Validity**: to evaluate ‘validity’ I used two tactics for the support of the case study. The first was by the use of triangulation (multiple sources) of evidence. Documents, field notes and in-depth interviews were used. The use of these different sources of evidence strengthened the case and provided validity since I used results from different sources. When conducting case studies it is advisable to use multiple sources of evidence to strengthen the research. Moreover, data
triangulation offers support to the problem or phenomenon. The second tactic is to establish a chain of evidence and relationships between or across the data. To ensure the validity of the case study I had to define the problem under study in terms of particular concepts and then relate these concepts to the predicted ones of the case study, and finally to identify operational measures that line up with concepts published previously (Denzin and Lincoln, 2000b, Horsburgh, 2003, Kaplan and Maxwell, 1994, Leininger, 1994, Malterud, 2001, Marshall and Rossman, 1989, Mays and Pope, 2000, Morse, 1994, Morse et al., 2002). This enables the reader of the case study to source and follow the evidence of the case and go back from the conclusion to the start with a flow of ideas that links to the data (Yin, 2009).

- **Reliability:** to evaluate the ‘reliability’ I used a case study design and protocol to follow during the data collection phase. The design stage at the start of the research is a significant aspect because it connects the empirical evidence and data to the original research questions. During the case study, many documents and notes were collected that were related to the case study. Therefore, I used the documentation and field notes for later reference during and after the fieldwork. The organizing of types of collected data is important for the research as it facilitates the development of the case study database, which supports the reliability evaluation. Despite the presence of these evaluation criteria for overseeing a case study, there are shortcomings related to case study research. For example, the descriptive case study relies on a single perspective and falls short of addressing other points of view. I may collect only some of the related data from the research field and this could be subjective. This will result in a one-sided view of the case. Therefore, I should consider the views of others to gain different perspectives (Yin, 2009).

Another common drawback of the case study is that the research offers little foundation for scientific generalization. The case study is usually based on one case (Kennedy, 1979) and researchers cannot generalize from the conduct of one case study (Flyvbjerg, 2006). Yin (2009) argues that although scientific facts are based on more than one
experiment, the same could be said about case studies, where instead of multiple experiments it depends on the different concept approach in the research design.

6.10 Conclusion

This chapter started by describing the different approaches to qualitative data analysis and the choice of the ‘meaning condensation’ method to understand and analyze the in-depth interviews collected in the fieldwork. The rationale for the approaches chosen was given. In addition, I presented the analysis process for examining collected data from the field. Finally, the presentation of the results and the evaluation criteria were discussed.
Chapter Seven: Identified Drivers and Barriers

7.1 Introduction

In the literature review, drivers and barriers were identified and categorized. In this chapter, the cultural drivers and barriers based on the in-depth interviews and observation field notes are presented. In the in-depth interviews I was looking for different concepts and themes; the participants described many of them in the shape of concerns and different experiences. Even though many different aspects emerged in the interviews, the focus was on the themes that are related to culture.

7.2 Identified Cultural Drivers and Barriers

The drivers and barriers that are presented here are collected from the field study’s in-depth interviews conducted in the public sectors, and from the observation field notes. They are features that could facilitate or impede the development and advancement of e-government. The empirical research identified various drivers and barriers related to the implementation of e-government in the public sectors in the KSA, categorized as: cultural, technical, organizational, political, educational, resource-based, regulatory and legislative.

7.3 Drivers

7.3.1 Cultural Drivers

Females Working Privately
The government of Saudi Arabia is now providing more opportunities for females in the labour market. The government is aware of the need for women to work to support the economy. However, there is the need to take into account religious and cultural traditions. Here, the adoption of the e-government project would benefit this sensitive situation in the KSA, giving women the opportunity to work in camera away from men.
This aspect was prominent in the empirical research, where most participants drew attention to the female working environment. It appears that it would be acceptable for women to have jobs if the right, segregated place was available. A participant said that “[i]f this technology provides a suitable work environment for women, in which they would not mix with men, then it is a really great feature of the e-government system”. Another participant said that, “[f]or me personally, I would accept women working in the sector if the organization had an appropriate place dedicated for them only, so no man in the job could take advantage of them”.

The practice of isolating women from men is derived from the cultural values inherent in the society and how it perceives females working in the labour market. One has to bear in mind the whole society and how it views women’s work, keeping in mind the traditions and customs that are inherited from one generation to another. The society feels that it has a responsibility to protect and guard women. This point was made very clear by many participants. One of them replied to this question, saying: “There is no objection to women working, however, not all male employees respect the women at the job and mostly want to entertain with them. Men always want to take advantage of women when they are around - that’s my opinion. From my own personal experience, I have not seen or heard any male employees dealing with the female employees in work matters only where there are other matters that are not related to the job”. In addition, another participant replied to the same question, saying “[p]eople accept women’s job in the public sector if they are in the teaching or medical professions only. However, other people are equally divided in the way they perceive women’s work in the private sector. One section of the people accepts and does not mind the presence of women at work, while the other section does not accept it at all and feels that their work is not needed, is insignificant and that they do not belong in a mixed workplace”.

Therefore, it is safe to infer that society feels the need to protect women from destruction and look after them to save them from various unsafe situations. The society (and particularly men) feels the need to save woman and this is considered more important than their potential work. In addition, if a woman wants to work, there are only certain fields that she can work in. Therefore, the exercise of dividing between men and women in an organization is to have order with females and to stop men from intruding (AlMunajjed, 1997).
A number of other reasons why women find it difficult to seek employment can be discerned in further comments made by male participants on this subject. One respondent, for example, said, “[w]omen should work in a suitable environment. They should be working in places that are well-suited to women’s nature and that are not harsh physically, such as working as a specialist in the desert or underground”. Here are some further comments on the topic:

- “Mostly employees don’t accept women’s jobs and believe that it is something that is not necessary”.
- “The employees would not accept women’s jobs in the sector because of their negative religious ideas”.
- “Saudi society is still under the control and pressures of old negative cultural beliefs and not all accept the female at the job. Also, nowadays, a lot of individuals are coming from rural communities and bringing with them their ‘cultural baggage’, therefore, they are less likely to accept seeing women working at the job. Their idea of women is similar to their idea of the mother who stays at home and takes care of the kids”.

It is interesting to note that the responses of the female participants were not very different from the male participants. Females also mentioned the traditions and customs which play a significant role in the matter of accepting females in the workplace. Here are some examples of female participants replying to the question: “How do male employees feel about having female employees working in the same organization?”

- “I do not think that the male employees are used to the idea of having a female at the job. It may result in weird things happening and problems could occur in the workplace. Personally, I think that having a separate working area would be best for men and women. Also, women feel more free and relaxed without having men around them”.
- “We still face many problems from men in the job in terms of how they perceive women in the workplace. Not all men respect us and some do not take us seriously. We have to show that we are serious and have boundaries so we will
not be abused. I still feel that our negative traditions and customs play a significant role in women being left behind and not advancing”.

- “The male employees like the idea of having female employees as long as they are not relatives. This is because they feel uncomfortable with others if she is a relative since not all the individuals will accept the matter of females working”.
- “I think that men do not take women seriously at the job and they would rather use this opportunity to entertain and waste time with them”.

Thus, it seems that females support the same ideas as the males - that having females in the workplace should be restricted by having some rules in the workplace. The mix between the sexes is not accepted as it is considered to be a negative aspect. One female pointed out that she feels more comfortable having a separate place to work from men. Also, other females pointed out the strange behaviour of men when they are around females. Since they are not used to seeing and being with them (females), problems can occur in the workplace. Male and female participants alike mentioned that women could be abused and not taken seriously in the workplace by men. One female pointed out that women should work harder in order to show that they are serious and at the same time there should be strict boundaries between men and women in the workplace.

Therefore, all of these replies support the idea of the strong influence of cultural beliefs and background on individuals in Saudi Arabia. These different responses reveal how cultural values impact on the many aspects of women’s work. Therefore, interpretations of labour laws in Saudi Arabia are guided strongly by traditions and customs. For this reason, I believe that a driver for employing the e-government system is to have women work in seclusion. The e-government system could allow women in the sector to work separately which would respect the traditions and customs of the country.

**Extra Financial Support for Females and their Role in Society**

Most participants made the point that working women provide much needed financial support for the family. In addition, the cost of living and the demands of the family are becoming more intensive day by day. One participant said that: “women’s jobs do support the family financially because of the high cost of living now and the low income of most men”. This claim appears to be in line with an article in the Arab News which pointed out the reality of the everyday pressures of life and the household
demands on the salary of the man who can no longer cope. Thus it is out of economic necessity that many females are now seeking work (Parker, 2011).

Naturally, most of the male participants were aware of the economic importance of women in the labour market. However, the social norms and traditional beliefs still limit the participation of women in the workplace. This is in line with the literature where there is a growing awareness that women have a significant role in the labour market but an acknowledgement that they are limited by the social customs (booz&Co., 2010a).

**Personal Data Search**

Nowadays, a massive amount of information is available online on most subjects. Individuals are able to access the Internet from home or the workplace, to look into different areas of interest and gain knowledge. The information available for the younger generation is wide and endless. The majority of participants pointed out the importance of the Internet for learning and sharing knowledge. One of the participants expressed his delight that his wife is learning a lot of things from the Internet, especially how to cook new dishes that he enjoys eating.

Participants also pointed out that students and researchers could benefit from the use of the Internet for research and learning as it enables them to find different ways to research and write their assignments and projects by providing them with new ideas and different perspectives. They also said that it was very useful for enriching knowledge and learning various subjects.

**Exchanging Ideas, Knowledge and Freedom Online**

The technology of the Internet enables people to have more room to express themselves. The availability of the computer and Internet allows individuals to go online and be part of chat rooms, forums, blogs and many other activities. In these online communities individuals, especially the young, are able to join forums, for example, and be in touch with peers, either male or female, to discuss different areas of interest. This gives them space and freedom to express themselves and talk about different subjects freely without being judged by their parents or older people. This is a new departure for a hierarchical society which stresses the importance of the family and society and where the elderly are dominant in their views and young ones have to listen and obey.
The interaction of people online, both adult and young, is an effective way of sharing knowledge. Some of the participants pointed out that individuals are able to share different subjects of interest online. This encourages everyone who is interested to log on and be able to participate and present their different perspectives. As a result, many have become more confident and open-minded on a number of subjects that formerly they knew little about. Thus, males and females are now able to exchange and share knowledge online, while, conversely, it is not possible to do so in actual social life.

This aspect of the ability to exchange ideas is clearly evident in my field research from the testimony of different participants. Many of them pointed out the important role the Internet plays in their lives. Freedom in the virtual world is tangible when connecting people from all over the world and this even applies to freedom to communicate locally with family and friends, both male and female. This is one of the most significant benefits provided by the online system for individuals across the country. Here are some of the comments of the male participants on this matter:

- “I personally enjoy sometimes logging into the different social networks. I can communicate with different people from both sexes online with no consideration of the social constraints that exist in our everyday life in the country”.
- “I enjoy socialization online with others all over the world. The Internet offered me the freedom to connect with various people from various countries and backgrounds. I am able to conduct conversations with male and female friends easily through the net without any social boundaries”.
- “My wife could communicate with her professor online with no restriction since it is difficult for her to be face-to-face with him at the university. She is studying at the business school and he teaches females students through a closed-circuit TV at the school since the male teacher and female students cannot interact face-to-face”.
- “Forums and social networks are useful for getting updated about my favourite subject ‘sports’. I can communicate with others about any upcoming events and discuss various ideas. The social network allows me to be updated since there are participants who add new information instantly. In addition, the Internet
allows everybody in Saudi to gather in one forum without regard to the gender issue which is very sensitive in our society”.

Here are some further comments from female participants who pointed out the influence of the Internet in their lives.

- “I am able to know different people online, male or female, whereas this is not possible in our real world because of the constraints that we women face in this society. I am linked to a business site that introduces me and others to each other. This site has helped me to communicate with people in the business field of both sexes and exchange ideas and conversations that are useful and informative”.
- “It personally gave me the opportunity to do things I cannot do in Saudi Arabia. I am able to communicate on the social networks with different people all over the world of both sexes. I can talk about and exchange ideas and even use my camera to see them. I feel that I am learning a lot and am open to other societies that I would not be exposed to if there were no Internet”.
- “We are a conservative society and in my opinion I feel that the existence of the Internet is a revolution in itself and we can get to know a lot from it. For instance, I am not able to go anywhere here by myself and I have to have someone to drive me or a brother or father to take me out. Now I do not feel that I have to nag a lot about going out since I can do many things by using the Internet. I can see and go to places and no one can supervise me to check on my actions. I can get to know boys and girls and communicate with no restrictions imposed by anyone in the society”.

Thus, all of these replies from different participants’ reveal how this technology is helping these individuals in exchanging ideas and having virtual freedom. The Internet has not only given them virtual freedom but has also given them the opportunity to break away from the social and cultural constraints that are strongly embedded in the society.

Another important point one of the participants pointed out was that the Internet was very useful for his wife’s education. She was able to communicate through the online system and contact her professor to discuss different areas of her business course. Of
course that would not be possible in the real world due to the many cultural and social restrictions that prohibit men and women from meeting face to face if they are not related. Using monitors in the classrooms for female students who are taught by male teachers is a well-known way of teaching in Saudi Arabia. This is common in various schools when there are no females to teach a certain course or subject.

At university, women are isolated from male students and the professors as well. In the class, women sit in desks surrounded by wood panels from all sides. The professor lectures from distant and isolated locations and the lectures are conducted through TV screens. If the female students have any questions, they can use phones or microphones to address different matters (Jabaji, 2008). This is because the schools and universities are segregated and men and women do not work in the same place. This is based on both local customary practice and religion (Doumato, 2003). Therefore, male and female students are separated from each other from the early years of their education to graduate school. Female teachers teach female students and male teachers teach male students. However, at university there are sometimes situations where a male teacher teaches female students and this is done through TV screens.

The Internet also plays a significant role in the lives of other individuals who like to communicate and socialize online. People online can be free from the social and cultural restrictions that apply in real life. This technology enables communication between males and females in a culture where gender separation is enforced in every aspect of social and public life. So the Internet gives people an opportunity to meet others who share the same interests to gather and interact together online in the virtual world. There are many types of interests that join people together such as research, business, education and other areas. As a result, individuals interact online to meet others and make friends, talk about different issues, and discuss different matter in their lives. Therefore, a dialogue between the two genders is possible online which would be absent in the real social and public world.

In addition, one of the female participants mentioned that she enjoys the use of the Internet since she can see and go places online. She mentioned that she does not have to badger her father or brother any more to take her somewhere as she can enjoy herself online. In a society like this where the female is restricted from going places without the
mahram, the Internet now offers a kind of freedom that allows females to find alternatives.

7.3.2 Organizational Drivers

*Informal Working Environment*

Many employees prefer to work in an informal working environment. This aspect could be considered both positive and negative. The empirical research revealed that a large number of employees feel more relaxed in an informal atmosphere since it is less stressful and makes them feel comfortable; this reflects on their job performance. For example, one participant mentioned that the employees sometimes meet up with their boss for breakfast in the workplace, which puts them at ease and takes the tension out of the work.

Another interesting aspect of the workplace is meeting in the Mosque or a designated area for prayer times, which happens one or two times a day during working hours. Most employees, whether they are superiors or subordinates, gather to perform their prayers. This peaceful social activity also makes staff feel comfortable and ready to continue their chores.

*Improved governance*

The KSA adopted the e-government programme in order to reform its public administration system. The aim is for more transparency and less bureaucracy and corruption. This is why the government is improving various aspects, such as changes in the management of the administrative system, to deliver improved services for businesses and citizens. On this note, some participants felt that this notion of transparency will enable the e-government system to be fully implemented and will result in a better performance in the sector.
7.3.3 Technical Drivers

“Yesser” & E-government Initiative

“Yesser” was launched in 2005 as an enabler and facilitator for the Saudi e-government initiative. The programme was designed to develop the national infrastructure and define common standards for a number of agencies and ministries to implement the e-government project. It should provide best practice guidelines and appropriate implementation of the pilot services. Some government institutions and agencies have already started to provide some services electronically. The ministries of Interior, Foreign Affairs, Hajj, Labour, Finance, and the General Investments Commission have all started different electronic services, offering services such as information exchange, issuing visas, payment of fees and the provision of official electronic forms. For example, the Saudi Arabian Monetary Agency operates and controls the payment systems by the use of a secure system named SADAD.

The ease of using the Internet for paying bills and shopping online is evident in the interviews of various participants. The participants expressed this by saying:

- “I pay bills online - it helps in saving time and it is convenient”.
- “I do that because of ease of use via the Internet, paying bills without problems of doing it personally, and buying online is more convenient and it arrives fast”
- “I use the Internet for shopping, paying bills, and online banking and for its speed and ease and I make use of the SADAD service available online”.

7.3.4 Political Drivers

Support of Government & Policymakers

The e-government initiative is a national project that is supported by political entities in the KSA. This is one of the most important aspects in implementing the new system since they can fully support it and be the real driver behind the e-government project. The Kingdom’s e-government initiative is user-friendly, focusing on providing better government services to the user. The KSA is dedicated to establishing the project, and the government is aiming to have a ‘knowledge and information society’. The target was set for the end of 2010 when it was hoped everyone in the Kingdom would be able
to use the e-government system from anywhere and at any time. This awareness of the significance and full support of the e-government system is one of the major aspects promoting the success of e-government implementation (Yesser, 2009a).

**Political Awareness**

The government and policy makers are fully aware of the significance of the e-government project. This awareness is essential for the appropriate adoption of the new technological system. Currently, the government wants to implement and utilize ICT in various public sectors and involve all parts of the organization in promoting the use of ICT in other sectors of society. That is evident in the interviews since some of the participants pointed out that they do have meetings from time to time with the project managers of e-government to confirm progress on the implementation of the project.

7.3.5 Educational Drivers

**Developing infrastructure of information and communication**

The Ministry of Education has a strategic plan for ICT implementation; it wants to develop the infrastructure of information and communication technology and its employment in education and learning. To carry out this plan, the Computer and Information Centre (CIC) was established in the Ministry of Education in 1996 in order to develop the mission (MOE, 2009). In addition, some of the participants pointed out that they do attend different training courses on some new technology programmes.

7.3.6 Resource Drivers

**Financial resources**

The KSA supports ICT development and advancement in the country. Between 1975 and 1985, around £130 billion were used in the development of the infrastructure and economy (Al-Turki and Tang, 1998). At present, substantial funding has been invested for the implementation of information and communication technology (ICT) in the country. In January 2007 the Kingdom invested more than $800 million for the first phase of implementing the e-government project through “Yesser”.

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**Human resources**

The KSA supports advancement and development in the human resource development area. The government assigned the Ministry of Education to promote the preparation of teachers and develop student skills and capabilities. The ministry supports the introduction of computers in schools, to encourage ICT skills and constructive objectives. In the area of employment, the government has prepared training courses for ICT skills, to produce the necessary manpower to satisfy the market demand.

7.3.7 Regulation & Legislative Drivers

**Established rules and regulations for the technology**

In the early years of the 21st century, Saudi Arabia considers information technology as a way to promote development and advancement. In addition, IT has great potential to contribute to development through the adoption of the e-government project by different agencies and ministries. In June 2001, the government endorsed the Telecommunication Act, which established the legal framework for the foundation of the telecommunication sector and also authorized the creation of the Saudi Communication Commission (SCC) as an independent regulator. The government is also, according to the field research interviews, is assessing the performances of the various sectors and giving recognition to those emerging as the best implementers of the e-government programme in accordance with their ‘implantation percentage’. The Saudi Commission for Tourism and Antiquities (SCTA), for example, was honoured by the Communications and Information Technology Commission with the award of excellence. The award title is: Excellence Award for providing e-government Services. This was because of their superior performance in a number of electronic services provided, with over 54 of them on the National Portal of e-government ((SCTA), 2010).
**Table 17: Identified Drivers**

<table>
<thead>
<tr>
<th>Main Categories</th>
<th>Sub-categories</th>
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<tbody>
<tr>
<td>Cultural Drivers</td>
<td>Females working privately</td>
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<td></td>
<td>Extra financial support provided by females and their role in society</td>
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<td></td>
<td>Personal data Search</td>
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<tr>
<td></td>
<td>Exchange of ideas, knowledge and freedom online</td>
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<tr>
<td>Organizational Drivers</td>
<td>Informal working environment</td>
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<tr>
<td></td>
<td>Improved governance</td>
</tr>
<tr>
<td>Technical Drivers</td>
<td>Yesser &amp; the e-government initiative</td>
</tr>
<tr>
<td>Political Drivers</td>
<td>Support of government and policy makers</td>
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<td></td>
<td>Political Awareness</td>
</tr>
<tr>
<td>Education Drivers</td>
<td>Developing infrastructure of information and communication</td>
</tr>
<tr>
<td>Resource Drivers:</td>
<td>Dedicated budgets</td>
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<tr>
<td>Financial Resources</td>
<td>Development of human resources</td>
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<tr>
<td>Human Resources</td>
<td></td>
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<tr>
<td>Regulatory &amp;</td>
<td>Established rules and regulations for the technology</td>
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<tr>
<td>Legislative Drivers</td>
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</table>
7.4 Barriers

7.4.1 Cultural Barriers

_Collectivism, Grouping, Nepotism, and Loyalty_

These different characteristics are all concepts woven into the fabric of the Saudi culture; the reasons for _collectivism_ and _grouping_ were explained in section (3.5). This social structure means that individuals depend on each other and those who have the power and authority help others who are related to them, creating _nepotism_ and personal _loyalty_. As a result, these traits are tangible in the workplace in the public sector in the KSA. Therefore, employees in the workplace bring with them to work their ‘cultural baggage’ that identifies who they are and what they do. This is the reason these aspects can be seen happening in the public sector in Saudi organizations.

One aspect of collectivism is that individuals belong to different groups. For this reason, employees may owe loyalty to the group they most relate to, such as the family, rather than to the organization itself. Some of the participants pointed out that in this type of society, for example, the business relations rely on relationships with individuals who know and have associations with. “Who you know” is a very important concept in Saudi society, rather than what the individual can do for the business.

_Generation Gap_

The generation gap is another aspect that is tangible in society today. Usually there is a gap or clash between different generations, but with the rapid emergence of technology and the adoption of many Western ideas this gap is broadening. The gap is apparent in the widely differing opinions, attitudes, and behaviours of the old and young. The younger generation (individuals under 30) are more eager to learn new things and adopt new technologies.

This gap is causing problems in both the social setting and the workplace. In the family there is a big difference in ideas and views between the young and old which causes issues among family members. The young feel that the older members do not understand them and the older ones feel that the young do not listen to or respect them. Individuals may therefore drift apart from each other.
Technological advances play a role in enlarging the gap between generations. In the workplace, on the one hand, younger employees are quicker to accept and adopt new technologies and perceive them as ways and opportunities to perform their work more efficiently. On the other hand, the older employees do not readily accept technology and consider it a waste of time to learn.

**Attitude toward outside influence**
Sometimes when a society encounters new things it does not accept them easily. Usually people have some kind of negative attitude towards the new. Participants in the field study pointed this out and explained that the reluctance to accept every new thing that comes along could arise from a fear that it might contradict their own traditions and customs. One participant explained the problems that occurred with the introduction of satellite television broadcasting. There was strong opposition from religious groups, among others, who were fearful that it would jeopardize their religious beliefs and social traditions (Hamdan, 2005).

**Female Obstacles and Constraints**
Transportation is another significant problem that many Saudi females in the country encounter. Not all females have male guardians to take them to places or to work. In addition, not all females can afford to have personal drivers to transport them from one place to another. As much as 35% of Saudi women’s income goes to pay for taxis or private drivers (Jawhar, 2011). These problems were pointed out during the field study and the females expressed the need to find a solution to such matters in the country.

Travel restrictions are also an obstacle that females face in the country. Travel restrictions are imposed on Saudi females who need the permission of a male guardian to leave or go anywhere. This means that a male guardian even if younger than the female could have the power to forbid her from travelling (Al-Mohamed, 2008, Reuters, 2011, Alsheryan, 2010). This matter was brought up by a female participant who mentioned her problems dealing with this matter. Saudi officials require women to obtain permission from male guardians in order to perform basic tasks such as travelling and getting medical care (HumanRightsWatch, 2009). Consequently, women’s freedom to move is very restricted in the country. Saudi women cannot leave their houses or neighbourhoods without the permission of the male guardian and company of a mahram.
(close relative). However, sometimes out of necessity, women have to leave the house alone to shop or conduct business (Wagner, 2010, Nazir and Tomppert, 2005).

In general, the rules and regulations of the country are very supportive of females and allow them to advance. However, there are inactivated or rejected (by society, culture, or clerics) rules and regulations that sometimes prevent the development of female empowerment in the country. That is evident from the field interviews where many participants pointed out the issue of the lingerie shops and the problems that occurred because of it (previously explained in the context chapter). Another example would be assigning females as cashiers. The government of Saudi Arabia is trying to increase jobs for Saudi women, therefore, the Ministry of Labour quietly authorised stores in Jeddah to employ women as cashiers. This was a reaction to the reports at the time which showed that unemployment among Saudi women had risen to 28.4% from 26.9% in April, 2008. However, the government’s policy to expand jobs for women was challenged and top clerics issued a fatwa (a legal view from high-ranking and recognized clerics about different Islamic issues) ruling that females should not work as cashiers in markets. They did not want to encourage the mixing of men and women and issued a statement that said: “it is not permissible for women to work in a place where they mix with men” (KhaleejTimes, 2010, Sidiya, 2011).

Another aspect that was considered to be a strong obstacle was the difficulty of access to the government sectors (RiyadhNewspaer, 2012, Alfasi, 2007). Many Saudi females are suffering from this issue in the country. They are not able access the public sectors without the presence of a mahram. This is an issue that is highly evident in the country and it is endorsed by my in-depth interviews. A female participant explained her difficulty in getting access to the public places to finish her paperwork. She is a business woman who needs frequent access to various public sectors in order to conduct her numerous business operations. She explained that: ‘[a]s a business woman I have to visit several government sectors and a lot of obstacles exist’. Usually these women hire a man and pay him to conduct their business operations in the public sectors (ALRiyadhNewspaper, 2012). Al-Geresi, speaking on behalf of the businesswomen criticized the fact that governments obstruct females from doing business and investing in different ventures by making it difficult for Saudi businesswomen to obtain permits for their work activities (Al-Mohamed, 2008, Alsheryan, 2010).
Male self-esteem is another cultural obstacle that prohibits female advancement. Some men in society are not willing to allow their wives to advance because they feel it will damage their male self-esteem. A female participant pointed out this matter and explained that it is sometimes difficult for her and other females to better themselves because men do not allow it. She explained that the husband does not want his wife to be better than him because he always wants to feel superior. Also, men do not want women to succeed because then women will appear better than them and they are afraid that women will become independent. Therefore, male-dominated societies are in some cases driven by insecurities felt by the males in terms of the labour market and educational achievement (Parker, 2011).

Therefore, it can be said that all of the above-mentioned cultural factors are problem areas faced by Saudi females in the country. In fact, they are totally different from the obstacles encountered by Saudi males. However, Saudi women are obstructed from performing the normal things in life that elsewhere would not be considered unusual. Unfortunately, due to the culture, the fundamentalist Islamic view, the tribal background, and different aspects that are rooted in society, many of these actions are not easily accepted (Al-Mohamed, 2008).

7.4.2 Technical Barriers

*High Dependence on Imported Technology*

The country is highly dependent on technology and information tools that are imported from other countries. There is no national or local production of information technology suitable to the country’s context. As a result, the country uses a lot of technology and programmes that are not specially designed for the setting of the organizations in Saudi Arabia. This aspect is pointed out by some participants in the field study where they mentioned that some problems arise from the implementation of systems that are designed in other counties.

*Problems of Internet Accessibility*

The KSA controls the information that the public could readily access on the World Wide Web through the use of a filtering system that blocks what are deemed to be
undesirable sites. The sites that are blocked tend to contain pornography, drugs, gambling, religious conversion, political opposition and extremist groups. The Internet Service Unit (ISU) of the King Abdulaziz City for Science and Technology (KACST) is responsible for maintaining the firewall and its content filters (KACST, 2000). However, the issue is that other sites or subjects that have no connection with this list are blocked as well. The filtering system is programmed to ban nude pictures, for example, but if one wants to research a medical subject and requires the study of the anatomy of the male or female body, then under the system this is blocked since it is not smart enough to differentiate between two purposes. Over-zealous blocking is inevitable since the system cannot specify exactly the content of the site and so errors cannot be avoided. This situation is, of course, very difficult to accept when someone needs the information for research or education. Therefore, this is a matter that the government and policy makers should pay special attention to, in order to have an improved Internet system that all could obtain full benefit from.

High cost of Internet Access for Individuals
The Internet in Saudi Arabia is considered to be expensive compared to other countries in the region. The employees in the field research explained that they are suffering from having to pay large amounts to get the Internet service. Participants attributed the high cost of the Internet to the monopoly in the ISP (Internet service provider) market. According to a study by (Aladwani, 2003) in Saudi Arabia local calls cost three times as much as the cost of an ISP connection. Even after paying this much, users are not getting good Internet service with problems associated with slow connections, or getting no connection at all for various technical reasons. The quality of the Internet services provided for users is therefore poor and inadequate, especially in light of the large amount of money paid for the service.

Digital Divide
From the field study, the ‘digital divide’ emerged from the in-depth interviews as a barrier. The ‘digital divide’ is considered to be one of the major challenges that the government organizations are facing. One reason for it is the monopoly enjoyed by the company responsible for providing the technology and services, at high prices. In addition, the ‘digital divide’ might exist because of the lack of knowledge and skills in
using technology which causes many people to hold back and prevents them from benefiting from the various technological services available.

7.4.3 Organizational Barriers

**High Power Distance**

The basic mould of family relationships in Saudi culture is reflected in the workplace environment. The different cultural and social characteristics do transfer to the workplace as another, smaller society. The high power remoteness of superiors is an accepted characteristic in the organization, so authority is accepted in society as a whole and in the workplace. Centralization is also evident in the work environment. Most decisions and orders are made by top managers and superiors, and there is little room for others to influence them. Both Islamic teachings and Arab tradition recognize status and hierarchy: leaders expect to be respected and their decisions followed.

**Bureaucracy**

Bureaucracy, considered to be a barrier to the implementation of e-government, is widespread in the public sector. Bureaucracy is closely related to the hierarchical structure of the organization. Thus, in order for a system of e-government to be successful there should be changes to the structure of the public sector. Indeed, the implementation of e-government should even decrease bureaucracy, since there will be a system in place to enable the carrying out of tasks. The usual rigid hierarchy and inflexibility of process and regulation should be replaced with more flexible processes that are appropriate to the new technological system. However, one of the participants doubted that such a system would be fully and properly adopted, because of entrenched bureaucracy. Another participant expressed his worry by saying: “I am afraid that the adoption of e-government represents only a change from paper-based work to digital forms without any change in the other aspects and management issues of the organization”.

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**Uncertainty Avoidance & Fatalism**

In general, Saudi culture can be characterized as one of high uncertainty avoidance. In such a society the fear of the unfamiliar is evident, which can be considered as a threat to the organization. Rules and laws are enforced to minimize anxiety and surprise. In addition, this culture resists changes because of the fear of failure. Cultures like this are also characterized as being more fatalistic in perceiving the world. Fate is related to religion; every individual believes that everything is in the hands of God. All Muslims believe this, and that they must be fully submissive to God. However, the empirical research showed that even though individuals believe in fatalism, they do tend to plan for the future and deal with uncertainties. From the field research, on the one hand, a good number of employees were found to be future-oriented and made plans and strategies to follow. In addition, they mentioned that in the workplace planning is an essential part of getting results. On the other hand, some employees had low future orientation and did less planning, although this is due to their having fewer responsibilities in the sector and relying on their superiors to make planning decisions.

**Time Orientation**

Time orientation differs from one culture to another, and is based in Saudi Arabia on the social relationships that are clearly strong in the cultural fabric. Time in Saudi Arabia can be characterized as ‘polychronic’, that is it does not follow a rigid timetable, but is flexible, and more than one task can be conducted simultaneously. In social meetings and gatherings this aspect of a flexible timetable does not cause much of a problem, and being on time is less of an issue. However, this matter is more complicated in the workplace. At work, employees need to be more responsible and punctual for work and office meetings. However, this aspect of time is not so straightforward; it is, as one participant described it, ‘elastic’. He added that little consideration is paid to time in public organizations. However, in the private sector time is very sensitive and employees follow a strict timetable. Nonetheless, this attitude towards time in the public sector is changing due to the introduction of technology and development. For example, some of the public sectors have introduced a scanning tool for employees to sign in instead of signing in manually; this has made most employees more punctual and more responsible. The system documents the time each employee enters the signature and there is less room for error or editing, whereas in the old system employees could talk the person who has the signing sheet into overlooking unpunctuality. In addition, the
attitude toward time in general in the workplace is changing especially in this difficult economic time.

**Resistance & Fear of Change**

Resistance to change is one of the main concerns in the adoption of any new procedure in an organization as it is considered to be the chief barrier to effective change. This is one of the key issues that the government and policy makers have to account for when adopting new technology, especially in a culture like Saudi Arabia. Resistance to and fear of change occur in the public sector for various reasons and this was evident in the field research. Participants expressed different reasons for being resistant to change. Some employees pointed out the fear of losing their job because of lack of knowledge and the skills needed for the implementation. Other reasons from the field were: lack of training for the new system, objection to anything new, refusal to change, lack of IT skills, feelings of being threatened by new technology, and fear of loss of identity.

Participants added that the new technologies are usually complex which makes employees resist using the new system. The lack of relevant technical skills is faced by many employees in the public sectors. They resist and fear technology since they are dealing with the unknown and unfamiliar. Another very significant aspect pointed out by some of the participants was that many employees feared change because they might lose of their jobs, or become obsolete, with someone else taking their position. As other participants mentioned, it is difficult to change traditional work methods and learn new ones in a short time.

**Fear of Loss of Identity & Fear of Being Controlled**

Both employees and managers are reluctant to adopt the new technology since it might affect their work. Managers especially fear losing control and power. Some participants explained that some of the supervisors are unwilling to use new technologies due to the shift in the power structure. For example, they may have to share data and knowledge that they had previously used to keep to themselves, for use only when needed. This finding supports that of (Yesser, 2007) who stated that there was previously a lack of data sharing. Information was perceived as a unique source of power and advantage and so there was a reluctance to share it with others.
Lack of Awareness

From the field research it was evident that many employees are unaware of the e-government programme. The sectors are introduced to the e-government programme through the executives and top management, and few employees are aware of the new system’s existence. The IT departments are aware of the e-government system; however, not all aspects of the system are used and implemented yet. The participants pointed out that a large number of employees in the sector do not know if their organization has e-government or when it is going to be applied. In addition, they have little awareness and knowledge of the process of e-government implementation.

Lack of Work Motivation

Some of the participants pointed out the lack of motivation that exists in the organization. They argued that some employees do not feel motivated and appreciated in their workplace, which raises different problems for the employers. Employees who are not motivated are not willing to learn and perform better in the job. Some of the participants expressed their lack of motivation due to lack of appreciation, rewards and promotions. They explained that the lack of motivation makes them feel depressed, which sometimes influences their performance at work.

Lack of Skills in the Public Sector Staff

This is a main concern in the adoption of any new system in the organization. The public sectors in the Kingdom are faced with this matter especially with the introduction of e-government technology to the organization. Many of the public sector’s staff usually lack the skills and knowledge to operate new systems in the organization. Participants in the field research explained that a large number of employees are not ready to work with new systems or technologies since they lack the knowledge to implement them. They pointed out that there are very few training courses provided for employees, and where they do exist they are only for specific, chosen employees. They added that many new employees are faced with various obstacles in the workplace due to their lack of skills and inappropriate background. The schools and universities, they said, should teach students the different skills needed in the workplace; however, at present, no such skills are taught. They added that the education system should provide the relevant knowledge and information to familiarise students with new technology, as well as teach the skills they will need later for the labour market. One concern that is
evident in the public sector is that employees who are skilled and qualified usually do not remain in the public sector, due to the low pay; they find other jobs in the private sector that appreciate their knowledge and skills.

7.4.4 Political Barriers

**Insufficient Political Involvement**
Participants were unaware whether the e-government project is held up by key individuals who could move the adoption process forward. They pointed out that strong political involvement is the key to any change in the public sector to ensure the progress and advancement of the e-government programme. The transformation to an electronic and digital service in the different government sectors requires commitment and great effort from strong political leaders, since they have the power and the authority to eliminate the various obstacles that occur at the different stages of the implementation process of e-government.

7.4.5 Educational Barriers

**Lack of Education & Lack of Training**
To assure the survival of the e-government project there should be a focus on training and educational programmes. However, these are absent. Many participants assured that there are few or no educational or training programmes regarding the use of computers and the Internet in their sector.

7.4.6 Resources Barriers

**Financial Resources**
Financial resources for the implementation of e-government in the public sector are considered to be a significant problem. Even though the government invested a substantial amount for the implementation of the e-government project through “Yesser”, the government sectors do not have a dedicated budget for the implementation of this technology. There is still a lack of dedicated resources that is needed for the development and implementation of such a project. Many participants in
the field made this point and considered it to be a major reason for not employing the e-government technology in their sectors.

**Human Resources Development**

Human resources are a major challenge for any new technological initiative. The e-government initiative requires various skills within the organization for it to be effective. However, in the KSA a chronic problem is the lack of qualified staff who can operate and manage the new technological system. In addition, adequate human resource training is a crucial factor in ensuring successful adoption of the e-government project. There is still a lack of training in the public sector for new programmes, including e-government. However, for the successful implementation of e-government, appropriate skills are vital. The staff need to acquire technical skills for installation, design, process and maintenance, in addition to other technical skills. In the field work, employees explained that they did not get any training in the new e-government programme or use it in their jobs.

7.4.7 Regulatory and Legislative Barriers

**Lack of Security & Trust**

A few of the participants mentioned that some individuals hesitate to use some of the Internet services due to lack of trust. They pointed out that they were afraid that their personal data and sensitive information was not secure. This is a matter that should be considered in the e-government project, to reassure individuals who are not willing to use the system because of security concerns.
<table>
<thead>
<tr>
<th>Main Categories</th>
<th>Sub-categories</th>
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<tr>
<td>Cultural Barriers</td>
<td>Collectivism, Grouping, Nepotism, &amp; Loyalty</td>
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<td>Generation gap</td>
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<td>Attitudes towards outside influences</td>
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<td>Technical Barriers</td>
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<td>Digital Divide</td>
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<td>Limited e-government services</td>
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<td>Organizational Barriers</td>
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<td>Uncertainty avoidance &amp; fatalism</td>
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<td>Resistance to &amp; fear of change</td>
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<td>Lack of skills in the public sector staff</td>
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<td>Political Barriers</td>
<td>Insufficient political involvement</td>
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<td>Educational Barriers</td>
<td>Lack of education &amp; lack of training</td>
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<td>Resources Barriers</td>
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<tr>
<td>Regulation &amp; Legislative Barriers</td>
<td>Lack of security &amp; trust</td>
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In the previous section the drivers and barriers for e-government implementation were gathered and collected in tables. In the two previous tables I grouped the different aspects (drivers and barriers) that were found in the field research. These data were collected from males and females working in the KSA. Even though there were many aspects that emerged from the interviews, I focused on the ones related to and influenced by culture. In the literature review, numerous aspects were documented; however, the research focused on the elements that were found and were associated with the research under study. The different concepts and themes found in the field for the drivers and barriers of e-government adoption were gathered into seven major categories: cultural, technical, organizational, political, educational, resources-based, and regulatory and legislative.

7.5 The Cultural Dimensions that Influence the Adoption of E-government

The cultural dimensions that influence the adoption of e-government are the collected drivers and barriers that have been discovered in the empirical research. All the aspects above were gathered from the fieldwork. They are highly complex and diverse challenges that the public sectors must face as they work on the adoption of e-government. To achieve effective initiatives in the e-government implementation the government and policy makers should be aware of these dimensions and have plans and strategies to deal with them. Accomplishment and success are not only related to selecting the appropriate technology; they also entail acquiring a suitable management structure, policies and regulations, financial and human resources, and being aware of the cultural aspects in the organization.

Figure 6 below illustrates the cultural dimensions that influence the adoption of e-government. I divided these cultural dimensions into two categories: cultural values and socio-structural practices. Cultural values are the elements in the culture that are hard to change and are embedded in the cultural fabric. These elements are acquired in infancy and childhood, from family and early education; they are considered to be the foundation for the everyday activities of individuals and are incorporated into their social lives. I extracted from (Karahanna et al., 2005) the concept of values related to the national culture and considered to be at a higher level of culture. Cultural values are
therefore elements that are higher-level cultural elements which are difficult to change as they are embedded and rooted in society. Two elements in the cultural value category are *national background* (history and beliefs) and *national culture* (cultural infrastructure).

*Socio-structural practices* are elements in the culture that are always changing and are not as embedded in the cultural fabric as the cultural values. These elements are learned from social living and the workplace. In addition, I extracted from (Karahanna et al., 2005) the concept of practices related to the group or organizational culture; this is a lower level of culture. Socio-structural practices are therefore lower-level cultural elements that can be changed, and acquired from the workplace. These practices have various elements: organizational, technological, political, educational, resources-based, and regulatory and legislative.

The cultural values and the socio-structural practices influence each other; however, cultural values are stronger. The cultural values are shaped at an early age which makes them more powerful in their impact on individuals throughout their lives. This is why they are considered to be a higher level of culture. Figure 6 shows the cultural values and socio-structural practice dimensions connected by two arrows: a straight arrow and a dashed arrow which illustrates the relationship between the two dimensions and reflects their relative strengths. Both arrows show how they affect each other, however; the straight arrow shows how that it is stronger and continues to have an impact on the socio-structural practices and the dashed arrow shows the latter’s effect on groups and organizations, albeit not as strong as the cultural values.

For instance, one of the organizational dimensions in the sector, Nepotism, is strongly influenced by *cultural values* which goes back to the nature of the Arabs in terms of living in tribal societies in the past, their dependence on individuals and on each other, and how they are strongly connected to their families and relatives. This explains why the concept of Nepotism is very strong. Nepotism is considered to be a positive and good aspect since it shows how loyal family and relatives are to each other. However, when it comes to the present day and how organizations operate and work, it is considered to be a hindrance and barrier to advancement and development. This is because, with the exercise of nepotism in the workplace, many other aspects are
jeopardized and overlooked. For example, one individual who has the power to make decisions could insist on hiring a relative or friend who is not appropriate for the job or does not hold the proper credentials or experience for the position. Therefore, even though this act is performed in the organization it is considered to be a *socio-cultural practice* since it could be altered by rules; yet it is influenced by the stronger *cultural values* that the individual learned and grasped at an early age.

Therefore, a significant point to consider in the implementation of any new technology in the organization is the various dimensions that could impact the adoption process. With an understanding of the cultural dimensions that exist in the organization, and acknowledging how they play an important role in dealing with technology, various barriers can be circumvented. For example, by knowing the cultural dimensions that influence the adoption of e-government and recognizing which category applies, i.e. whether it is a cultural value or social-structural practice, suitable plans could be implemented to deal with them. Strategies adopted for a specific category could be planned in a way that is appropriate either to the fixed cultural value or a practice that is learned but could be changed. Both categories should be dealt with, even the cultural values, especially if they have a negative effect and so might have an inappropriate influence on development.

Therefore, the government and policy makers should use the proposed framework in introducing new systems such as e-government into the organization. For example, from the framework the cultural dimensions are divided into the two categories, cultural values and socio-structural practices, and understanding this could shed light on some aspects in the workplace. For instance, when introducing a change in the organization, such as the introduction of a new system, the policy maker could benefit from understanding that the socio-structural practices are aspects that are learned from social living and the workplace, and that individuals could adapt to them and learn to change them since they are considered to be related to the lower level of culture. This would increase the potential for success in the implementation of technology, as employees would be more understanding and accepting of the new technology.
Figure 6: The Cultural Dimensions that Influence the Adoption of E-government

Cultural Dimensions

Cultural Values
Higher Level of Culture

Socio-structural Practices
Lower Level of Culture

National Background

National Culture

Organizational
Political
Economical

Technological
Educational
Resources
Rules & Legislation

Individual

The Organization
E-government adoption by employees

All these elements influence the individual in the society

All these elements influence the individual in the society

All different cultural dimensions influence the employees in the adoption process of e-government

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Figure 6 also illustrates the cultural dimensions in the adoption of e-government. These cultural dimensions (drivers and barriers) influence the adoption process of the e-government project since they impact employees in the organization. The employees in the public sector are individuals in society, and culture impacts on their activities. Therefore, since culture influences individuals as part of society, culture is also going to influence the organization. The organization in turn is an element of the whole society on which culture has an impact. Therefore, this research explores society’s culture and its impact on the employees in the organization during the adoption of e-government. For this reason, knowing and understanding the dimensions that influence the individuals in society will lead to understanding the employees in the organization and what influences them in their sector.

7.6 Conceptual Framework for the Adoption of E-government and the E-Acceptance Model

In chapter three, I chose to use the (Siau and Long, 2005) five-stage model, with modifications to include the e-acceptance concept. These modifications were made to suit the context of the research for the appropriate adoption of the e-government system in the public sector in the KSA. Later on, I collected the cultural drivers and barriers found in the field research and identified the cultural dimensions that influence the adoption of e-government in the public sector. Figure 7 shows the e-government development stages and the e-acceptance model, and includes identified cultural dimensions, cultural values and socio-structural practices.
Figure 7: E-government & E-acceptance framework
In figure 7, I proposed an e-government framework that could be employed to enhance the cultural drivers and attenuate the cultural barriers. These cultural dimensions are highly complex and therefore require policy makers to consider the influence of culture on the adoption of any new technology. This research highlights the significant cultural dimensions that have an impact on the adoption process of e-government in the KSA. These are challenges that have been identified and extracted from the field from the interviews conducted with employees in the public sectors. As such this framework could assist the government and policy makers in implementing e-government since it highlights the drivers and barriers that they could encounter during the adoption process. In addition, the framework provides the user with the cultural dimensions and the distinction between cultural values and socio-structural practices. By understanding the difference between these two cultural dimensions, appropriate plans and procedures could be implemented accordingly.

In this framework, the research proposes five stages that the e-government development process could follow, taking into consideration the cultural leap phase. In this phase, I proposed to include the e-acceptance stage that involves an understanding of culture and its impact on individuals in both society and the workplace. The empirical field research found that there is certainly an association between culture and the adoption of technology by employees in the workplace. Therefore, this proposed framework highlights the significance of culture in the adoption of e-government. By acknowledging the importance of culture, this framework develops a tailored e-government adoption model that could be dedicated to the context of the Kingdom of Saudi Arabia. In addition, the model highlights the human rather than the technical challenges that might arise with the implementation of e-government. Indeed, it is argued that the non-technical aspects are the most significant if the success of the programme is to be secured. I defined the e-acceptance concept as the attitude of individuals toward technology in terms of rejecting or accepting it. In the fieldwork it was found that many problems in the adoption of e-government were related to humans and their attitude to the idea. Therefore, accepting technology and benefiting from it depends heavily on humans and their perception of the programme. Moreover, since culture is such a strong force that moves individuals, it can be argued that understanding and looking into it would help the policy makers to achieve the desired goals (Straub, 1994b, Straub et al., 2002b). Therefore, to gain acceptance of e-government there
should be cultural acceptance and understanding by individuals (employees) of the system and how it will benefit them. For this reason, the e-acceptance concept in the cultural leap phase is proposed for adoption for e-government project development. Inclusion of e-acceptance will influence culture and will also affect the organization and the employees.

7.7 Conclusion

In this chapter, I presented the findings and results of the in-depth interviews conducted in the field study. Different concepts were discussed in these interviews and various cultural drivers and barriers related to the adoption of e-government were discovered. The drivers and barriers identified are a mixture of cultural, technical, organizational, political, educational, resource-based, and regulatory and legislative drivers and barriers. The interviews with participants revealed some issues (drivers and barriers) that had been found in the literature and others that were new. In addition, the chapter identified and compiled the cultural dimensions that influence employees in the public sector when adopting e-government. A conceptual framework was proposed for the adoption of e-government in the KSA. This framework illustrated how the cultural dimensions influence individuals in society and as a result impact employees in the organization. In this framework the cultural dimensions are divided into two categories, cultural values and socio-structural practices.
8 Chapter Eight: Discussion

8.1 Introduction

The principal motive behind attempting this research was to try to understand the complex, traditional, conservative culture of Saudi Arabia and how it addresses incoming new technology; and to contribute in some small way to a better understanding of that culture. In this case study my goal was to explore and discover the cultural drivers and barriers that emerge from employees in the public sector during the adoption of an e-government system in the KSA. In the previous chapter the findings and results of the research were presented, based on the data collected in the fieldwork.

In looking into the impact of culture on employees, the basic research question was: “What are the key cultural drivers and barriers that emerge from employees in the public organization when adopting the e-government project in the KSA?” An important point to bear in mind is that I looked at the culture as a whole and how it affects the public sector. In other words, this research focuses on exploring the culture of the country and how it influences employees in adopting the new technology. This necessitated a study of the culture of the society and related aspects such as background, history, values, beliefs and cultural infrastructure.

As a result, the cultural drivers and barriers that surfaced during the empirical research were identified. The terms used in the research question are defined as follows: cultural drivers are elements that enable and facilitate the development of e-government; cultural barriers are elements that hinder and impede the development of e-government; employees are the stakeholders (unit of research), that is, a group of individuals who work in the public sector and who influence and are influenced by the e-government adoption process; organization is the workplace (setting) of the research, that is, the public sector organization; and e-government represents the alteration of the traditional administrative processes and services of the public sector into an electronic system, for better delivery of government services to citizens and businesses. In addition to the improvement in the government services, other aspects in the organization should
be modified, such as the organizational structure and the adoption of new skills by staff to achieve successful outcomes.

This chapter will be divided into the following sections: a summary of the study, discussion, contribution, implications, limitations and conclusion.

## 8.2 Summary of the Study

Various features, such as policies, rules and regulations, finance, human resources, and technology are significant to the success of the e-government project. Organizational and cultural changes are considered to be more complex than technological changes, so this study explores the non-technical or cultural aspects, in the search for the impact of e-government on employees. In short, the study explores the underlying key cultural issues that drive and impede e-government initiatives in the KSA. It is based upon a qualitative methodology and empirical research model applied to three different public sectors. A case study was conducted that employed in-depth interviews to collect primary data from various employees.

The literature review presented an overview of the different concepts of e-government and of culture. The cultural dimensions of Arab culture were presented, together with the drivers and barriers identified from the existing literature. In the wake of this, I proposed a theoretical framework derived from the (Siau and Long, 2005) model and named it the “E-acceptance model for e-government adoption”. This added the e-acceptance step in the cultural leap phase to the original five-stage model. The concept of e-acceptance was developed to be included in the e-government adoption process for better implementation of the system in the context of Saudi Arabia. Thus, it is my belief that E-acceptance is the mental attitude of individuals towards a new electronic or technological system and the pattern of rejecting or accepting it. E-acceptance is the state of society’s culture as it embraces the new technology and absorbs it into their lives. E-acceptance is the ability of the society’s culture to take advantage of the new technology to promote the country’s growth and human development”. 
To reach the full potential of the e-government project there should be cultural acceptance and understanding of the new system by the people in the society. The e-acceptance concept could provide a sound foundation for eliminating the gaps in the adoption of e-government, which has been adopted from another country with a different culture. It is always significant to go beyond the technical factors of any system and look into the non-technical aspects of the adoption process. The government of Saudi Arabia has the resources to create and develop a tailored e-government project and infrastructure. However, without society’s acceptance of the new, there will always be obstacles and challenges to the implementation process. Therefore, I believe that it is not more funds and technology that the nation needs. What the country needs now is acceptance.

In this case study I implemented an empirical qualitative research approach in order to explore the cultural drivers and barriers to e-government adoption in the public sector in the KSA. In-depth interviews were conducted with thirty-two participants. To analyze the data, I used the meaning condensation approach to interpret the in-depth interviews. The case study research context of Saudi Arabia was also presented. Describing the research context is significant for understanding the background of the case study, and to provide an overview of the country’s environment. In the following chapter, the results from the field study were presented. The different cultural drivers and barriers that surfaced during the interviews were divided into seven categories: cultural, technical, organizational, political, educational, resource-based, and regulatory and legislative. Finally, a conceptual framework was proposed for the adoption of e-government in the Kingdom of Saudi Arabia. This framework illustrated how the cultural dimensions influence individuals in the society and as a result have an impact on employees in the organization.

8.3 Discussion

8.3.1 Aspects found in the empirical field research

Lack of Leadership Role
Leadership can be one of the major motivating forces behind the implementation of new systems in the public sector. The organizations usually resist new systems and changes;
therefore, it is important to have strong leadership to support the adoption of a system like e-government, before, during and after the project implementation: *before* - to enable the project leadership to explain the project, the new system and its concept; *during* - for management and support; and *after* - to guarantee the flexibility of the project (Ndou, 2004). However, the public sectors in the KSA lack the leadership factor; this gap should be filled by influential government and policy makers in order to achieve the required results.

*Lack of Sufficient Compensation Packages for Staff*
This is a significant matter that was strongly evident in the field work. A large number of employees explained that most public sectors lack attractive compensation for their employees. The public sector pays less than the private sector in general, and employees in the public sector feel that they are not getting sufficient rewards for the work they do. This, as many participants pointed out, is one of the major reasons why employees are not willing to learn or adopt new systems. Others pointed out that the low salary encourages some qualified employees to think of leaving the sector and finding jobs in the private sector.

*Top Manager Support for Technology and Words used as a Substitute for Actions*
This is an issue that is evident from the field research. Many of the participants mentioned that many of the new systems that are employed in the sector are supported by the manager; however, it is possible that he might lack the knowledge and the skills to apply them. In addition, participants pointed out that there are managers who resist the use of new technologies and do not want to use them. They are resistant to changing the way they accomplish and perform their tasks.

*Partial Political Leadership*
Participants pointed out that political leadership is vital for the advancement of the e-government project. They linked this to the power of leaders in enforcing the adoption of the new technology and making decisions. In the Kingdom of Saudi Arabia the political will and support exist; however, the lack of implementation guidelines is an issue that should be considered in order to achieve the full potential of e-government.
Political will and leadership are considered a prerequisite to achieve the goals and objectives of the e-government programme. Political support in the early stages of e-government is especially significant. In addition, political leadership and support should constitute more than words: it should be words that are supported with actions. Political leadership should be the key motivator in pushing for change and the adoption of e-government. Political will and strong leadership have the power to promote financial resources, coordinate public organizations, make decisions and policies, and allocate human resources. They should be sustained throughout the different stages of e-government.

**Financial Resources**

Despite strong interest and investment from the Saudi government in the development of technology, there are concerns in the public sectors about the funding available for supporting technology. There is no dedicated budget for developing ICT in the sector which as a result has an influence on the advance and adoption of technology. Some employees, for example, do not have personal computers to accomplish their tasks. Indeed, according to information obtained from the interviews, not all employees have computers. Depending on the nature of their job, not all need to have their own.

**Slow Progress of Legal Regulation & Appropriate Framework**

There is slow progress in the area of legal regulation in the country. Despite the government’s aspirations for advancing and developing ICT, progress is still slow due to various issues as well as the social environment and the lack of social pressure. Rules and regulations need to be developed before the implementation of new technologies. The government did establish several new rules and regulations for technological development, but there is still a problem in that many areas of technology are still not covered. The government and policy makers need to keep up with the changes occurring in the regulatory area with the advance of different technologies, and be able to make modifications accordingly. Thus, it is suggested that an appropriate legal framework be designed in order to introduce a proper legislative and regulatory infrastructure that the e-government programme could follow.
8.3.2 Aspects of Saudi Arabia

Saudi Arabia is a unique and fascinating country. It would be unjust to make general judgments and claims about the society and people of Saudi Arabia. I have attempted to present a cultural overview of the Kingdom of Saudi Arabia, although it is a little difficult to describe all the social and cultural aspects given the relatively small amount of social research about the country. Nevertheless, I can claim to be a natural-born member of this society and can relate to and explain some of its characteristics. This was done through the field research study, the field notes, and the personal observations of me who lives in this culture.

The country of Saudi Arabia could be considered a conservative traditional society that is changing rapidly (Metz, 1993). With the discovery of oil in the mid-twentieth century the country was transformed and began to play an important part in the world. The impact of modernization is evident. As a result, the country is going through constant change, triggering many developments in the social, economic, and political environment. In addition, the enormous advances in communication technology and transportation have opened up the Kingdom to various new areas and to the outside world. Modernization and Western influences have descended upon the country more markedly with the arrival of many Americans and Europeans to work for Aramco (Arabian American Oil Company) and other petrochemical industries.

The Islamic values that are deeply embedded in the society are faced with various challenges from modernization (Long, 2005); this conservative, traditional and religious society wants to find a balance between adopting the fast modern changes initiated by the West and at the same time preserving their identity as Muslims. This could explain why any innovation that comes into the country is scrutinized by society. The people want to be sure that the adoption of the various modern practices will not impact on their beliefs and Islamic values. Arabs in general are characterized as having an attitude towards outside influences (Hill et al., 1998), and that is especially true of Saudi Arabia. Sometimes when this society encounters new things it does not accept them easily, and indeed may have a negative attitude towards them. The Saudis are exposed more than ever before to travel and technology, but this does not necessarily translate into openness. There are still young Saudis who are afraid of the involvement of the outside
influences which are considered to be a threat to their religious and cultural identity (VOA NewsNow, 2006).

Participants in the field study pointed this out and explained that not readily accepting every new thing could derive from fear that it may contradict their own traditions and customs, or it might influence their Islamic values. In light of this, I proposed three possible reasons for suspicion of outside influences: first, the physical isolation of the land in the past; second, Arab national traditions; and third, Islam.

**Physical Isolation of Land in the Past**

Land has a strong influence on cultural and social attitudes. The physical nature of the country has kept it in isolation due to the harsh climate, inhospitable desert, and high mountains. The centre of the Arab land was named ‘Najd’; it was the most isolated and had ‘encirclement syndrome’ - fear of being surrounded by enemies (Long, 2005). This could explain the stance of those Saudi individuals who have a negative attitude towards foreign or outside influence. It could be a ‘defence mechanism’ that is used to protect oneself from unknown risks or dangers. In the empirical research, one of the participants said: “The problem with us is that when anything new comes out, we usually refuse it and don’t want to deal with it even before we know its advantages or disadvantages”.

**Arab National Traditions**

Another possible reason for the negative attitude towards outside influences is the Arab national traditions. The Arabs want to keep their entity and identity and will not accept or allow anything that will compromise that. This was seen clearly in the field study from the comments of various participants. They fear that outside influences could corrupt or interfere with their self-identity as Arabs.

**Islam**

The Islamic faith could be a further explanation why some Saudis do not want to deal with outside influence. Islam is the basis for every facet of Saudi social life, so the fear of compromising their faith and beliefs is strong. They may be afraid that in accepting outside influences they will be doing something that is not appropriate or that these outside influences could impact on their beliefs and values negatively. Religion has
been and still is a substantial and powerful link among people in the community. A great religion has its forms of belief, sentiment and organization that can mould social relationships (Hertz, 2009).

8.3.3 The Impact of Globalization on Saudi Arabia

Globalization in its different forms has entered the KSA and blended with the culture and society of the people. Undoubtedly, the globalization of Saudi Arabia has had a considerable impact on individuals and the country, causing many changes in society, especially with the increase of Internet use and the strengthening of international relations. Indeed, globalization has opened up a new world for people in the country, by exposure to Western media, television programmes, movies, newspapers and many other things that have entered the Saudi market and provided information about different areas of the world and Western civilization.

The Internet is one of the most transforming components of globalization which is strongly influencing Saudi society. This important observation on the attractions of the virtual world or community was evident in many of the interviews in the field. Employees and different individuals have created strong links with others by use of the Internet and being online. Some participants explained that through the Internet and access to emails, forums, and blogs, people are more connected with friends and family. One participant said that he checks his emails daily and replies and forwards messages to his contacts. Another participant said that with emails he is even better connected with friends and family members he has not seen for a long time. He added that his group of friends now know more about him through his choice of subjects in the emails. Other participants believe that the Internet (forums and blogs) has created an environment where they can speak with others and share their feelings in discreet and safe surroundings.

**Face-to-Face Communication**

One of the findings from the fieldwork that differs somewhat from those identified in the literature review is the concept of face-to-face communication. In the literature the consensus is that Arabs prefer face-to-face communication to the use of emails, both socially and at work (Hill et al., 1998; Khalil and Elkordy, 2001; Rose and Straub,
However, in the empirical field research most of the participants pointed out that, nowadays, with the existence of technology, there are many tasks that can be accomplished without the need for face-to-face meetings. Meetings are only important when critical decisions are made or a special process in the job is required. In addition, they mentioned that face-to-face communication matters more in social and family gatherings than in the workplace.

Participants also mentioned that they enjoy using the Internet for socializing and disclosed their heavy use of emails and other forms of communication, using the Internet for social interaction. They still recognized the importance of face-to-face communication with family members during visits and gatherings for special events. The employees stressed in their interviews that with the use of computers and the Internet in the workplace, many employees could execute several of their jobs with less face-to-face communication. Hence, the findings are not completely parallel to the literature review.

**Family Matters**

Cultural values and beliefs shape and outline the mentality, behaviour and attitude of the individual in Saudi Arabia. These cultural values and beliefs are a unique blend of Islamic principles and Arab traditions. This is evident in the concept of family and its importance in Saudi society. Family relationships are highly significant and take priority in the culture.

Both nuclear and extended family members have strong ties. This relationship depends on mutual need and support. The family is the core and base of Saudi society, providing physical and emotional support. This in turn influences individuals in their work. If any problem occurs in the family, work will not be a priority at that time. This is a feature that might sometimes compromise the work; however, it is seen as a positive quality that distinguishes Saudi society and makes it what it is. All these values were supported by the participants during the in-depth interviews. They endorse the work of (Hill et al., 1998) who pointed out that loyalty to religion, family and national traditions are usually more important than accepting change from the outside.
The importance of the stability of the family which provides harmony, sanctuary and safety, was reflected in the interviews, where it became clear that the family was highly valued and considered to be crucial for spiritual well-being. On being asked about the importance of the family, one of the participants was shocked at the researcher even bringing up such a question, since the answer is obvious. As a member of Saudi society, I obviously understand the importance of the family, but by posing the question, I wanted to bring out other aspects related to the subject of family.

Many participants expressed their fear of how the availability of some technologies is interfering with family relationships. This is one of the most surprising aspects found in the field study. A large number of participants pointed out how some family members might become cut off from the family due to the high use of computers and the Internet. Advances in technology are affecting many aspects of society, including family. The negative influence of technology on individuals in the family is evident in people’s homes, with different members of the family spending long hours using the Internet and not socialising and entertaining as much. One participant observed this with his children, commenting that now the children prefer to be playing on the computer rather than playing with their brother or sister. Even adults are spending a lot of time using the computer and Internet and not being with other members of the family.

The influence of technology goes beyond close family members to the extended close family members (Arhaam) and other related family members. Some individuals regularly text their Arhaam using the mobile phone instead of physically visiting and being with them. One participant pointed out that texting families instead of visiting them is not proper and he does not approve of it, adding, “[b]ehaviour like this would not have occurred in the past”.

**Fate Concept**

An interesting and surprising aspect that was found in the field research was uncertainty avoidance and fatalism. In most of the literature, the matter of uncertainty avoidance and fatalism was described as being high. A culture like Saudi Arabia is characterized as being more fatalistic in perceiving the world. Fate is related, as explained previously, to religion; every individual believes that everything is in the hands of God. However, the empirical research pointed out that even though the participants believe in fatalism
they still tend to plan for the future and deal with uncertainties. A number of employees were found to be future-oriented and made plans and strategies to follow. In addition, they mentioned that in the workplace planning is an essential part of working and getting results.

**Motivation Issues**

The findings from the field study suggest that if certain factors existed in the workplace, employees would be motivated and have more self-esteem. Reward systems that include a career path, promotions, monetary, and non-monetary compensation could be introduced. Furthermore, motivated employees are needed in the ever-changing work environment to sustain the survival of the organization (Smith, 1994). This is a very significant point that the managing classes in the public sectors should understand and consider in order to promote a healthy organizational work environment. As an observer myself, I formed the opinion that some employees were worried by that fact that they did not feel appreciated. (Metz, 1993) sensed that this is one of the most important reasons for their unwillingness to be cooperative and supportive in adopting new ideas and technology in the sector. This aspect is consistent with the literature, where (Hill et al., 1998) reported that problems with technology acceptance resulted from poor worker motivation. This matter is significant for the organization since motivated employees are more productive and effective at their jobs.

**“Brain Drain” Issues**

The “brain drain” issue was tangible in the in-depth interviews with different employees. The public sectors in Saudi Arabia should examine the issue of “brain drain” in public organizations and put in place some serious plans to overcome this problem. A modest number of employees in the public sector are technically skilled and qualified, and they should not be lost because of low salaries. Some employees explained that they had several colleagues who were skilled but who did not continue in the organization due to the lack of adequate compensation. However, there should be a solution to this drain in expertise and knowledge, since the government’s aim is to adopt technology and transform the country into an information society. The public sector is trying to implement and adopt technology, but lacks sufficient appropriately-skilled staff to acquire the skills to operate and use this technology. This problem is reflected in
the literature, albeit on a grander scale, which points out that intellectual Arabs are leaving (brain drain) for developed countries (Fergany et al., 2002).

The government of Saudi Arabia needs to take a closer look at the ranking of skilled migrants who are seventh in the top ten list (Times, 2005). This means that the government is losing skilled workers to other countries. For this reason, plans should be provided for the retention of nationals in the Kingdom. The government could, for example, introduce some new procedures to facilitate work conditions, such as simplifying procedures for dealing with different businesses, improving the standard of living, improving the pension and compensation packages, providing better regulations, and investing in different developmental projects.

**Women’s Issues**

I observed that female skilled and educated labour is also looking for better opportunities in other countries. The reasons for the female “brain drain” are somewhat different from the reasons for the male “brain drain”. Females are trying to find better employment opportunities or business investments, but the restrictive rules and regulations in the country are holding them back. According to the famous Saudi newspaper *Arab News*, women are leaving due to the limited opportunities for employment and business ventures (ArabNews, 2009). Bahrain and UAE (United Arab Emirates) are the most popular areas in the Gulf for Saudi females to work in. The Saudi females in these countries find independence and more liberty in pursuing their jobs and business affairs, while keeping their Islamic and cultural values. This matter of the Saudi female “brain drain” should be considered seriously in order to keep the Saudi females who are qualified and skilled in the country and benefit from their expertise. On a more optimistic note, the KSA recently started to provide scholarships for Saudi women to study abroad, since King Abdullah wishes to provide more opportunities for females in the country. This is an important step in providing more opportunities for females in the workplace.

Providing Saudi females with more opportunities would also benefit the country by decreasing the number of foreign workers who are currently present in high numbers. It is estimated that non-nationals in the country total more than 8 or 9 million, out of a population of 25 million; they have become part of the economic fabric of the Kingdom.
The number of women in the country holding college degrees is more than half of men; conversely, less than 10% of the Saudi workforce is female (McEvers, 2008). This was confirmed in the field research. Although most of the participants interviewed were men, they did raise the issue of female labour in the government sector. Therefore, the country could take advantage of women’s skill and employ them instead of having to recruit foreign labour. The government of Saudi Arabia is leaning towards this path to reduce the dependence on expatriates, hiring more women and encouraging the private sector to follow suit (McEvers, 2008). The government is on the move to get as many as 200,000 women in the Kingdom into the labour market and this is backed by the Ministry of Labour which is launching a major female employment plan. In addition, many ministries and private sector companies are reinforcing job opportunities for Saudi women. For example the Ministry of Water and Electricity announced new sections and branches for Saudi females to service female customers (ArabNews, 2005c). Therefore, Saudi females nowadays have more and better opportunities than their mothers and grandmothers, owing to the new vision of King Abdullah. He is reported to have said that “the Saudi women have started entering the mainstream of the national life”, and he added that he hopes that “the social attitudes toward them would change for the better in less than five years” (ArabNews, 2005b).

As mentioned above, the KSA recently started supporting female higher education by providing scholarships to study abroad; however, this is simply not enough. There should be more effort made in many other areas of the country in terms of changing the environment in the workplace, public sectors, and the social setting. Since the government is offering better education for women, there should be more opportunities in the workplace as well, to provide better job openings and chances. More effort should be made in order to get the full benefit of women in the labour market. Thus, the country should lay down appropriate social and cultural foundations to enable women to work for economic growth. In addition, the government should plan training strategies to equip women with the tools needed in the business market.

According to Booz & Co.’s report (2009), the KSA in recent years has seen more progress in female education and the gender gap has been reduced. The movement towards the support of women’s education in the country has encouraged several social developments. The government of Saudi Arabia has become aware of the real need for
development and improvement through education and the need to increase the women’s role in the economy. However, traditions, social norms and the current public education systems remain obstacles to equal opportunities. Women in Saudi Arabia are restricted by social and traditional cultural boundaries more than by religion. In addition, the Saudi Universities Law, the Civil Service Law, and the Labour and Workers Law treat men and women in the same way when considering some matters and following Islamic law. However, there are some problems in their implementation that originate from a blend of local norms and traditions and social beliefs, and there are some principles that are obstacles to gaining educational opportunities for women (Booz&Co., 2009).

King Abdullah bin Abdulaziz’s top priority is women’s education and he is encouraging women to work in business and the law. He also recognizes that the country cannot advance socially or economically without women in the workforce. Moreover, he has appointed for the first time a woman as deputy education minister for a new department for female students (CanesInternational, 2009). This major action in support of females in the Kingdom shows the King’s commitment to making changes to the roles of women.

Education Reform Issues
Currently, education and, more specifically, the level of educational have a huge impact on the economic development of a country. Information and technology are becoming increasingly important. The labour market, nowadays, has a high demand for skilled human resources. Nevertheless, educational systems and their practices have changed very little over recent decades. Various participants in the case study pointed out the need to modify the education system to enable individuals to be better prepared for the labour market. In addition, some participants mentioned that people who have a good education tend to be more accepting of technology. This is in line with the study of (Hill et al., 1998) who found that education is the most important aspect in developing social standing and motivating behaviour in the organization especially in terms of the acceptance of changes in technology.

Since his accession in 2005, one of King Abdullah’s major reforms has been in education, and according to (Booz&Co., 2009) the educational system has become a major priority and a big challenge for the Saudi government. The King is launching the
first co-educational high-tech university, the University of Science and Technology (KAUST). It is a graduate-level research university dedicated to inspiring a new age of scientific accomplishments in the Kingdom (KAUST, 2007). In addition, this university is the first in the Kingdom to mix the genders; this is a radical and crucial change for Saudi Arabia, as other universities in the country are based on the segregation of the sexes (ThomsonReutersNews, 2009). One of the main issues is whether there should be a radical alteration to the education system, to explore various areas to promote less restriction for the benefit of the country. An article in the Arab News commented that good education has a positive impact on change and builds a healthy environment; graduates in the Kingdom should be offered high quality education in order to develop and become a knowledge-based society, and the current education initiatives could push forward and prepare the way for an efficient cultural renovation of Saudi society (ArabNews, 2007). Furthermore, according to the UNESCO global index for assessing quality of education in 2008, even with the launching of the $2.4 billion education programme in 2005, only minimal results have so far been achieved, with Saudi Arabia ranked 93rd out of 129 (UNESCO, 2008).

**E-government Adoption Issues**

One of the most illuminating insights in the field that helped me to understand the problem under study was the insufficient adoption of the e-government project. The public sector in Saudi Arabia in the area of information service is suffering from various issues that need to be addressed immediately in order to attain the status of ‘Information Society’. The principle of e-government has been established for some time, but no tangible results have appeared on the horizon. According to the findings of the empirical field research there has been a failure, on the part of the decision makers or supervisors, to adequately present the e-government project to the public sector. Some of the participants indicated that there is political support for the implementation of e-government; however, no enforcing power is executing the project. It is important for the success of such a huge project to assign a person who has the political power and leadership to push through changes and be responsible for the adoption.

Furthermore, in one sector for example, there is no dedicated budget that covers developments in ICT, and any expenses needed are taken from other budgets. This is in line with the literature review, which cites the report of the Ministry of Communication
and Information Technology (MICT) on the subject of the ‘Information Society’ pointing out the lack of allocated budgets for ICT which as a result affects and weakens ICT training and employment (MCIT, 2006).

In addition, from my own observations, there seems to be an inadequate sense of awareness and insufficient communication and coordination between the “Yesser” programme and the decision makers in the three different sectors. In view of this fact, many features of the e-government programme have still not been activated. This is reflected in the literature: the MCIT report admitted that there was no proper administration to organize the work and procedures and guide the implementation. Indeed, there was no coordinating entity to observe and supervise collaboration among the different sectors (MCIT, 2006). Furthermore, “Yesser” is currently urging both the public and the stakeholders to provide them with their own perspective on the work methodology of the programme. The reason for this step is to deliver a formal and documented analysis of the available information and needs for the pilot services agencies. The Ministry of Higher Education has announced the availability of different online services for students, including the scholarship programmes, registration for programmes online, data for students concerning the approved universities abroad, and various other student services (Yesser, 2009b).

8.4 The Transformation to the ‘Information Society’ Age

For the transformation of the Kingdom of Saudi Arabia into an ‘information society, there are many challenges to overcome, most importantly illiteracy, the ‘digital divide’ and resistance to change. One third of the population is illiterate although this rate is declining (Yesser, 2007); the Kingdom of Saudi Arabia should eliminate illiteracy and educate adult citizens in order to enable them to make use of the new technology available for citizens throughout the country. In the field, some of the participants pointed out this problem, adding that the e-government programme is not going to be attractive to adult citizens who do manual work since they do not have the knowledge to use such technology. The KSA has drawn up a ten-year plan to eradicate illiteracy and educate adult citizens and aims to eradicate illiteracy among the 10 to 45-year olds by 2013 (Al-Awsat, 2005).
The ‘digital divide’ is another gap that the government should fill. It is the gap between people with access to digital and information technology and others who have limited access or no access at all to this technology. There may be many reasons for this technology gap, and one of the significant ones is the high price of the Internet compared to that of other countries. Most of the interviewees pointed this out. In Saudi Arabia the cost of a month’s Internet access exceeds that of the USA. The cost of Internet access is beyond the budget of the average citizen since local calls cost three times as much as the cost of an ISP connection (Aladwani, 2003). The price of Internet use in Saudi Arabia is still high compared to other countries, although they should be reduced gradually in the near future (Watan, 2009).

Therefore, the cost issue of Internet connection should be reviewed seriously to enable better Internet penetration for the population. Making Internet access available at a low price will encourage individuals to use it and learn more. The government should plan a strategy for making computers and the Internet available to the public at affordable prices. There is a need for a national ICT penetration initiative to reduce the ‘digital divide’ and to provide affordable access.

The ‘digital divide’ is not caused only by the problem of access to computers and the Internet, but also by the inability to use the technology effectively. The knowledge and the ‘know how’ needed to use technology is another significant point in order to achieve an ‘information society’ with the full participation of the population. This implies that the gap is not only an access gap; it is one of skills to access these technologies. The general status of awareness and preparedness of the people is a great challenge, with Internet penetration still below 20% in 2007 (Yesser, 2007).

Further, rural communities, the poor, and the old and the disabled are less likely to have Internet access than are suburban dwellers, the rich, and the young. The ‘digital divide’ suggests therefore that the community is still not ready to deploy e-government projects as it has not fully equipped all its citizens with the means of benefiting from the integration (Joseph and Kitlan, 2007).

In addition, even though the KSA has undertaken new initiatives to reduce the ‘digital divide’ and to spread awareness of ICT, it is evident from the field study that there are
still many individuals who lack the knowledge and the finance to use the technology. This aspect is in line with the literature review, that shows that the Arab states are making efforts to introduce technology to decrease the ‘digital divide’ but inaccessibility on the part of some members of the population is still a problem (Dutta and Coury, 2002).

Resistance to change was found in the field research. The Kingdom of Saudi Arabia has recognized the importance of e-government. To foster the growth of ICT in Saudi Arabia the government has introduced national polices and strategies. However, Saudi officials and outside observers believe that there is resistance to ICT. There is certainly resistance to the Internet among some community leaders, which is slowing down progress (UnitedNations, 2005). This point was supported in the empirical field research where some managers were found to be resistant to the technology due to the fear of losing power and control over information. This shift in power means a feeling of lack of control in some aspects of the job. In addition, senior employees were found to be resistant to the new technology. Long-term employees in the organization are especially susceptible to change, because they have been used to performing their job in the same way for a long time (Joseph and Kitlan, 2007).

The resistance to change issue has always been clearly evident in the society of Saudi Arabia. For instance, the introduction of television in 1965 in the cities of Jeddah and Riyadh was faced with resistance from the conservative religious group in the country (Boyd, 1972, Hamdan, 2005). Some conservative religious leaders objected to this type of media as it reproduced the human form on the television, which, it was argued, contravened God’s sole power to create human life (Long, 2005). In addition, some people were troubled that television would cause various problems by contradicting the teachings of their faith and social traditions.

Another example of the country’s strong resistance to change is the introduction of female education. Education for women started in 1960; however, the opening of schools for girls was faced with opposition from a variety of people across the country. Education was perceived as unsafe and dangerous for girls. This was revealed in the ratio of boys to girls in school, where it was 22% of boys and 2% of girls. However, later on, society became more supportive and each year this percentage increased until
in 1989 the number of girls enrolled was almost 1.2 million out of a total of 2.6 million students (Metz, 1992). These examples are in line with the work *Transfer of Information Technology to the Arab World: A Test of Cultural Influence Modelling*, which points out that Arab cultural beliefs have always been a very strong instigator of resistance to systems (Straub et al., 2002b).

The adoption of e-government is not only a technological change; it also involves organizational, political, cultural and social change. Saudi society is highly resistant to change, according to the literature and the field research. Performance of tasks in the workplace is also evolving, with technology replacing old fashioned manual methods of doing business. However, this technology is not always welcomed in the workplace environment for various reasons: the fear of losing jobs, technology taking the place of people, loss of control for senior management, decentralization of work, less authority (no more opportunities to dominate or power to control all aspects of work), the greater need for skilled employees instead of unskilled, loss of security, the need for fewer employees, fear of the unknown, strong resistance to change, change of organizational structure, the dissipation of nepotism and other features that were evident before the introduction of new technology.

8.5 **Benefits of Adopting E-government**

These benefits are features that I perceive and believe to be strong, positive aspects of implementing an e-government system in the Kingdom of Saudi Arabia. They are: cultural benefits, organizational benefits, geographical benefits, economic benefits, and benefits to citizens.

8.5.1 Cultural Benefits

The Kingdom of Saudi Arabia would benefit from the adoption of e-government technology for different cultural reasons related to the religious and conservative nature of society, and the tribal nature of society.
Religious and Conservative Society

Saudi Arabia is a strongly religious country, rigorously following the Islamic system which influences and moulds individual and group behaviour throughout life (Ali, 1996). The adoption of e-government in such a society would be a benefit especially for female labour. Females would be able to conduct their jobs in their own workplace without the need to be physically face-to-face with male employees in the sector. As explained in chapter seven, this aspect was highlighted in the empirical research.

Tribal Nature of Society

In addition, one of the benefits and motivations for the adoption of e-government is the incentive to restructure and reform some off-putting aspects of the culture, such as nepotism and grouping (even though these can be considered positive aspects outside the workplace). The adoption of the new system will allow reform and better performance by the organization.

Nepotism

In Saudi Arabia, tribal background still influences individuals in their social life and in the public sector. Nepotism is heavily used to support family and friends in the public sector. In this culture one needs to know an influential person inside the organization to receive favours and make progress. However, such acts hinder the advance and development of the sector, which is why consideration needs to be given to such cultural aspects in order to promote better implementation of the e-government project. The adoption of e-government is therefore a positive step in overcoming cultural aspects that could impede the advancement of the public sector. Many participants highlighted issues related to this aspect. One of the participants said: “[o]ne reason for not advancing in the organization is having this ‘nepotism’ when filling positions in the sector; many hire relatives even if they are not qualified, which affects the quality of work they produce”.

Grouping

The grouping concept is another cultural aspect that influences the attitudes and behaviours of individuals in the public sector. Grouping is based on people with a common tribal background, common family relations, common geographic location, or holding similar personal interests. Some government departments will not accept
someone who is not related to the group (this is not announced, although it is widely known), and it is evident that some departments only employ individuals from certain tribal backgrounds. Grouping is based on personal interest, with the formation of alliances and groups around people who have influence and power that, as a result, secure their personal benefits and jobs. The government officials and employees who perform these actions and discard their responsibilities are acting against the organization’s ethics and morals. These activities are not officially or publicly accepted; however, they do occur and the adoption of e-government in KSA is needed in order to eliminate such negative actions. A Ministry of Information and Communication official announced at one of the e-government meetings that one of the important reasons for adopting the e-government system is to decrease corruption and practise transparency in the public sector (Al-Jazirah-newspaper, 2007).

8.5.2 Organizational Benefits

Four motivational factors that encourage the organization to adopt the e-government concept are: raising efficiency and reducing costs; reforming the organization; being competitive; and bringing staff benefits.

*Raising Efficiency & Reducing Costs*

The development of e-government raises the efficiency of the sector and effectively reduces costs. As a result, communication between the different public sectors will be more productive and save time and money.

*Competitive Public Sector*

The adoption of e-government in the different public sectors allows the organization to be competitive. I believe that this could be the way forward for the government and policy makers to improve their organizational systems. The government could, for instance, introduce incentives or award intellectual prizes to bodies in the public sector that best implement and employ e-government with positive outcomes.
Reforming the Organization

Reform is one of the major reasons for the government and policy makers to promote e-government, for a healthier and reformed public organization. The facilitator programme “Yesser” was launched by the government and policy makers to achieve reform in the public sector (SaudiComputerSociety, 2004). Excessive bureaucracy and corruption are aspects that the government aims to reform, for better productivity and transparency.

8.5.3 Staff Benefits

Employees in the public sector want to save time and effort in performing their tasks at work. The adoption of e-government saves time and offers work efficiency, enabling the public sector to provide better and more efficient services. One participant interviewed said that: “I would certainly learn and use the e-government system if it is going to make my job easier and save me a lot of the time and effort I spend in doing many tasks in the organization”.

Other employees want to advance their careers and by understanding and using IT skills they might be promoted to better positions. Some are competitive and would be willing to learn to challenge themselves and be successful. However, e-government is only a means to the development of the organization and a complementary system is needed to aid in reducing any negative concerns and promoting solutions to the various problems that may arise in the sector. Therefore, the policy makers should be aware of and understand the different drivers and barriers in order to be able to achieve appropriate implementation.

8.5.4 Geographical Benefits

The KSA is a large country of around 2.25 million km$^2$. The different public sectors are mostly located in the capital, Riyadh, and other major cities, meaning that people living in different cities and villages are far away from the government services and have to travel to do business with the government. One participant mentioned that the e-government system is a good way to access the services of the government for citizens.
who live in different parts of the country. This means that the size of the Kingdom is an important driver for implementing e-government in the public sectors.

8.5.5 Economic Benefits

Economic development is the aim of every country, and it is the intention of the Saudi government to adopt e-government to develop the Kingdom’s economy (Alsheha, 2007). The government could benefit from the fruits of e-government implementation by the creation of jobs, increasing returns on investments, and reducing costs. The different economic motivations are: employment opportunities, demographically young population, the private sector, and the World Trade Organization (WTO). These are all important aspects to motivate the government to implement this new technology.

**Employment Opportunities**

Moreover, in the field research, many participants pointed out the need for more job opportunities to accommodate the number of university graduates and individuals who are unemployed. The official unemployment rate in the KSA is 9% (for people who are 15 years old and over), while the unofficial rate is variously reported as being 20% (BBCNEWS, 2006) and 25% (alloexpat, 2009). Therefore, the country needs to create new jobs for individuals, and the adoption of e-government would promote job creation by attracting investment. In addition, the employment of the e-government system will improve access to information about available investment opportunities that would benefit the prosperity of the Kingdom. One of the main objectives of the “Yesser” programme is to promote a better economy, and the adoption of e-government should encourage investment and assist in increasing the return on investment (ROI) (Yesser, 2009a).

**The Younger Generation**

The KSA is considered to be one of the youngest countries in the world, since 40% is under 14 and 60% between 15 and 60 (alloexpat, 2009). However, the large proportion of young people could result in a number of problems for the government. This age structure affects the nation’s key socio-economic issues. The government needs to invest in education, health, and provide jobs. This is a strong motivator for the government to adopt the e-government project. The young can learn and adapt easily
and are very interested in new technology. Therefore, youth training and teaching programmes would encourage economic growth since young people will be IT skilled and educated. Participants in the field study pointed out that the younger generation are more eager to learn and could adapt easily to the new technology.

**Private Sector**
The private sector, which has many transactions with public organizations, already has electronic services and systems available online. The private sector depends heavily on such services for speed and ease of working (Yesser, 2011). Therefore, the initiatives and capacity for innovation of the private sector are a strong motivator for the government to adopt e-government (Kaliannan et al., 2010). These private sectors support the nation’s economic growth by providing jobs opportunities and promoting economic advancement.

**World Trade Organization (WTO)**
In addition, the Kingdom wants to open its economy to free and foreign investment for better capital flow in the country. The government is interested in creating a strong centre for various investment opportunities, and promoting the e-government project would reap better returns. Different investors would be able to access information about investment opportunities in the Kingdom quickly and easily. The KSA is a member of the WTO (BBCNews, 2005b) and the adoption of e-government technology is essential for gaining the full potential for economic growth and increasing ROI.

8.5.6 Citizens’ Benefits

One of the main reasons for the government and policy makers to implement e-government system is to meet citizens’ needs (Abdullah et al., 2006). “Yesser” is responsible for fulfilling this aim by providing implementation plans and strategies. Citizens will be able to access the system twenty-four hours a day and seven days a week with no problem of waiting or making appointments. They will also be able to access any government agency to search for services and conduct different operations. Rather than individuals physically visiting several different offices, or even several different Internet websites, in order to complete a transaction, they can complete them online through the one-stop portal that will be available the whole time. In providing
government portals to different public sectors for citizens and residents, the government is creating an opportunity to build relationships between public sector management and citizens and establish trust.

8.6 Contribution

- The contribution of this research is in the originality of the method employed by myself. In this study a qualitative research method was used to gather primary data through conducting in-depth interviews. This was achieved in a conservative society where females play only a partial role in public life. I went through a complex journey in order to reach the findings of the study in which culture was the spirit of the research.
- This research is intended to make a contribution by assisting managers in both the public and private sectors to highlight some of the cultural issues that are associated with the adoption of new technology in their organization.
- The findings from the research case study could provide scholars and management with valuable information about the culture of the Kingdom of Saudi Arabia. Analysis of the data, confirming the findings in the literature (Straub et al., 2002b) suggests that culture has an influence on individuals in dealing with technology. Based on the results of this study it is implied that for successful implementation of the e-government project a detailed understanding of the employees’ culture and social background is required.
- This research has developed a framework for the adoption of e-government in the Kingdom of Saudi Arabia. The framework “E-acceptance for e-government adoption in the KSA” could provide a ‘roadmap’ for overcoming some of the cultural drivers and barriers that emerge with the implementation of e-government in public organizations.

8.7 Contribution to Knowledge

With regard to the contribution to knowledge, I will first relate the previous work done in Saudi Arabia in the area of technology and culture with my own work. I will
then explain how the research question is significant. Lastly, I will explain how the question has been answered.

- With reference to the early works, e.g. *Computer technology adoption in Saudi Arabia: correlates of perceived innovation attributes*, the researcher wanted to investigate how the perceived attributes of computer technology influence the rate of adoption in the workplace. He utilized Rogers’ five attributes of innovation to explain the rate of adoption of computers in both private and public organizations. The findings were important since Rogers discovered that there were three problems that hindered the adoption of IT: technical, organizational, and human issues (Al-Sulimani and Sharad, 1994, Atiyyah, 1989, Bukhari and Meadows, 1992, Atiyyah, 1988). This current study is significant since it explores the human issues of e-government adoption in Saudi Arabia. This research case study attempts to explain how culture influences employees in the workplace, by discovering the cultural drivers and barriers that emerge from the public sector.

- Another study conducted in Saudi Arabia on the transfer of technology focused on the structure and organizational culture rather than on the influence of the entire culture on employees (Abdul Ghani and Al-Sakran, 1998). The study by (Bjerke and Al-Meer, 1993) of management styles and cultural consequences used Hofstede’s four cultural dimensions to evaluate culture, whereas the current study is not restricted to four dimensions and has utilized many other dimensions found in the literature and from the in-depth interviews.

- Research by (Elmusa, 1997) in Saudi Arabia argued that the substantial importation of IT into the country resulted in changes to the traditional culture. However, the study did not evaluate the matter of IT transfer in the public sector.

- Two further studies conducted in Saudi Arabia examined, respectively, end-user attitudes to computer use; the perceived attributes of computers and the impact of the their adoption in the workplace (Al-Khaldi and Olusegun Wallace, 1999, Al-Gahtani, 2003a). Neither of these studies explored the attitude of employees in the public sector.
In an e-government workshop, researchers investigated the motivations for the change to the e-government project. It was pointed out that there are various aspects that should be considered carefully in order to enable the technology transformation (Abdullah et al., 2006). However, this study takes a broader perspective in exploring the whole culture and how it affects the users of the e-government system throughout the KSA.

(Bawazir, 2006) addressed the key factors in the successful development of e-government in Saudi Arabia, and concluded that understanding the technology is one method of achieving goals; however, the current study goes beyond technology to address the key cultural drivers and barriers related to the adoption of e-government since understanding of the culture of the society is crucial. The theory of acceptance of the use of IT is used in a Saudi study to determine the ‘intention of use’ and the ‘usage behavior’ of the users of computer technology (Al-Gahtani et al., 2007). In contrast, the present study explores not only these two dimensions, but also many others in order to acquire a whole picture of e-government adoption in the KSA.

One study, pointed out the challenges that need to be understood in order to promote the advancement of e-government. This was based on the findings that increasing the awareness of staff, developing a legal framework for e-transactions, and adopting a flexible method to facilitate change are among the most important points that the government should take heed of to achieve its goals (Al-Fakhri et al., 2008). Although these are significant aspects to consider, the current research is more concerned with the cultural influence on employees working in public organizations. More to the point, here I am attempting to gather the cultural dimensions that influence employees when dealing with technology in the Saudi public sector.

A different study, focusing on the acceptability of e-government by individuals, employed a ‘people-centric’ approach to determining the total acceptability by people in the KSA (Hamner and Al-Qahtani, 2009). This research, however, is concerned with the employees who will be working with e-government, and how they are dealing with this new technology in the public sector.
Furthermore, another research study highlights the key organizational issues that affect e-government adoption in the KSA. The research pointed out that the country needs radical change in the public sector and needs a change in the relationship between the government and its stakeholders. In addition, the study pointed out that before and after going online there are many technological, managerial, and organizational issues that should be considered carefully (AL Shehry et al., 2009). In this study, the emphasis is on the cultural drivers and barriers that emerge in the public sector.

Another study discusses the perceptions of employees in the government sector in the KSA. The researchers pointed out that studying the elements that affect employees’ acceptance of new technology will aid in the adoption of technology. Data were collected through survey and interviews and they found a significant digital and cultural gap between the technological understanding of employees and solutions promoted by management. They found that the lack of trust in overcoming employees’ resistance is a significant matter facing biometric implementation (Alhussain and Drew, 2010). Even though this current research discusses the perceptions of employees in the public sector and deals with technology, it does not discuss, in a broader manner, culture as a whole and its influence on employees in the workplace.

This case study’s question is, “What are the cultural drivers and barriers that emerge from employees in adopting e-government in the Kingdom of Saudi Arabia’s public sector?” This is the main question that this research is attempting to answer, which has not been addressed in previous studies. The focus of this research is on culture in the particular context of Saudi Arabia.

The chief purpose of this case study was to provide a panoramic view of the complex, conservative, traditional culture of the Kingdom of Saudi Arabia, which was necessary because the picture is somewhat hazy when addressing the cultural and social life, due to the limited number of studies and social science research (Long, 2005) that have been conducted on this topic. This research sheds some light on the mystifying cultural aspects of Saudi Arabia and in a small way helps to build a greater understanding of this conservative society.
This case study research is unique and significant for the reasons given in the introductory chapter. In addition: the focus is on the complex and traditional culture of KSA; it provides an in-depth exploration of the cultural phenomenon; it is a study of the influence of the entire culture on employees in adopting technology; it is qualitative in nature and empirical; and it provides an insight into the complex association between culture and technology. Furthermore, the methodology implemented was challenging since I am a female conducting research in a conservative society, where I interviewed male and female employees in three public sectors.

In summary, the findings of this study contribute to a better understanding of the crucial role of culture and the behaviour of people when dealing with technology. More studies of interesting cultural issues and the adoption of technology in greater depth in different public sectors in the KSA will be needed in future to enhance understanding of how technology adoption could be more successful and acceptable in the public sector in this particular cultural context. Such an understanding is likely to help the government and authorities in formulating and adopting more effective implementation strategies in the KSA public sector, where perceptions of technology are very different from those in other cultural contexts; and to target the requirements needed in this particular context.

Therefore, to answer the research question three to four months were spent in Saudi Arabia interviewing thirty-two participants, and these in-depth interviews provided the primary data collected for the research. Many themes and concepts emerged from the conversations, together with personal observations, and various leads and elements aided in shaping the findings of this research. This all helped to form a greater understanding of the situation in terms of how the cultural and social context might affect employees in so many different ways.
8.8 Implications

8.8.1 Implications for Theoretical Outcomes

- This research reviewed the literature on the research objective and presented the drivers and barriers to e-government adoption. The research outlined an inclusive list of drivers and barriers that could be used with reference to the difficulties associated with e-government adoption. In addition, the research presented some of the issues that are related to e-government implementation in developing countries.

- Furthermore, this research found several new drivers and barriers that could be added to the list of developments and challenges when adopting e-government technology.

8.8.2 Implications for Practice

- The findings and conclusions drawn from this research affect the issue under study. The study attempted to understand the complex conservative culture of Saudi Arabia and how this culture influences individuals when adopting technology. The findings and conclusions of this research indicate that culture and social background influence people when dealing with technology. The fieldwork established that many dimensions of culture in Saudi society have a strong impact revealing that many of the reactions and responses of employees towards the adoption process are related to the social culture of the country.

- The findings in this research could benefit the government and policy makers when implementing the e-government project. This will enable the decision-makers to have a deeper understanding of the cultural issues and major challenges that could influence the adoption process. Furthermore, this research alerts the public sector to management and implementation issues arising out of the introduction of this new technology.

- The study provided insights into aspects associated with employees and cultural drivers and barriers when implementing e-government. It found that culture is one of the major aspects that influence the adoption of e-government in the KSA. This result supports the study of (Straub et al.,
who proposed and found that cultural factors are powerful explanations for predicting the outcomes of technology transfer. Their findings were based on a qualitative progressive study to discover the link between information technology transfer and the socio-cultural factors that support or impede successful transfer. In addition, their findings propose that Arab cultural beliefs are a very strong predictor of resistance to systems (Straub et al., 2002b). The empirical research supported the literature (Ali, 1996) in that Islam is the most influential force in the Arab world, regulating individual and group behaviour.

- The practical implication of the empirical finding is that the government, policy makers, and managers need to recognize cultural influence on individuals in society. Adopting technology should be compatible with the cultural context of the country. In addition, the study could offer some recommendations to the policy makers and managers.
- The outcomes and findings of this research study could prove significant to the different public sectors in Saudi Arabia.
- In addition, this research is important for researchers or academics who are concerned with cultural and social studies. It could explain the impact of culture on people and provide different reasons for their responses. The findings could provide some answers for the use and adoption of technology especially in the Kingdom of Saudi Arabia and generally in a similar environment or context.
- In addition, although this research was conducted within the context of Saudi Arabia, similar areas could benefit from the general research findings of the study.

8.8.3 Implications for Further Research

- This research would hopefully encourage and stimulate other researchers to discover more dimensions or to study one particular dimension in more depth.
- As the Kingdom of Saudi Arabia is stepping more and more into the modern era and adopting new technologies, there is a growing need to understand how
cultural dimensions might influence organizations in their ability to utilize and implement the technology.

- Further studies that expand on this research could provide scholars and policy makers with new ideas of ways to improve the implementation process. This knowledge could be useful to policy makers since it could shed light on the issues that relate to success and failure in the adoption of technology.
- Furthermore, the research offers some recommendations and ideas for future research in which other aspects could be developed and studied.
- Other questions that came to the surface during this study were:
  - “How can organizational cultural barriers that are deeply engrained in society be overcome while successfully adopting the e-government concept in the KSA?”
  - 2. “How do the culture and beliefs (history and background) affect the organizational culture in adopting e-government in the KSA?”, and
  - 3. “How can management turn cultural barriers into portals to utilize e-government in the KSA?”

8.9 Conclusion

Culture is extremely complex and people are unconsciously influenced by it. It provides individuals with a system to follow in their everyday social life. This chapter discussed and outlined different sections: a summary of the research, discussion, contribution, implications, and limitations. In addition, my aim to explore how a nation’s culture and background have an impact on individuals in society was addressed. The conclusion reached was that the adoption of e-government is strongly influenced by the context of the country that adopts this technology.
9 Chapter nine: Conclusion

9.1 Introduction

The principal purpose of this research was to understand the complex, traditional, proud and conservative culture of Saudi Arabia and the way it deals with technology. The objective of the case study was to explore the cultural drivers and barriers that emerge from employees in the public sector during the adoption of e-government in the KSA. In this chapter, I present an overview and summary of the research process and procedures, the results and findings, and the conclusion. Recommendations for future research are presented.

9.2 Review of the Research Process

The intention of this case study research was to explore the cultural drivers and barriers to e-government initiatives in the KSA. The question under study was: “What are the key cultural drivers and barriers that emerge from employees in adopting e-government in the public sector of the KSA?” My aim was to explore how culture impacts on the employees working in the public sector in the adoption of technology such as e-government. In addition, these drivers and barriers were discovered through in-depth interviews with different participants, who expressed their different experiences and ideas leading to the identification of the cultural drivers and barriers. Cultural drivers are elements that enable and facilitate the development of e-government, and cultural barriers are elements that hinder and impede the development of e-government.

9.2.1 Literature Review

I reviewed literature related to the objective of the study. However, little was found specifically on the subject of e-government and the culture of Saudi Arabia. Then I explored different studies on e-government in developed and developing countries in general and Arab countries in particular, which generated a list of drivers and barriers influencing the adoption of e-government. The study also surveyed the literature on
social and cultural phenomena related to the adoption of technology in general and Arab countries in particular, to supplement the list of drivers and barriers. This resulted in the recognition of seven major categories of e-government drivers and barriers: cultural, technical, organizational, political, educational, resource-based, and regulatory and legislative. An appropriate framework was proposed for the cultural drivers and barriers for the implementation of e-government in the public sector, after reviewing previous work and frameworks related to the field of technology and e-government.

9.2.2 Research Methods

I chose the qualitative research method, which is appropriate for investigating social and cultural phenomena (Neuman, 1999, Baskerville and Wood-Harper, 1998), which should be studied in their natural setting. Quantitative research was inappropriate as it deals with figures and statistics, rather than the ‘why’ and ‘how’ of the problem which are the focus of the current research. This qualitative research is based on an interpretive philosophical methodology, relevant to interpreting the behaviour of employees under study. In short, the interpretive approach is used to research human behaviour and their perceptions in the workplace (Myers, 1997).

A case study was conducted since it could be used to represent the world (Stake, 1995) and was useful in addressing the ‘how’ and ‘why’ questions (Yin, 2003) and in understanding the cultural drivers and barriers. The research collected primary data by carrying out thirty-two in-depth interviews with different participants, in order to identify and collate the different drivers and barriers to the e-government adoption project.

9.2.3 Data Analysis

For the purposes of data analysis, the ‘meaning condensation’ approach was used, which helps interpret the significant meanings derived from the responses and activities of the subjects based upon the context. The technique brought out the deeper meaning from the interviews and explained what participants were trying to say. These interviews were recorded, transcribed and then translated from Arabic into English. The
field notes, documents and transcripts were organized and copied for easy use and reference. The data were then analyzed using the ‘meaning condensation’ approach and themes, concepts, and evidence were indicated and presented.

9.2.4 Summary of Research Findings

The drivers and barriers which emerged from the study were presented in the results chapter. The following sections will summarize the findings derived from the evidence, in two parts: the drivers that should be included for successful development of e-government and the barriers that should be removed.

9.3 Drivers that should be included for successful development of e-government

The drivers were divided into seven major categories: cultural drivers, technical drivers, organizational drivers, political drivers, educational drivers, resource-based drivers, and regulatory and legislative drivers.

Cultural Drivers: Saudi culture is a blend of Arab traditions and Islamic values, which have an impact on society in everyday life. An important cultural driver highlighted for the adoption of e-government was that of female jobs. Many participants supported the adoption of e-government if women were allowed to work privately, away from men.

Technical Drivers: the Kingdom of Saudi Arabia is dedicated to the development and advancement of technology and has a long-term ICT plan. In addition, the government has set up the “Yesser” programme for the implementation of e-government in the public and private sectors.

Organizational Drivers: the organizational drivers that exist in the public sector are the informal working environment, and improved governance. It was found that the informal working environment was considered to be a driver since the employees feel more relaxed and less stressed which influences their work performance positively. Another driver that was found in the public sector was the prospect of improved governance. One of the government’s objectives in applying the e-government
programme is to improve government services, and create transparency and reduce bureaucracy.

**Political Drivers:** a significant driver any national project is the support of the government and policy makers. The KSA fully supports the e-government project initiative and focuses on providing better user-friendly government services. Having long-term political goals and objectives are important for the success of the e-government project, and for that reason the “Yesser” programme was created to plan strategies for the implementation. Moreover, the government is aware of the importance of the project, and this is a central driver for its success.

**Educational Drivers:** having an effective educational system is essential for driving the e-government programme forward. The KSA has developed the education system to improve the educational process and has established strategic plans that encourage and strengthen the adoption of technology. In addition, the Ministry of Education has an ICT strategic plan to develop the infrastructure of information and communication technology.

**Resource-based Drivers:** the KSA has supported the development of ICT since 1975 and has spent generously in order to establish and develop the economy and the infrastructure. In addition, the government is supporting the advancement of human resources in the country, with various programmes and plans to prepare teachers and develop students’ skills and capabilities.

**Regulatory & Legislative Drivers:** the KSA established various regulations to encourage the development of technology in the early years of the 21st century. It endorsed the Telecommunications Act that established the legal framework of the telecommunication sector. These aspects were found to be drivers that would help in the adoption of e-government.
9.4 Barriers that should be removed for successful development of e-government

The barriers identified during the study were divided into seven major categories: cultural barriers, technical barriers, organizational barriers, political barriers, educational barriers, resource-based barriers, and regulatory and legislative barriers.

**Cultural Barriers:** the evidence from both the literature and the field research draw attention to the cultural barriers that stand in the way of gaining the full potential from the adoption of e-government. Based on the interviews, it appears that culture is a very strong influence on people and social order in the KSA. The society’s beliefs and actions are derived from intertwined Arab traditions and Islamic principles. The cultural barriers identified in the field study were: collectivism, grouping, nepotism and loyalty, generation gap, attitude to outside influence and female constraints.

**Technical Barriers:** several technical barriers hinder the e-government project in the KSA, including: high dependence on imported technology, difficulty of Internet accessibility, high cost of Internet access for individuals, the ‘digital divide’, and Internet access issues for employees. However, public organizations should make their services available online in order to motivate individuals to use them. In addition, promoting the benefits of using governmental electronic services and making access to the Internet affordable and available will encourage people to use them more often.

**Organizational Barriers:** reasons given for not moving forward with the e-government project were: high power distance, bureaucracy, uncertainty avoidance and fatalism, time orientation, resistance to and fear of change, fear of loss of identity and of being controlled, lack of leadership role, lack of awareness, lack of work motivation, and lack of skills among the public sector staff. Understanding employees’ resistance to change is crucial for the potential success of any new project, and the first step towards finding solutions. Resistance was identified as stemming from the fear that technology would cause them to lose their jobs or make them obsolete; from unfamiliarity with technology; and from fear of loss of the power they had had with the previous system. Policy makers should recognize these reservations and develop a strategy to overcome them. For instance, a concerted campaign could be launched to outline the programme...
and its benefits, providing training for the new system, and including employees in the planning process.

**Political Barriers:** the evidence from both the literature and the field research highlights the significance of political leadership which opts to heavily involve itself in the e-government adoption process.

**Educational Barriers:** educational issues were also highlighted in both the literature and field research. Interviewees stressed that the lack of education and training negatively influenced the adoption of new technology.

**Resource-based Barriers:** adequate resources are vital for the success of any new project, and the field study found that financial and human barriers influence the adoption of e-government negatively. For instance, the public sectors need to assign additional funds for the advancement and development of technology. Secondly, there is a lack of qualified staff in the public sector to employ new technologies because of inadequate training courses available for public sector employees.

**Regulatory & Legislative Barriers:** concerns relating to regulation and legislation are considered important; participants pointed out that the progress of establishing legal regulations and an appropriate framework should be speeded up. In addition, the lack of security and trust in computer systems are significant elements for individuals.

### 9.5 Limitations of the Research

- The fact that it was a female who conducted this research was a challenge to the conservative culture of Saudi Arabia. Gathering data was most challenging; I had to go to public sectors that were male dominated. Before attempting to analyze the data collected in the field, I had to pay special attention to the specific aspects of the research in hand. Here, I had to think about various issues related to my research and keep them in mind before, during and after the field research; for example, issues such as the restrictions that could limit the researcher from pursuing the objectives of the
As a female living in Saudi Arabia, I am bound by the system and rules of the society. Therefore, I had to respect the culture and follow the accepted system and at the same time make the most of what was available to me.

- There is a lack of literature on technology in Saudi Arabia and the rest of the Gulf, especially in adopting e-government, since it is a new phenomenon. Most available literature relates to developed countries.
- A limited number of social science studies describes and explains the culture and social life of Saudi Arabia.
- A larger sample size in the case study would have been preferable, augmented by samples from other public sectors in the KSA.
- Every region in the Middle East comprises different cultural characteristics. More in-depth studies on the adoption of technology in the Middle East are needed, especially in Saudi Arabia, obviating the need to generalize findings from one Arab area to all the others.
- This research was a challenge since it is multi-disciplinary, encompassing aspects of culture, e-government, and technology. I concur with (Heeks and Bailur, 2007), that e-government is a new and developing field that is advancing fast and attracting researchers from a variety of disciplines. E-government researchers are applying models and concepts that are outside the e-government area, or are creating their own models, concepts, and framework.
- The research was conducted in three Saudi ministries, but additional research in more departments within the same national context would have been preferable. This would have offered a wider perspective providing further views and emphases within the particular context.
- Generalizing the findings to other public or private organizations in KSA or to other countries is going to be difficult, due to the different environments and contexts.
9.6 Recommendations for Future Research

- Raising awareness among public employees is an important step towards benefiting from the adoption of e-government. There should be workshops, seminars, conferences, and training courses to educate staff. Employees need to be knowledgeable about the e-government programme and how it is going to be useful to them. In addition, encouraging employees to participate in the implementation process of e-government would enhance their commitment and knowledge. Awareness and acceptance by the wider society should also be fostered.

- There should be a strategy and plan devised to reduce the lack of awareness and knowledge about the e-government initiative among the employees in the public organization.

- Countries and governments are pressured into adopting technology *willy nilly*. Both developed and developing nations are adopting e-government systems, but attempts to gain quick solutions usually lead to a slowing down at the implementation stage. Developing countries should tailor their systems to fit their particular environments. The development of e-government, therefore, demands a strategic approach that encompasses all aspects of e-government adoption. E-government can be a vehicle for national and public sector advancement if it establishes the requirements in advance, and takes into account the context and real life events in promoting solutions. As a result, technology could offer real benefits to citizens and businesses.

- However, adopting e-government should not be viewed as a quick way of sidestepping traditional bureaucratic administration or other issues associated with the previous conventional system. For the successful integration of e-government, there should be a reorganization of bureaucratic and organizational structures, with data sharing and cooperation among departments. Legislative changes and new management models are required.

- Similarly, a centralized system is not a sufficiently flexible system for e-government, and the public sector should change its working system in adopting changes and transferring from the traditional system to a new, more flexible one.
The resistance to change by employees is one of the key barriers that should be addressed. Policy makers need to break down this barrier by providing training programmes and explaining the importance and benefits of the use of the new technology.

The Kingdom of Saudi Arabia needs to overcome the most significant barriers to the implementation of any technology that is related to human resources and the shortage of qualified and skilled employees.

The KSA should broaden the concept of e-government beyond electronic service delivery.

For the successful implementation of the e-government project, correctly positioned ICT policies should be implemented. The government should have an appropriate legal framework for this process.

In addition, every school, university, and library in the Kingdom of Saudi Arabia should provide computers and Internet access for people to use.

There should be a supervisory organization to administer the implementation of the e-government project.

To achieve cultural change, the government should start with an understanding of the underlying attitudes and values of individuals in society.

More future research into the adoption of technology is needed to highlight and discover obstacles to e-government implementation in the KSA.

Studying interesting cultural issues in connection with the adoption of technology in greater depth in different public sectors in the KSA is needed to enhance an understanding of how technology adoption could be more successful and acceptable in public organizations and the cultural context.

Having legislation and cultural terms and conditions which are acceptable to the people usually ensures trust between the government and its citizens (Brooks et al., 2008). This is extremely significant where national culture and social values influence individuals’ acceptance of technology (Al-Busaidy and Weerakkody, 2008).

The country of Saudi Arabia strongly has supported female education in various fields. Females have been provided with as much education as males and this is even true in terms of scholarship opportunities either locally or
abroad. However, equality in education is not replicated in terms of equality in employment opportunities. The Kingdom is aiming to address this issue but there are still many actions that need to be taken to provide equal employment opportunities for females in the country. This matter is supported by UNDP which pointed out “the development of human capabilities of women but not for their utilization” (Metcalfe, 2006). Therefore, better job opportunities should be provided for females in the country.

- Reforms in the labour market need to be made to create better and/or higher positions and a supportive environment for Saudi females.
- Complete the implementation of various female rights that exist in theory but are not enforced in reality in the labour market.

9.7 Final Word

There is no doubt that the Saudi people’s culture, history and background influence the way they perceive things in life. Despite borrowing ideas, products and technology from abroad, Saudi society still retains its identity and personality, which are complex and full of contradictions. Cultural and social elements in a country like Saudi Arabia are powerful explanations for various actions, behaviours, values, and beliefs. Hence, culture is bound to play a major role in the adoption process of technology in an organization, especially since tradition and religion have always been the pillars of Saudi Arabian history and cultural identity (NewsVOA, 2006).

Taking into account the religious and cultural background of Saudi Arabia, one must understand the difficulties in implementing change. Understanding the role of culture in KSA is vital to an understanding of social change in the country. The structure and role of tradition and norms and religion are crucial in this society. The KSA should try to strike a balance between globalization and its strict background and cultural influences, while striving to retain its values. To gain the full benefit of the e-government project, the different barriers will need to be overcome and various changes made. However, it should be remembered that many aspects of life and work are changing gradually for the
better, especially since 2005 with King Abdullah’s vision for reform in all aspects of life in the country. He is calling for a more balanced concept in all aspects of society.

Therefore, the King and the government are looking to achieve balance, harmony, and at the same time, development and advancement in the country while keeping faith. That is one of the reasons for the establishment of the King Abdulaziz Centre for National Dialogue where they are strengthening national unity through the framework of the Islamic faith and relying on comprehensive national dialogue (KingAbdulazizCenterForNationalDialogue, 2011). The KSA has various contradictions and problems that are present in the country. The national dialogue concept is an effective method of dealing with these issues if used properly. The King Abdulaziz National Dialogue Centre’s aim is to generate an atmosphere in which the different sections of society can carry on a dialogue with ease with the goal of promoting public interest and national unity while following the Islamic faith. This concept should help to regulate different issues that may arise and turn them into a method for managing various types of issues (KingAbdulazizCenterForNationalDialogue, 2011).

In Singapore, for instance, they employed the People’s Action Party (PAP) in order to regulate Singapore’s media and culture, and consequently to direct the thoughts and conduct of Singaporeans (Lee, 2010). Employing this method establishes conceptual link between government and the practice of cultural policy, was created to help citizens to accept the rationales of the government.

The author Terence Lee explores the inherent contradictions present in the Singaporean media, and cultural, and political discourses. Some aspects are close to the situation in KSA in that Singapore’s social and political reality is framed from the cultural status of the Singaporean nation-state within the modern world (Lee, 2010). The country of Saudi Arabia is a desert that has been inhabited by tribes whose lives are based on Islamic teaching. The discovery of oil transformed and influenced the social and cultural life in the country. New influences flooded into the cultural landscape of the country of Saudi Arabia and changed various aspects of life. Somewhat similarly, Singapore was once a fishing village that became the world’s most technologically modern city (Neher, 1999). Therefore, it would be beneficial for the government and policy makers in Saudi Arabia to look at different experiences in other parts of the world. Doing so might provide
insights into new ways of monitoring the country’s progress and help the government to come up with innovative ways of dealing with some of the issues that face the society.

9.8 Conclusion

This final chapter presented an overview of the research process, literature review, research methods, and data analysis. A summary of the findings and outcomes from the case study were provided. The research limitations and the recommendations for future research were then presented. The research study concluded by suggesting a number of key cultural issues that will need to be addressed for successful e-government adoption. The results of this research suggest that the public sector organizations in Saudi Arabia do recognize the significance of the e-government project; nevertheless, the country is currently at a very early stage in the development of electronic services. There is a gap between expectations and the reality on the ground concerning the potential of e-government. Furthermore, the research findings are validated against the literature that addressed culture and e-government in terms of drivers and barriers. It is therefore hoped that this research study will make an initial contribution to the field and guide additional and further research into e-government and culture in the Kingdom of Saudi Arabia.


ADC (2005) Keynote address by Prince Alwaleed bin Talal Alsaud. American-Arab Anti-Discrimination Committee


ALARABIYANEWS (2009) Islam allows mixing of the sexes: Saudi scholar. *Al Arabiya News Channel*


ALRIYADHNEWS PAPER (2012) The Opening of the First Female Government Operational Office

ALSARQALAWSAT (2006) Appointing of six advisory females in the Shura council is faced with controversy. تعيين 6 مستشارات غير متماثلة في مجلس الشورى يثير جدلا في الأسواق الشامية *Alsharq Al-awsat newspaper.*


ARABNEWS (2011a) Growth of women in Islamic finance remains a challenge. Arab News
ARABNEWS (2011b) Women should be allowed to drive: Alwaleed. Arab News.


BBCNEWS (2005a) Saudi rulers issue 'lingerie law'. *BBC News*

BBCNEWS (2005b) Saudi WTO membership approved *bbc News*.

BBCNEWS (2006) Unemployment, the new Saudi challenge 2006/10/04 12:05:51 GMT.


BBCNEWS (2011) Women in Saudi Arabia to vote and run in elections *BBC News Middle East*


BOOZ&CO. (2009) Women's education in Saudi Arabia: the way forward. Booz & Company is a leading global management consulting firm, helping the world's top businesses, governments, and other institutions.


DENZIN, N. & LINCOLN, Y. (2000a) Handbook of qualitative research, Sage Publications, Inc., 2455 Teller Road, Thousand Oaks, California 91320 ($130). Tel: 800-818-7243 (Toll Free); Fax: 800-583-2665 (Toll Free); e-mail; order@sagepub.com; Web site: http://www.sagepub.com/.


HALL, S. Decoding Cultural Oppression.


KAUST (2007) University of Science and Technology (KAUST).


KHALEEJTIMES (2010) Saudi fatwa bars women from cahier jobs. *Khaleej Times online*


MCIT (2006) The Vision Towards the Information Society: The National Communications and Information Technology Plan *MINISTRY OF COMMUNICATIONS AND INFORMATION TECHNOLOGY KINGDOM OF SAUDI ARABIA.*


MOP (1995) 6 DEV PLAN. Ministry of Planning


RIYADHNEWSPAER, A. (2012) Woman...Between Fact & Hope *Al Riyadh Newspaer*


SAUDIGAZETTE (2009) No end to expat labor dependence seen in KSA *The Saudi Gazette*.


THREECONOMIST (2010) At a snail’s pace The Economist.


THOMSONREUTERSNEWS (2009) ANALYSIS-Saudi education lags behind new high-tech university. Thomson Reuters is the world’s largest international multimedia news agency.


WILLIAMS, R. (1985) *Keywords: A vocabulary of culture and society*, Oxford University Press, USA.


YESSER (2009a) The e-government program in the Kingdom of Saudi Arabia.


YESSER (2011) Rules governing private sector participation

The Role of the Private Sector in Applying the e-Government Program. *Yesser*


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10 Appendices

10.1 Appendix I: Review of Relevant Frameworks

This research resulted in identifying a range of articles related to e-government adoption, culture, and organizational culture. The first section is an overview of reviews of different studies that cover e-government and technology, e-government and the public sector, and information systems adoption. The second section is an overview of studies covering culture, organizational culture, and technology adoption and information systems.

*Reviews that relate to e-government and technology, to e-government and the public sector, and to e-government and the public sector information systems adoption*

Table 19: Different Reviews

<table>
<thead>
<tr>
<th>Authors</th>
<th>Level of Analysis</th>
<th>Some concepts and results</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Ernst and Young, 2004)</td>
<td>Organizational</td>
<td>Proposed a four-stage model for e-government implementation. The stages are: Information, One-way interaction, Two-way interaction, and Transaction.</td>
</tr>
<tr>
<td>(Caudle et al., 1991)</td>
<td>Organizational</td>
<td>Managers in the public sector are less inclined to implement new IT than are middle-level managers. The budgeting of technology transfer is new to the public sector. Large government agencies are not as interested in technology transfers as are small ones. The implementation of technology is more flexible with more ‘red tape’.</td>
</tr>
<tr>
<td>(Chan and Pan, 2003)</td>
<td>Organizational</td>
<td>The relationship between stakeholders and e-government projects.</td>
</tr>
<tr>
<td>Davison et al. (2005)</td>
<td>Organizational</td>
<td>Five-stage transition model for e-government. The stages are: Online presence, Basic capability, Service availability, Mature delivery, and Service transformation.</td>
</tr>
<tr>
<td>Authors</td>
<td>Level of Analysis</td>
<td>Some concepts and results</td>
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<tr>
<td>Gasco (2003)</td>
<td>Organizational</td>
<td>E-government projects impact institutional change. ICT implementations affect technological, management, and political aspects in the organization. E-government projects do not take into account if the implementation takes positive or negative direction. Further research needs to be conducted for the institutional restrictions government entities have to encounter.</td>
</tr>
<tr>
<td>Gronlund (2005)</td>
<td>Organizational</td>
<td>For successful implementation of e-government there should be an account for formal politics, administration and civil society.</td>
</tr>
<tr>
<td>(Hackney and Jones, 2002)</td>
<td>Organizational</td>
<td>Proposed a framework as a template for identifying the barriers, objectives, and priorities of e-government agenda. The Framework pointed out some critical issues for e-government consideration. The model could be used for local level authorities in order to recognize opportunities for successful e-government implementation.</td>
</tr>
<tr>
<td>(Heeks, 2003)</td>
<td>Organizational</td>
<td>Proposed a model identified as ‘Factor Model’ to judge e-government success and failure. This model presents the reasons behind success and failure of the projects of e-government.</td>
</tr>
<tr>
<td>Hiller &amp; Belanger (2001) and Moon’s (2002)</td>
<td>Organizational</td>
<td>Hiller and Bélanger proposed a five-stage model for e-government implementation. The stages are: Simple information dissemination (one-way communication), Two-way communication (request &amp; response), Service &amp;</td>
</tr>
<tr>
<td>Authors</td>
<td>Level of Analysis</td>
<td>Some concepts and results</td>
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<tr>
<td>Ho (2002)</td>
<td>Organizational</td>
<td>The e-government paradigm contradicts the traditional bureaucratic paradigm. Key obstacles in implementing e-government are: insufficient staff, lack of funding, and digital divide.</td>
</tr>
<tr>
<td>Janssen &amp; Cresswell (2005)</td>
<td>Organizational</td>
<td>Implementation of systems should be with combination of modifying of individual responsibilities. Cost and benefited should be identified.</td>
</tr>
<tr>
<td>Kawalek &amp; Wastall (2005)</td>
<td>Project</td>
<td>Some aspects of e-government are useful but have limited scope. The bureaucratic model is a barrier in implementation.</td>
</tr>
<tr>
<td>Layne &amp; Lee (2001)</td>
<td>Organizational</td>
<td>Proposed a ‘stages of growth’ model for functional e-government. Four stage development mode of e-government implementation. They are: Cataloguing, Transaction, Vertical integration, and Horizontal integration. Technological and organizational challenges accompanied each stage. Three issues that are fundamental ones to government to take into account to evolve into efficient and effective e-government in support of citizens’ demands: Universal access, Privacy and confidentiality, and citizen focus in government management.</td>
</tr>
<tr>
<td>(Molla and P. S. Licker, 2002)</td>
<td>Organizational</td>
<td>Proposed a framework based on Heek’s work Molla and colleagues (2002), for implementation IT in the public sector in developing countries. Examine the problems and challenges that arise. The challenges were categorized in four key areas which are: Information issues, Information systems issues, Environmental issues, and Organizational issues.</td>
</tr>
<tr>
<td>Moon (2002)</td>
<td>Organizational</td>
<td>Barriers to e-government adoption were found to be: lack of financial resources, staff and professionals, lack of technology, technological updates, and privacy and security.</td>
</tr>
<tr>
<td>Ni &amp; Bretschneider</td>
<td>Governmental</td>
<td>E-government services. Contracting decisions at the national level are</td>
</tr>
<tr>
<td>Authors</td>
<td>Level of Analysis</td>
<td>Some concepts and results</td>
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<tr>
<td>Norris &amp; Moon (2005)</td>
<td>Organizational</td>
<td>Some reports of e-government impacts are depressing. Lack of technology, financial resources, and web staff, and security issues are significant barriers.</td>
</tr>
<tr>
<td>Robey &amp; Sahay (1996)</td>
<td>Organizational</td>
<td>GIS adoption in the organization. IT consequences are socially related and rely on social meanings more than the object and material properties. IT is experienced differently from one country to another. The different IT implementation results in different consequences.</td>
</tr>
<tr>
<td>Scatolini &amp; Cordella (2005)</td>
<td>Organizational</td>
<td>Most significant aspects for IT implementation are: personal and professional training, management competence and vision, sharing accountability for change. Substantial aspect for IT adoption is politically bound. Aspects important for organizational improvement are: human resource management, decision-making, and organizational environment.</td>
</tr>
<tr>
<td>Schildt et al. (2005)</td>
<td>Organizational</td>
<td>Propose a strategic management model for change of implementation of technology. Political risks occur due to complexity of IT. For successful implementation, there should be consideration of different value sets of organizational and political members.</td>
</tr>
<tr>
<td>Scholl (2005)</td>
<td>Multiple</td>
<td>Proposed a framework for information sharing in the public sector. The barriers to the interoperability are organizational, political, legal, social and not technical.</td>
</tr>
<tr>
<td>Siau &amp; Long (2005)</td>
<td>Project</td>
<td>E-government adoption in the public sector is influenced by technological and social factors. The study synthesizes the existing e-government stage models for common frame of reference for researchers and practitioners in the area. Proposed a new e-government stage model that has five stages which are: web presence, interaction, transaction, transformation, and e-democracy. The new synthesized conceptual framework model presents a road map for practitioners to follow in their e-government projects. E-government development is not the same in all countries due to the high or low human development indicator (HDI).</td>
</tr>
<tr>
<td>Authors</td>
<td>Level of Analysis</td>
<td>Some concepts and results</td>
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<tr>
<td><strong>Thong et al. (2000)</strong></td>
<td>Project</td>
<td>Public sector highly resistant to change. Communication is significant for public managers for understanding the importance of change and various challenges. The importance of employing pilot sites for success of e-government adoption.</td>
</tr>
</tbody>
</table>

*Reviews that relate to culture, technology adoption and information systems*

Table 20: Other Different Reviews

<table>
<thead>
<tr>
<th>Authors</th>
<th>Level of Analysis</th>
<th>Some concepts and results</th>
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<tbody>
<tr>
<td>(Al-Gahtani, 2003b)</td>
<td>National Culture</td>
<td>Survey of 1200 Saudi managers and government personnel. Study validated use of Roger’s (1995) five perceived attributes of technology that are: relative advantage, complexity, tri-ability, compatibility, and observe ability.</td>
</tr>
<tr>
<td>(Cabrera et al., 2001)</td>
<td>Organizational Culture</td>
<td>Proposed a multi-system perspective of organizations to stress the interdependencies between organization’s technology, structure, and culture and how these affect the organizational processes and behaviours. The framework establishes three different levels of analysis of organizational performance: the strategic level, the capability level, and infrastructure (or architecture) level. It is a case study based on technology – driven change. The framework should be able to aid and manage change.</td>
</tr>
<tr>
<td>Authors</td>
<td>Level of Analysis</td>
<td>Some concepts and results</td>
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<tr>
<td>(Deal and Kennedy, 1982b)</td>
<td>Organizational Culture</td>
<td>Corporate culture is based on the intertwining of six elements: history, values and beliefs, rituals and ceremonies, stories, heroic figures and the informal cultural network of storytellers, gossipers, whisperers, spies and priests. Four cultural types based on two elements: Feedback speed and Degree of risk. Four cultural types are: Though-Guy Macho culture, Work-Hard and Play-Hard culture, Process culture, and Bet-your-company culture. Culture is one of the important aspects that the success of failure of organization depends on. Proposed four dimensions of culture: Values, Heroes, Rites and Rituals, and the culture network.</td>
</tr>
<tr>
<td>(Ein-Dor et al., 1993)</td>
<td>Extant literature</td>
<td>Conducted a meta-analysis of the extant literature to create a list of the national cultural dimensions affecting IS. Proposed a framework for future global information systems research and implementation. Question related to their work is to which degree the national cultural characteristics influence the adopting countries’ desire to adopt and the success and failure of adoption.</td>
</tr>
<tr>
<td>(Galliers et al., 1998)</td>
<td>National Culture</td>
<td>Case study of government agency in Pakistan. The study examines how cultural factors influence the rate of technology adoption by individuals. Applied growth model of information systems development in organizations. The implementation lags behind due to prevailing cultural values as: low uncertainty avoidance and poor culture for making decisions based on information. The findings stressed the utility and limitations of the stages of growth model in its ability to consider the inherent cultural characteristic.</td>
</tr>
<tr>
<td>(Garfield and Watson, 1998)</td>
<td>National Culture</td>
<td>Case study of government of NII archives across seven countries and employed Hofstede’s dimensions of culture. Structure of national information Infrastructure. National culture is vital in the development of the government. Study the seven-country pointed out that countries will use similar NII development based on the similar cultural values (uncertainty avoidance &amp; power distance).</td>
</tr>
<tr>
<td>(Graves, 1986)</td>
<td>Culture</td>
<td>Discriminated between cultures based on the levels of bureaucracy and managerial-ego drive.</td>
</tr>
<tr>
<td>(Hall, 1973, Hall, 1977)</td>
<td>Organizational Culture</td>
<td>Hall employed Context, Space, and Time to examine individuals from different countries and how they react to various situations. He related context with the space variable, as in Low-Context cultures and High-Context cultures.</td>
</tr>
<tr>
<td>Authors</td>
<td>Level of Analysis</td>
<td>Some concepts and results</td>
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<tr>
<td></td>
<td></td>
<td>Hall related context with the time variable, as in <em>Monochronic</em> time and <em>Polychronic</em> time.</td>
</tr>
<tr>
<td>(Handy, 1995)</td>
<td>Organizational Culture</td>
<td>Linked organizational culture with organizational structure. Proposed four elements of culture: Power Culture, Role culture, Task culture, and Person culture.</td>
</tr>
<tr>
<td>(Harrison, 1973)</td>
<td>Organizational Culture</td>
<td>Classified organizational culture using the degree of formalization and centralizations as a criteria</td>
</tr>
<tr>
<td>(Hasan and Ditsa, 1999)</td>
<td>National Culture</td>
<td>Interpretive field study of ten organizations in Middle East, Africa, and Australia and employed Hofstede’s dimensions of culture. Technology transfer is less adopted in risk-averse cultures (uncertainty avoidance) due to inherently viewing it as risky.</td>
</tr>
<tr>
<td>(Hill et al., 1998)</td>
<td>Organizational Culture</td>
<td>The purpose of the research is to report the progression of study examining the role of culture in the transfer of technology. The study used focused groups, structured interviews, and critical literature review. Better adoption process when staff could provide IT managers with advice (low power distance). Qualitative method used to examine the relationship between information technology transfer (ITT) and the socio-cultural context of the Arab world. Difficulty in adopting IT when specific aspects of culture embedded in information systems is not compatible with the Arab culture. Preference to face-to-face communication that strongly influence the transfer. Strong loyalty and commitment to family and kin group, concept of time, religion, and gender relations.</td>
</tr>
<tr>
<td>(Hofstede, 2001)</td>
<td>Culture</td>
<td>Hofstede’s cultural theory has a framework for defining national culture and that by gathering cultural dimensions. The group is based on geographical location or national boundary. Proposed a four dimension cultural model: Individualism/collectivism, Power distance, Uncertainty avoidance, and Masculinity/femininity. In addition, Hofstede &amp; Bond (1988) added a fifth dimension of culture, which is long-term orientation.</td>
</tr>
<tr>
<td>Authors</td>
<td>Level of Analysis</td>
<td>Some concepts and results</td>
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</tr>
<tr>
<td>(Hofstede, 2001)</td>
<td>Organizational</td>
<td>Proposed six dimensions of organizational culture. It is defined as common practices of symbols, heroes, and rituals that correspond to specific meaning in the organization that they selected from Deal and Kennedy (1982) literature. They are: Process oriented/result oriented, Employee oriented/job oriented, Parochial/professional, Open/closed, Loose/tight, and Normative/pragmatic.</td>
</tr>
<tr>
<td>(Hussain, 1998)</td>
<td>National Culture</td>
<td>Qualitative field study of five Japanese-Brunei joint ventures. Technology transfer could be successful with cultural openness.</td>
</tr>
<tr>
<td>(Loch et al., 2003)</td>
<td>National Culture</td>
<td>The level of technology culturation (exposure and use of technology in other countries); The level of acceptance and use of computers and Internet in the Arab world. The influence of cultural and social norms on the use and adoption of technology.</td>
</tr>
<tr>
<td>(Png et al., 2001)</td>
<td>Organizational</td>
<td>Multinational survey of 153 businesses in 23 countries. Infrastructure adoption and employed Hofstede’s dimensions of culture. High uncertainty avoidance organizations are less likely to adopt information technology Infrastructure. The dimension of power distance was not related to the adoption process.</td>
</tr>
<tr>
<td>(Schein, 1993)</td>
<td>Organizational</td>
<td>Schein considers culture to have a three-layer phenomenon. Organizational culture could be studied on several levels: Artifacts, Espoused values, and Underlying Assumptions.</td>
</tr>
<tr>
<td>(Srite, 2000)</td>
<td>National Culture</td>
<td>Field study of foreign students from 33 countries and employed Hofstede’s dimensions of culture. Individuals from high power distance countries are less creative and do not trust technology.</td>
</tr>
<tr>
<td>(Straub, 1994b)</td>
<td>National Culture</td>
<td>Multi-method study of media use (e-government-mail &amp; fax) comparing U.S. and Japanese respondents. Cultural difference between the two countries results in differences in the rate integration and diffusion of technology. Japan’s workers are high uncertainty avoidance and less likely to employ email since they prefer rich information and have a preference for social forms of communication.</td>
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<tr>
<td>Authors</td>
<td>Level of Analysis</td>
<td>Some concepts and results</td>
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<tr>
<td>(Straub et al., 1997)</td>
<td>National Culture</td>
<td>Survey of airline employees from U.S., Japan, and Switzerland. The study compares Tam model across three different countries. TAM (technology adoption model) did not work as well for Japan as U.S. and Switzerland due to the high power distance, high uncertainty avoidance, collectivism, and assertiveness issues. Finding that TAM is not universally accepted.</td>
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<tr>
<td>(Straub et al., 2002b)</td>
<td>Organizational Culture</td>
<td>Testing and conceptualizing cultural influence model of ITT (information technology transfer). The setting of the study is developing countries (Arab society). Cultural beliefs had strong impact on IT outcomes. National IT development varies from one nation to another. The cultural belief understudy was <em>time</em>; that was tested in the culture influence modeling.</td>
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<tr>
<td>(Trompenaars and Hampden-Turner, 1993).</td>
<td>Cultural</td>
<td>Defined culture based on shared values. Proposed seven dimensions for culture that is different from Hofstede. The dimensions are: Universalism/particularism, Individualism/collectivism, Neutral/affective relationships, Specific/diffuse relationships, Achievement/ascription, Internal/external control, and Perspective on time</td>
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<tr>
<td>(Trompenaars, 1993)</td>
<td>Organizational Culture</td>
<td>The cultural model based on three layer <em>Onion</em> model; core layer, middle layer, and outer layer. Proposed a three-dimension model: Universalism/particularism, Specific/diffuse, and Achievement/ascription.</td>
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10.2 Appendix II: Interview Questions

“The key cultural drivers and barriers that emerge from employees in the organization with the adoption of e-government in the Kingdom of Saudi Arabia”

The full title of the research is “The key cultural drivers and barriers that emerge from employees in the organization with the adoption of e-government in the Kingdom of Saudi Arabia”. The purpose of this research is to investigate the influence of culture on employees when adopting new technology like e-government.

This is a research questionnaire dealing with how employees deal with and feel about the new IS system of e-government. I will conduct in-depth interviews with employees who are using the system in the organization.

Thank you
The researcher
Ghada Alsowayegh
PhD student at the University of Manchester
Sponsored by the Ministry of High Education in Saudi Arabia
Alsowayegh.Ghada@postgrad.manchester.ac.uk

What is E-government?
According to Wikipedia (2007), while e-government is often thought of as “online government” or “Internet-based government,” many non-Internet “electronic government” technologies can be used in this context.
“E-Government” refers to 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. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions” (The World Bank, 2007).
Confidentiality and anonymity
For my interviews confidentiality is guaranteed to all participants. In addition, there will be no identification by name or by giving a specific position.

The Questions:

**Theme One: Personal Information**
1. What is your current position?
2. How many years of working experience do you have?
3. What is your monthly income range?
4. Your age range?
5. What is your education?

**Theme Two: Computer Experience**
1. Do you have your own computer at work?
2. Do you work on a computer? Yes/No, If No go to question #5
3. How much time do you spend on the computer at work?
4. How do you use the computer at work?
5. Do all employees have their own computers and use them to perform tasks?

**Theme Three: Internet Experience**
1. Have you ever used the Internet? Yes/No, If No go to question #5
2. How often do you use the Internet daily?
3. Where do you use the Internet mostly?
4. For what mostly do you use the Internet?
5. To what extent do the computer and Internet influence the Saudi family?
6. In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?
7. Are the computer and Internet used by all levels of society in Saudi Arabia?
Theme Four: E-Commerce Experience

1. Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?
2. Why is that (if using, or not using)?

Theme Five: E-government System

1. If faced with a problem in the system the employee should go to whom to solve it?
2. How do employees exchange and share information in order to understand the e-government system?
3. How does the e-government system affect your work?
4. How does the e-government system affect your relations with colleagues?
5. How is this system different from the previous system?
6. What are the advantage and disadvantages of using the e-government system?
7. Do you think that there is a relationship between the use of e-government application and the amount of face-to-face communication?
8. Do you think that language is an obstacle in applying the system?
9. Why in your opinion do employees refuse to use the new application (e-government)?
10. Do you think that e-government or any new technology is accepted easily in the organization?

Theme Six: Training Experience

1. Did you receive any training on computer applications?
2. Did you receive any training on e-government application?
3. Did you take any courses in the English language?
4. If you got any training in any of these courses did you learn and benefit from them?
Theme Seven: Work environment

1. How do you deal with difficulties in your job?
2. Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?
3. What motivates you in the job, and do you feel motivated in your job?
4. Do you feel appreciated in your job?
5. If you have uncertainties in your job, how do you deal with them?
6. How do you deal with surprises in your job?
7. How do you deal with challenges in your job?
8. How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?
9. In your opinion, does the loyalty of employees go toward a person, or a group, or to the organization?
10. How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?
11. In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Theme Eight: Culture

1. Do you think that the value of time is considered the same in the public and private sector?
2. When you have time or on the weekend where do you prefer to spend your time?
3. In your opinion, is family a significant aspect in Saudi culture?
4. In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Theme Nine: Organizational Culture

1. How would you describe the organizational culture’s atmosphere in the workplace?
2. Is there any grouping in the organization?
3. How did you get your job?
4. Are there any aspects that could be tackled to make the organization a better environment?

**Theme Ten: Female issues**

1. Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?
2. How do you and other employees feel about having female employees working with you in the same organization?
3. Do you believe that the e-government system would offer females more job opportunities?
4. From your own point of view, do you think that women can play a significant role in society and in the development of the country?
5. In your opinion what are the advantages and disadvantages of women’s jobs?
6. Could the working female provide additional support for the family beside the contribution of the working male in the family?
7. How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.
8. Do you think that negative cultural beliefs or not understanding the religion that is engrained in the society are responsible for delaying Saudi female advancement in various aspects of life?

**Theme Eleven: Communication**

Different methods of communications: Face-to-face, telephone, email, SMS, or fax.

What method do you prefer for:

a. Personal communication?

b. Family communication?

c. Communication with friends?

d. Social communication?

e. Business communication?

f. Communication with employees?

Is there anything that you would like to add or ask?

**Thank you**
10.3 Appendix III: Interview Questions and Answers

Interview number: 01

Theme One: Personal Information

Researcher: What is your current position?
Participant # 01: I am an executive secretary at the financial and administrative affairs at the Ministry of Higher Education.

Researcher: How many years of working experience do you have?
Participant # 01: I have eight years of experience

Researcher: What is your monthly income range?
Participant # 01: It is 5,000 SR (Saudi Riyals).

Researcher: Your age range?
Participant # 01: I am 32 years old.

Researcher: What is your education?
Participant # 01: I have a bachelor’s degree

Theme Two: Computer Experience

Researcher: Do you have your own computer at work?
Participant # 01: I have my own computer that I use actually for long hours at work.

Researcher: Do you work on a computer?
Participant # 01: Yes, I do use my computer.

Researcher: How much time do you spend on the computer at work?
Participant # 01: I do spend long hours in performing different activities at work, around six hours a day.

Researcher: How do you use the computer at work?
Participant # 01: I use it in printing, typing, and copying of documents and I use the Internet for doing a lot of research.

Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 01: No. Not all employees at the sector.
Theme Three: Internet Experience

Researcher: Have you ever used the Internet?

Participant # 01: Yes.

Researcher: How often do you use the Internet daily?

Participant # 01: As I mentioned before I do use the Internet. I use it for around four hours.

Researcher: Where do you use the Internet mostly?

Participant # 01: Mostly I use the Internet at work. It is fast and easy so I could do a lot in less time.

Researcher: For what mostly do you use the Internet?

Participant # 01: I check my emails on a daily basis as I do a lot of research to explore different matters that I want to know about.

Researcher: To what extent do the computer and Internet influence the Saudi family?

Participant # 01: The family is affected positively by the computer and Internet.

Researcher: Can you give me an example of this positive influence?

Participant # 01: I can tell you that now I am teaching my wife to use the computer and the Internet to be able to use them.

Researcher: Did she enjoy that or benefit from you teaching her?

Participant # 01: Currently, my wife for example is learning a lot from the Internet and using the computer for many things. It is amazing she is researching many areas and learning new things and getting new knowledge and she is becoming very skilful in using them.

Researcher: What about the negative influence of the computer and Internet?

Participant # 01: I think that now by the use of computer and Internet the problem is centred around the fact that everyone is apart from each other because we are so busy using this new technology.

Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 01: Nowadays, with the heavy use of Internet and depending on the computer for doing various things, there seem to be some negative issues that came up on this issue.
**Researcher: Can you elaborate?**

People now are being isolated because the heavy use of the computer and Internet and less social communication is occurring. Even one can see now that the members of one household are busy because the intensive access to Internet at home.

**Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?**

Participant # 01: From my own experience I can tell that most levels of the society do use the computer and Internet.

**Researcher: Can you tell me from your experience how you sensed that in the society?**

Participant # 01: A very strong evidence for that is that even the uneducated are using the Internet for stocks; they only know how to get to stock sites for buying and selling stocks online.

**Theme Four: E-Commerce Experience**

**Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?**

Participant # 01: Yes, I do many things using the Internet. I shop and explore different products. I search through the net for so many subjects that I am interested in. Also, I pay bills online as it helps in saving time and it’s convenient.

**Researcher: Why is that?**

Participant # 01: It helps me in a way to expand my knowledge about so many things I am interested in. It is a great tool to help me in saving my time and accomplish things in an easy and fast manner.

**Theme Five: E-government System**

**Researcher: If faced with a problem in the system the employee should go to whom to solve it?**

Participant # 01: The ministry of technology and communication is responsible for overcoming problems in the e-government system. However, I have not used this system yet.
Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 01: Employees exchange knowledge and information by training courses that are organized by the public sector or the private sector.

Researcher: How does the e-government system affect your work?

Participant # 01: I think that this system is going to be useful when applied.

Researcher: How does the e-government system affect your relations with colleagues?

Participant # 01: I do not think that this system or any other technology system has affected my relations with other employees. However, I can say that the internal network system made work much easier and faster.

Researcher: How is this system different from the previous system?

Participant # 01: Here in this department we did not apply the e-government yet, so for me personally I did not use it. However, I can say that applying the intranet in the sector and having the internal network system helped us in doing our job faster and much more efficiently.

Researcher: What are the advantage and disadvantages of using the e-government system?

Participant # 01: Since I did not use the system I cannot say exactly.

Researcher: Do you think that there is a relationship between the use of e-government application and the amount of face-to-face communication?

Participant # 01: I see that the system will make tasks and work much better organized; in addition, it will allow employees to communicate electronically which will make the interaction among employees more relaxed and more convenient.

Researcher: Do you think that language is an obstacle in applying the system?

Participant # 01: The language for most will not be a problem.

Researcher: Why is that?

Participant # 01: The system will usually be in the Arabic language for local use in general.

Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 01: Employees don’t use the system because of fear of the unknown which is evident in the public sector.
Researcher: Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 01: Yes, I think that e-government should be in some way accepted.

Researcher: Why do you say that?

Participant # 01: Because of the other countries who applied this system before us and they in general are accepting the system.

Theme Six: Training Experience

Researcher: Did you receive any training on computer applications?

Participant # 01: Yes, I got some training courses that I benefited from.

Researcher: Did you receive any training on e-government application?

Participant # 01: No, I did not get any training on the e-government system.

Researcher: Did you take any courses in the English language?

Participant # 01: Yes, I took some courses.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant # 01: Yes, for sure I did benefit from these courses around 95%.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?

Participant # 01: I deal with them by having an optimistic view and by producing more with my colleagues.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant # 01: The technological and electronic equipment helped in doing business easier and faster as I mentioned before.

Researcher: What motivates you in the job, and do you feel motivated in your job?

Participant # 01: I feel motivated at the job because of my friendly colleagues around me. I deal with surprises and challenges by looking at and searching for different solutions that could be applied to help in dealing with the challenges and surprises.
**Researcher:** Do you feel appreciated in your job?

Participant # 01: Yes, I do feel motivated. I get appreciation from superiors and from my colleagues. In addition, my first thought is to do that for my God and serve my religion and my country and to be loyal to what I am paid to do.

**Researcher:** If you have uncertainties in your job, how do you deal with them?

Participant # 01: I deal with uncertainties as they occur and try to reach applicable solutions.

**Researcher:** How do you deal with surprises in your job?

Participant # 01: I deal with any surprises at the job and find the best way to deal with them.

**Researcher:** How do you deal with challenges in your job?

Participant # 01: I try to have high spirits and view these challenges from different perspectives.

**Researcher:** In your opinion does the loyalty of employees go towards a person, or a group, or to the organization?

Participant # 01: The loyalty of employees is towards a group, and I think that as a result means loyalty to the sector.

**Researcher:** Why do you think that, or what is the reason for that?

Participant # 01: Fine. It is kind of embarrassing talking about that but it exists and no one can ignore that. People do that in the organization to make sure their benefits run smoothly and their business and own back are taken care of.

**Researcher:** How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant # 01: No problem in accepting orders from higher authority.

**Researcher:** In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 01: The physical atmosphere is appropriate for the workplace and I feel relaxed mostly but stressed sometimes with the heavy workload.

**Theme Eight: Culture**

**Researcher:** Do you think that the value of time is considered the same in the public and private sector?

Participant # 01: I think that time should be considered for sure. However, time has no value for most employees, except for those who want to achieve success at the job.
Researcher: What is your opinion?

Participant # 01: Working in the public sector is the same as working in the private sector. And I personally describe this situation as a train moving fast so whoever wants success must ride it and whoever does not want to change will not ride it and so the train will leave and they will not be successful and stay years behind.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 01: I like to spend weekends with family. However, that does not always happen since I sometimes work at weekends.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 01: Family for sure is important in our culture. It is where everyone gets their emotional boost that everyone needs. And it motivates individuals always to be active and be confident at the job.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 01: Reasons for not advancing in the country are: laziness in developing oneself, being dependent on others and not thinking of society’s advancement, and selfishness and ignoring others.

Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 01: I think that the organizational cultural environment could be described as being cooperative. I feel that the people around me in the department are cooperative and supportive especially my colleagues.

Researcher: Is there any grouping in the organization?

Participant # 01: the grouping aspect is evident in a lot of departments in the organization. It is something that one sees happening in the organization a lot.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 01: There are different ways to get a job in the public sector in terms of applying for a job, being qualified, knowing people, and having relatives. Taking all these ways, either one of them or two together could be a way to get a job; however,
mostly getting a job is through ‘who you know’ and nepotism and then qualifications could be an additional value.

**Researcher:** Are there any aspects that could be tackled to make the organization a better environment?

**Participant # 01:** My opinion is that the sector could be better if everyone performs their job as required and executes it on time. In addition, to have continuous monthly assessments to evaluate the performance of employees and to know the gaps and to find ways to overcome them.

**Researcher:** Why do you think that this aspect is important?

**Participant # 01:** I say that because I feel that a lot of time is wasted and if any job is done through managing time better work quality and outcome will be better.

**Theme Ten: Female issues**

**Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?**

**Participant # 01:** The work is limited for women in specific areas and this is guided by Islamic rules and some negative cultural beliefs and traditions.

**Researcher:** How do you and other employees feel about having female employees working with you in the same organization?

**Participant # 01:** There is no objection to women’s work. However, not all employees respect the women at the job and want to entertain themselves with them. Men always want to take advantage of women when they are around - that’s my opinion. From my own personal experience, I have not seen or heard any male employees dealing with the female employees in work matters only where there are other matters that are not related to the job”

**Researcher:** Do you believe that the e-government system would offer females more job opportunities?

**Participant # 01:** The e-government system will not create jobs either for men or women where it will need fewer employees to do the same previous jobs.

**Researcher:** From your own point of view, do you think that women can play a significant role in society and in the development of the country?

**Participant # 01:** I strongly believe in the role of women in society. She is half of the society and the country could benefit a lot from having women’s new perspective on life.
Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 01: I think that the greatest disadvantage from my own experience is the absence of the mother for a long time away from her children and having less time for the family.

Researcher: What about the advantages?

Participant # 01: There are various advantages for the working of females and it depends on the goals of women working.

Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 01: That depends on the situation of each family. Financially women do provide for the family. She is becoming like an additional member who could provide as men do.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 01: That depends on the real and genuine awareness of the benefit of the female job. Therefore, if the goal of females working is only to be like other countries and trying to follow them without planning that will create many problems that have no solutions.

Researcher: Do you think that negative cultural beliefs or not understanding the religion that is engraved in the society are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 01: I think that some of the negative old traditions could be blamed for the lack of advancement of women in our society. In addition, another reason is the misunderstanding from the society’s side of the role of the working female.

Theme Eleven: Communication

Researcher: What are the different methods of communications: Face-to-face, telephone, email, SMS, or fax?

What method do you prefer for:

Personal communication?

Family communication?

Communication with friends?

Social communication?
Business communication?

Communication with employees?

Participant # 01: I use different methods for communication depending on the situation. However, I mostly use the phone with my friends and family besides also being up close and personal. Also, now, a lot of SMSs are heavily used between friends and relatives. At work now we use emails and phone calls. However, for important meetings, face-to-face communication is used. Here is a summary:

Personal communication: Face-to-face and telephone.
Family communication: Face-to-face, telephone, and SMS.
With friends: Telephone and SMS.
Social communication: SMS and emails.
Business communication: Telephone emails.
With employees: Telephone, emails, and fax.

**Researcher: Is there anything that you would like to add or ask?**

Participant # 01: I hope that you do fine in your studies. And maybe, this PhD research and its results would help to develop our society and especially to develop ourselves.

**Interview number: 02**

**Theme One: Personal Information**

**Researcher: What is your current position?**

Participant # 02: Director of Financial Affairs at Saudi Geological Survey.

**Researcher: How many years of working experience do you have?**

Participant # 02: Twenty Years of experience.

**Researcher: What is your monthly income range?**

Participant # 02: I earn around 16,000 SR (Saudi Riyals).

**Researcher: Your age range?**

Participant # 02: I am forty four years old.

**Researcher: What is your education?**

Participant # 02: I am a university graduate.
Theme Two: Computer Experience
Researcher: Do you have your own computer at work?
Participant # 02: Yes.
Researcher: How much time do you spend on the computer at work?
Participant # 02: I spend most of the time working on my computer.
Researcher: How do you use the computer at work?
Participant # 02: I use the computer at work to conduct different tasks that are related to the job.
Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 02: Yes, they do.

Theme Three: Internet Experience
Researcher: Have you ever used the Internet?
Participant # 02: Yes
Researcher: How often do you use the Internet daily?
Participant # 02: I use the Internet for around three hours.
Researcher: Where do you use the Internet mostly?
Participant # 02: I mostly use it at home.
Researcher: For what mostly do you use the Internet?
Participant # 02: I mostly use the Internet for checking my emails, looking at things that are of interest, to gain knowledge, and search for different things on the web.
Researcher: To what extent do the computer and Internet influence the Saudi family?
Participant # 02: The Internet and computer do greatly influence the family positively and negatively. The positive aspects are that nowadays the younger generation are able and know how use the Internet for knowledge and information, the development of educational skills, and to communicate with friends, colleagues and relatives. In addition, participants in blogs and forums can give opinion in privacy and there is no need to be conservative. Furthermore, the negative aspects are the addiction and obsession to using the Internet and not being able to leave it even for a short period of time. Also, the young are involved in many forums that are sometimes not useful for
their education, also not participating with family events and visits, and not exercising and being susceptible to health problems which are showing now in their health.

**Researcher:** In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 02: Yes, as I explained previously. Nowadays, the computer and Internet are really affecting the family communication where you find that the people consume most of their time using Internet and being away from the members of their house hold and other close family.

**Researcher:** Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 02: I think that computer and Internet are used by all society levels. It is essential for the educated to always develop their skills to learn and to use these skills for the job and their own benefit. In addition, the use of IPO (Initial Public Offering) stocks at banks in the financial market influenced the entry of various individuals from different backgrounds and levels to the technology field. For example, the Bedouins are efficient in the use of the Internet technology only for the purpose of using it in the stock market and they got courses to train for employing this new technology. When dealing with money and stocks people would like to learn to make money online through the Internet.

**Theme Four: E-Commerce Experience**

**Researcher:** Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 02: Yes.

**Researcher:** Why is that (if using, or not using)?

Participant # 02: I do that because the ease of use via Internet, paying bills without problems of going personally, and buying online is more convenient and it arrives fast.

**Theme Five: E-government System**

**Researcher:** If faced with a problem in the system the employee should go to whom to solve it?

Participant # 02: I am not using e-government system currently, however, our sector is using it in some departments and it is still new and not all are using it. In addition, our
sector does have periodical meetings with the e-government project managers to check our usage of the system.

**Researcher:** How do employees exchange and share information in order to understand the e-government system?

Participant #02: To gain knowledge about any new system, training and the on-going development of skills are necessary. Also, training helps in avoiding the fear of using the system. In addition, the encouragement of the boss helps to allay the fear of the system.

**Researcher:** How do the network system and technologies affect your work?

Participant # 02: It affected me positively since it is an easy and fast medium for communication. In addition, the e-government would let most of the data become available and accessible in the system which would bother some who are used to having the information and people asking to get it. The reason would be that the person feels that he is no longer in power by holding data. Also, this aspect would mean that there will be less ambiguity and work would be more transparent in the sector.

**Researcher:** How does the e-government system or electronic system affect your relations with colleagues?

Participant # 02: The network helped in a positive way. It became much easier to communicate with colleagues at the job and less time was wasted.

**Researcher:** How is this system different from the previous system?

Participant # 02: The new system is fast but it is still new and not all are using the system.

**Researcher:** What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 02: The advantages are: the ease of use and the precise information, the ease of getting and retrieving data when needed, also, it is understandable by the employees, fewer mistakes are made because of the system, improving the quality of the job and the employees being aware of and knowledgeable about the system. The system helps the government to attract investments in the country and by marketing for goods and services and competition through the Internet, the system helps communication between foreign and local companies and communication with the government by executing procedures fast and easy without the need to go physically to the government sector. However, the disadvantages are: fear of making mistakes employing the new...
system, the new system could be exposed to hackers, exposing secure information, and the high cost of employing electronic programs.

**Researcher:** Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 02: Usually the face-to-face communication becomes less due to the use of the network system. However, we still use the paper media in our work to communicate also.

**Researcher:** Do you think that language is an obstacle in applying the system?

Participant # 02: No the language is not a problem because the system will be in the Arabic language for the users in the government sector.

**Researcher:** Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 02: Fear of falling into mistakes because of not knowing the system and not feeling confident in oneself, and senior employees not accepting the change and employing a new system.

**Researcher:** Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 02: At first, there will be problems; however, in time employing and using the system becomes easier. At first other governments in different countries who employed e-government faced problems but then they overcame them and are now working successfully now such as Dubai government. I understand that at the beginning they faced problems but I think now they are using e-government and benefiting from its services.

**Theme Six: Training Experience**

**Researcher:** Did you receive any training on computer applications?

Participant # 02: I got training at my job by going to a training centre. However, the employment at work was more beneficial.

**Researcher:** Did you receive any training on e-government application?

Participant # 02: Did not get training yet in the program, but the system was introduced to us.

**Researcher:** Did you take any courses in the English language?

Participant # 02: Yes.
Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant # 02: I benefited from training courses a lot.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?

Participant #02: By being patient and not doing something hastily, and trying to overcome obstacles and consider work stake.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant #02: By using computers and using different specialized software.

Researcher: What motivates you in the job, and do you feel motivated in your job?

Participant # 02: No there is no motivation and I don’t feel motivated at work. I feel motivated when I accomplish my job.

Researcher: Do you feel appreciated in your job?

Participant # 02: By a few only.

Researcher: How do you deal with surprises in your job?

Participant #02: Trying to be cool and not doing anything hasty.

Researcher: How do you deal with challenges in your job?

Participant # 02: I do deal with it in a normal matter and by the encouragement of colleagues.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant # 02: It is different for everyone; some are loyal to their boss and others to friends in the sector. But most of them are loyal to the sector.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant # 02: I do accept it if it goes by the rules and procedures of the sector; however, I do not accept something that does not follow the rules of the sector.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 02: It is different from time; sometimes it is stressful because of workload.

Theme Eight: Culture
**Researcher:** Do you think that the value of time is considered the same in the public and private sector?

Participant # 02: Time is always important; however, because of the boring routine of the public sector, time has not much value. In the private sector every hour counts and has its value.

**Researcher:** When you have time or at the weekend where do you prefer to spend your time?

Participant # 02: Family and friends.

**Researcher:** In your opinion, is family a significant aspect in Saudi culture?

Participant # 02: Family is very significant in our culture. The employee feels sturdy because of the family and it shows on the work, especially when the family is understanding and encouraging.

**Researcher:** In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 02: First, the government system: the legislator in the government (the ministry committee) is responsible for advancing the country economically and socially. Developing rules and procedures can be updated with advancement happening in the country. Second, the media and influential religious people who have the experience in various levels to spread awareness, could help in showing the government and citizens how to do what is beneficial for society and necessarily demands of life for advancement that do not contradict with our religion. Thirdly, the citizens should be aware of what is going around them and try to advance and be positive in the society. And the citizens’ loyalty should be for our God and country and advancement in the society starts with the family.

In addition, the society should be open minded about new aspects that occur in the country and think about it and how it is going to benefit them instead of rejecting for no reason. I remember when the satellite was first introduced a lot of rejection happened and people were afraid that it would harm them.
Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 02: Being cooperative depends on the mood and how the employer could benefit and sometimes it is hostile and aggressive. Employees do count mistakes of others to use later for themselves.

Researcher: Is there any grouping in the organization?

Participant # 02: Actually, there is grouping in the public sector and other sectors also. Most employees do have a group of people that they are a part of and work for their benefit.

Researcher: How do employees get a good position in the public sector?

Participant # 02: First case scenario, the employees have a good education and apply for a job and get interviewed then go under training for three months and after that the sector decides either to keep or not. Second case scenario, by knowing people who are influential who can make the decision to employ individual.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 02: There are several areas that could help and most importantly is the religious responsibility. Also to have a good and relaxing environment and a good brotherhood between colleagues, updating the rules and procedures and making it more flexible, having tools that help workers to work and advance their skills, having motivations for employees for conducting tasks properly, encouraging employing, and to raise the feeling of loyalty for the sector and country from employees.

Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 02: Yes, there are areas where the society needs women and cannot work without them as in education, training, and health. Women do work from long ago going back to the prophet’s wife who also worked. The society and country need women and cannot do without them here. The Saudi government laid the groundwork for Saudi women to work and learn and that goes back to the beginnings of the country when education of women was started at the time of King Faisal.
Researcher: How do you and other employees feel about having female employees working with you in the same organization?

Participant # 02: Employees are different in accepting the work of women; some think that it is not needed or important where the sector does not need them to work there. They don’t want the mix of men and women at the workplace. While others encourage women’s work especially in the areas where they show expertise and success in some areas. The different point of views of employees depends on their ideology, background and cultural background.

Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 02: No, because the new government system will need fewer employees in the sector.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 02: Yes, women play an important role in the family and raising the kids and guiding them. Women are the centre of the family. The educated family plays a part in educating the children and showing them their religion and the family. As a result this influences other families and neighbours. Therefore, mothers are significant and the core of the family.

Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 02: The advantages: the role of women in developing the country, women acquiring knowledge and new fields, providing for the family, building an educated family, and women would be independent and self-confident. Furthermore, the disadvantages: women getting into jobs that are not appropriate for them and does not suit their body and strengths, and the mix of men and women in the workplace.

Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 02: Yes, having extra financial help in the family, and on the other hand, to have a cooperative atmosphere with the father in the family, having better and more developed children intellectually for an educated generation, and providing a future for the kids.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.
Participant # 02: The policy of the government is responsible for supporting women in the labour market. Therefore, when the government adopts an encouraging policy and opening various jobs on different levels in the labour market and protects women from extremists. Need to provide training and scholarship for women to be able to work in the market. And doing the opposite of the above will stop women from advancing.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 02: Women ignoring chances of advancing and developing ability academically and in the job place. Also, not working as a team member, and just accepting the society’s point view towards the women’s work, and to have a balance between work and family.

Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant #02: I use all of these different types of communication at different times and different purposes.

Personal communication: Face-to-face, telephone.

Family communication: Face-to-face, telephone.

Communication with friends: Face-to-face, telephone, and email.

Social communication: Face-to-face, telephone, and email.

Business communication: Face-to-face and telephone.

Communication with employees: Face-to-face, telephone, emails, and fax.

Researcher: Is there anything that you would like to add or ask?

Thank you.

Interview number: 03

Theme One: Personal Information

Researcher: What is your current position?

Participant # 03: I am the head of unit at the financial affairs department of accounting.

Researcher: How many years of working experience do you have?

Participant # 03: I have ten years of experience.
Researcher: What is your monthly income range?
Participant # 03: my monthly income is 8,000 SR (Saudi Riyals).

Researcher: Your age range?
Participant # 03: I am thirty one.

Researcher: What is your education?
Participant # 03: I have a Master Degree.

Theme Two: Computer Experience

Researcher: Do you have your own computer at work?
Participant # 03: I have my own computer.

Researcher: Do you work on a computer?
Participant # 03: I do work using the computer.

Researcher: How much time do you spend on the computer at work?
Participant # 03: I work for five hours using my computer at work.

Researcher: How do you use the computer at work?
Participant # 03: I use my computer to supervise work procedures, financial reports, and other aspects of work.

Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 03: In this department of accounting all employees have their own computers because of the requirements of the job and most of other employees in the organization have computers connected to the organization network.

Theme Three: Internet Experience

Researcher: Have you ever used the Internet?
Participant # 03: Yes, I do.

Researcher: How often do you use the Internet daily?
Participant # 03: I use the Internet for around four hours.

Researcher: Where do you use the Internet mostly?
Participant # 03: I use the Internet mostly at home and when needed at work.
Researcher: For what mostly do you use the Internet?

Participant #03: I mostly use it to check my emails, reading newspapers, research and information.

Researcher: To what extent do the computer and Internet influence the Saudi family?

Participant # 03: The computer and Internet updates with all new information and news. Also, to check up everything new in areas they are interested in. However, there are some negative aspects such as: the long-time people spend using the computer and Internet, and the family is influenced badly because the kids are spending a lot of time using the computer instead of playing with their brothers and sisters in the house.

Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 03: Yes, as I mentioned previously computers and Internet could be a reason for some families having less time to communicate with each other. That is because every one of them is busy in her/his virtual world on the Internet.

Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 03: The computer and Internet are used at mostly all society levels because they are related to conducting work and also could be used for entertainment. In the past they were used by educated individuals only, however, currently many people use them and the reason for that is the ease of programs and applications have got a lot of people from different society levels to use the computer and Internet.

Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 03: I prefer the use of Internet for shopping and paying bills, and would always use it if I had the opportunity to do so.

Researcher: Why is that?

Participant # 03: I buy products and services always online. I usually buy products that I know and do not need close examination.

Researcher: And why do use this method?

Participant # 03: And I do that for the main reason of the effortless making of payments and it is simple that I can do it anywhere, at any time, and anywhere around the world.
Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 03: Here we did not use the e-government system program “Yasser” yet. However, I know that the system is supported by Communication and Information Technology Commission (CITC).

Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 03: The employees exchange knowledge through workshops and seminars and by doing that employees enrich their knowledge and skills.

Researcher: Researcher: How do the network system and technologies affect your work?

Participant # 03: The Internet affected my work in a positive way because of the shortcuts that it provides me through the process of research and getting the information I need or in solving problems I encounter at work.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 03: It affected my relations with colleagues positively with exchanging knowledge among us and the interaction of different interests. In addition, we can also negotiate different subjects and topics that are submitted and give feedback and comments.

Researcher: How is this system different from the previous system?

Participant # 03: The new system should offer speed of executing procedures in different public sectors where it could take weeks and months with no explained reason; also, the trouble-free method to follow up on your application or service at any time. That is the opposite of the traditional old systems that are controlled by bureaucracy and long procedures. That is different than the system used now, since the new system not yet applied, is complicated and controlled by the bureaucracy of the organization in procedures and the lengthy time to accomplish.

Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 03: The positive aspects of the use of the new system are the saving of time and effort and the saving of money. The negative is that employees think that it is difficult to use.
Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 03: I think that at the first stage of implementing the system we would be seeing each other face-to-face for a while, however, with the development of the system and employees being more accustomed to the electronic system little by little we will be seeing each other less and when advancing more we could discard the face-to-face communication and things will be done electronically and through the Internet and emails if needed.

Researcher: Do you think that language is an obstacle in applying the system?

Participant # 03: I do not think that it is going to be a problem when time passes by but it could be a problem at first when applying the system. However, with the new advancements in different technologies and the many softwares available in the Arabic language this will not be a problem. Also, the English language is not considered to be an obstacle since the program will be in the Arabic language.

Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 03: Fear is considered to be a very important factor for employees refusing the system.

Researcher: Why do you think that?

Participant # 03: I think that because there is information that has been spread around here that describes the difficulty of using the system and the difficulty of editing and fixing mistakes that are used electronically. As a result, employees are fearful of doing and repeating mistakes among staff and superiors. In addition, there is the lack of knowledge and not knowing how to handle and deal with it accompanied by the lack of will sometimes in acquiring knowledge in learning the system.

Researcher: Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 03: No, any new system will not be applied easily in the organization even if the system is adopted by the government for speed and ease of different operations.

Researcher: What is the reason for this issue in your opinion?

Participant # 03: The main reason is because of two problems; the first is the nature of the bureaucratic procedures that is currently available which is not easy to get rid of, and the second thing is the resistance to change by the employees of the public sector.
Theme Six: Training Experience

Researcher: Did you receive any training on computer applications?

Participant #03: Yes, I took various courses here at the job and others at different institutions.

Researcher: Did you receive any training on e-government application?

Participant #03: No, I did not get any training on the e-government system; however, I got training in some different accounting programs and financial software. And these different systems and programs could be linked to other departments when needed.

Researcher: Did you take any courses in the English language?

Participant #03: Yes, I took different levels of English language courses.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant #03: Yes, I did benefit from these different courses a lot.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?

Participant #03: I deal with difficulties in the workplace by taking the advice from my superiors in addition to going back to the rules and legal procedures of the sector. In addition, I also seek advice and get some recommendations from colleagues in other public sectors since the accounting and financial procedures do follow the same method and system.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant #03: In the past I did the reports on paper that takes a lot of time to finish and follow. They were a big number of different file sizes that took a lot of time to organize and associate together. Currently, I use different financial and accounting software that helps me in completing my work fast and easy. In addition by the use of the new system we were able to transfer all the different folders and files into electronic forms.

Researcher: What motivates you in the job, and do you feel motivated in your job?

Participant #03: For me the first motivator at work is the quality of staff I deal with everyday which is friendly and knowledgeable from whom I learned, thanks to God, many new skills and practical experiences. Also, the other motivator is that there are
some close colleagues who assisted me in gaining and learning new experiences and knowledge in a short time.

**Researcher: Do you feel appreciated in your job?**

Participant # 03: Yes, I do feel appreciated thanks to God.

**Researcher: How do you deal with surprises in your job?**

Participant # 03: Dealing with surprises depends on the type of the surprise and its influence in the job. For example, there are some minor mistakes that happen from time to time that could be dealt with and adapted easily and resolved. However, there are other mistakes that are huge fatal mistakes on different levels as in the financial operations, management procedures, and legal issues and this type I always try to avoid and transfer to my superiors and experts in the field.

**Researcher: How do you deal with challenges in your job?**

Participant # 03: I do accept challenges as much as I can with strength thanks to God. Also, I consider these challenges an opportunity and a way to learn and add more knowledge.

**Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?**

Participant # 03: I think that the loyalty is different from one employee to another. There are some employees who are loyal to a superior person who assisted them previously in some matter which make them loyal to them forever. Also, there are others who are controlled by the ‘grouping’ and their loyalty is toward the group. And I do not know if there is any loyalty to the public sector or not since the sector I work for follows the rules and procedures of the Saudi Labour Law and the employee could easily resign and work in a different sector.

**Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?**

Participant # 03: I accept orders from superiors with ease in most of the daily financial operations which is our core work and that comes from my full trust in his knowledge and experience in these matters. However, sometimes I do have a different point of view in the management procedures from his.
Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 03: Thanks to God most of the time I do feel relaxed in conducting my job and mainly that is because of flexibility of the daily work that follows an organized system for daily routine work. However, there are times when there is high stress at the job which influences the employees negatively and results sometimes in stress and pressure. Also, there are other times when employees are affected by exterior stress that also influences them negatively in doing their daily tasks.

Researcher: What about the physical working conditions are they appropriate?

Participant #03: The workplace is suitable for work with the needs of the office and the technology needed.

Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 03: Of course time is valuable, however, there is no evaluation method to determine wasted time or we do not know how to evaluate time. In general in most public sectors there is a lot of time wasted and not used properly. However, the department I work in is very sensitive since I deal with the finance and accounting matters. Therefore, time is valuable because if anything is delayed in our department that will result in a setback of the whole cycle of work that depends on our work. However, unfortunately, there are times in the year as in the summer and the month of Ramadan when there is a big decrease in the work performance which results in less work done and a lot of time waste if compared to the other times in the year.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 03: I like to spend the weekend with the family mostly and some time with friends as well, when I can carry out some of my hobbies with them.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 03: Family is the main motivator and inspiration for the individual.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 03: The aspects responsible for not advancing in the society are mostly the hanging on to old traditional ideas and customs that are not related to Islam, which in
my opinion is the reason for not advancing. Also, other reasons are the shallow judgments over some religious issues without having full knowledge and understanding of religion. And if we depended on the true essence of our religion as in the past we would be one of the best nations and I hope one day we will be as we were before.

Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 03: The atmosphere is somehow cooperative and friendly. I like it when it feels informal at work. That happens mostly when we get together for prayer time where there is no work stress on employees.

Researcher: Is there any grouping in the organization?

Participant # 03: I think that there is no sector that has no grouping, and I do not know if this concept exists in other foreign societies or not, but I feel that the grouping concept is the main reason for the failure of some of the development projects in the public sectors.

Researcher: How do employees get a good position in the public sector?

Participant # 03: There are various ways that individuals could get a job in the public sector. Some could apply for the sector and wait for reply, others could have someone they know in the sector or know someone with strong relations who could help, and others could rely on their qualifications and education.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 03: Aspects that could help the sector: having a united and developed new system, there should be a network that gathers all the departments and units with the new system to have all parts of the organization connected under one coherent system with less effort and money.

Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 03: The encouragement of women’s part in the workplace should be made a reality in the country and there is no need to test the society to check if there is
acceptance since there is no sense in having educated human resources and keeping them at homes.

**Researcher: How do you and other employees feel about having female employees working with you in the same organization?**

Participant # 03: In our sector there is no female working at all and the sector did not ever introduce the idea of females being involved in the organization. However, I think that there could be an opportunity for them working in labs at the organization. And that if one could see the other areas and companies that are employing females and are benefiting from their potential and knowledge since many of them have chemistry and biology backgrounds. Nevertheless, the decision should be made from the government and higher authority.

**Researcher: Do you believe that the e-government system would offer females more job opportunities?**

Participant #03: The e-government system will not create jobs for women since there is unemployment already among men which is very high. And I think that the opportunity for female jobs is very low either with e-government or without.

**Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?**

Participant # 03: I strongly believe in women’s role in the developing of the country. There are great women who have succeeded in medicine for example that the country could benefit from. Also, there are the women who succeeded in the education field and attained higher degrees and the time has come now to benefit from their education.

**Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?**

Participant # 03: The positives of women working is being part of building the country which will affect her in being self-confident and assist her in promoting a positive knowledge and culture in the society which will as a result will be reflected at her job and giving her more space for promoting and developing the country. However, the negative aspect is at the family’s side. She will be busy at her job and spending less time with the family. I really do not know the solutions that are presented in order to reduce or prevent this problem; especially because many women prefer their families and children over their jobs and careers as academics and doctors.
Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 03: Yes, for economic reasons first and foremost and that is because of the existence of many of the individuals with low income where men in these families cannot fulfil all the household requirements. Also, there are a big number of housewives and many college and university graduates who have an important education which is not benefited from. Therefore, women’s jobs do support the family financially because of high cost of living now and the low income of most men.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 03: I am not aware if there are any new regulations in the labour market that are related to women’s jobs, however, I know that there is a strong rejection of that. I will just give you one example of that, the Ministry of labour issued a new regulation for women to work selling gowns and lingerie and that all these jobs should be replaced by women, however, this matter was rejected strongly and refused by a big number of people from different levels. But I think it could be easier if these new rules and regulations were according to the core of rules of Islam.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 03: The reason for not advancing in the society is that men are in control of everything which make female’s role very minor where men get to make all decisions. This I got from the many forums where people were talking about this matter and presented this concept.

Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 03: I use all of these different types of communication at different times and different purposes.

Researcher: Is there anything that you would like to add or ask?

Participant # 03: For the women’s job aspect I just want to explain that I do support them at the job completely, however, without using and taking advantage of them in a negative way and to have their female dignity intact. I am saying that because, nowadays, there are many companies and institutions are employing women and they
are being represented in a negative way. And as you know we are a Muslim society and a very conservative culture thanks to God. Therefore, we should first and mostly be a good example for others and protect and defend our society from having negative phenomena come into our lives. So the employment of women into the job should be based on benefiting from their experience and skills that God gave them and not for just announcing to the media and the world that we have working women in companies and if we looked closely we would find that their jobs were only trivial and minor with small unsatisfactory salaries.

Interview number: 04

Theme One: Personal Information

Researcher: What is your current position?
Participant # 04: I am an architect at the Mining Development division at the Saudi Geological Survey (SGS).

Researcher: How many years of working experience do you have?
Participant # 04: with 13 years of experience.

Researcher: What is your monthly income range?
Participant # 04: My income is 9,000 SR.

Researcher: Your age range?
Participant # 04: I am 39 years old.

Researcher: What is your education?
Participant # 04: I have a Master Degree.

Theme Two: Computer Experience

Researcher: Do you have your own computer at work?
Participant # 04: Yes, I do have my own computer that I use at work.

Researcher: Do you work on a computer?
Participant # 04: Yes, I use the computer at work for different tasks.

Researcher: How much time do you spend on the computer at work?
Participant # 04: I use the computer for around six hours at work.
Researcher: How do you use the computer at work?
Participant # 04: At the job I use my computer to check work emails, office work, and financial work.

Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 04: Yes, employees have their computer at the department.

Theme Three: Internet Experience
Researcher: Have you ever used the Internet?
Participant # 04: I use the Internet.

Researcher: How often do you use the Internet daily?
Participant # 04: I use the Internet for around three hours.

Researcher: Where do you use the Internet mostly?
Participant # 04: I use the Internet mostly at home.

Researcher: For what mostly do you use the Internet?
Participant # 04: For email, research, and local and international news.

Researcher: To what extent do the computer and Internet influence the Saudi family?
Participant # 04: The computer and Internet do influence the family; however, there are advantages and disadvantages. The advantages of the Internet and computer for the family are: shopping online, paying bills, online banking, the use of phone with cheaper prices, good tool for learning of the young, reading online newspapers, books, and magazine, and for entertainment, chatting and research and information. The Internet, nowadays, is considered to be a personal library for every person and it is also a small suitcase that the individual has their stuff on and carries around.

Researcher: What about the negative or the disadvantages aspects?
Participant # 04: The disadvantages are: the addiction of use, no censoring, and the use of wrong information that could be available online, the use of the information and taking credit for someone else’s work, the use of this technology for entertainment purposes only, use it as a tool to harm others and to spread rumours and lies about and the use of their photos in a negative way, introducing ideas that contradicts our values, and presenting negative concepts.
Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 04: The computer and Internet influence the family positively and negatively. The positives are: communication among the family through email and video, and for knowledge and information of the family, in addition there are programs that benefit the whole family members where they all could use and share their common interest with each other. However, the negative aspects that influence the family’s communication are: over use of computer, the use of computer and Internet and being away from the family, not fulfilling family duties for being so occupied by the use of the Internet, and the dependence on the Internet that lowers the thinking skills of users.

Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 04: Yes, the computer and Internet are used by all society levels because of the fast change of technology that is occurring in the country. The speed of the development in technology is happening very fast and the many products that the market carries are very high tech. Therefore, the control of the information and technology in our lives makes us depend on them in many aspects and use them heavily.

Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 04: Yes, I use the Internet for shopping, paying bills, and online banking and for its speed and ease and by the use of SADAD service available online.

Researcher: Why is that?

Participant # 04: In addition, I can view many products and services at one time and make an informed decision.

Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 04: There is the IT division in the sector that we go to if we face any technological or electronic problem.
Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 04: Employees could exchange information through training workshops and through the Internet.

Researcher: How do the e-government system or the network system and technologies since you are not using e-government affect your work?

Participant # 04: The electronic and network system affected me at work in a very positive way. It helped me in conducting my job fast and provided me with speed of information and strength in finding data I need. Also, it assisted me in communication at work with the staff and employees in a fast way.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 04: Also, with the existence of the Internet and the network system it has been much easier to communicate at work and it also gave us the opportunity to find different ways to do our jobs and gave us the opportunity to compete with each other to find the best information available to develop ways to do our work.

Researcher: How is this system different from the previous system?

Participant # 04: It is faster and easier to communicate at work.

Researcher: What are the advantages and disadvantages of using the e-government system or any electronic system?

Participant # 04: As I mentioned before the advantages are that we could communicate together in a fast and easy way without the need to see each other face-to-face. However, also there are some disadvantages where some employees are resistant to any technology and are afraid that they will not be able to learn and use it effectively. In addition, some employees or superiors will not be very pleased with this system since they will not be able to have control and full authority of different matters and data. At this point we can see how these individuals try preventing or stopping such development since they are going to be affected negatively (from their point of view). That is why I think it is important to spread awareness first before implementing any new system in the sector where employees will understand the benefit of adopting the system. Also, to provide incentives and promotions to employees who are successful in implementing the new system.
**Researcher:** Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 04: Yes, with the use of the electronic system there is less face-to-face. But that does not affect the quality of work we produce since through the new network system we are able to do the same job in less time without the need to be physically in front of each other. However, sometimes we do have some meetings where important matters need to be done and in that case we do it face-to-face.

**Researcher:** Do you think that language is an obstacle in applying the system?

Participant # 04: In my opinion I do not see that the English language is an obstacle for many people. Now a lot of people are learning the language since early years where the new generations are not finding difficulty in this matter. Also, there are a number of words that are used in the system and will be used over and over which makes it easy to learn and understand over time.

**Researcher:** Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 04: I think that not understanding or knowing the new system is a reason for not using the system. Also, some employees are not willing to change and are afraid to show their weakness in not knowing how to use the technology. In addition, there are employees who cannot update themselves and their understanding that this new system will be confusing and a big headache for them.

**Researcher:** Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 04: No, I do not think that the new system will be easily implemented because all the reasons I mentioned before.

**Theme Six: Training Experience**

**Researcher:** Did you receive any training on computer applications?

Participant # 04: Yes, I did take many training courses at the university and some different institutions.

**Researcher:** Did you receive any training on e-government application?

Participant # 04: No, we did not get any training on the e-government system.

**Researcher:** Did you take any courses in the English language?

Participant # 04: Yes, I did take some English language courses.
Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant # 04: Yes, I did learn a lot of stuff.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?

Participant # 04: Work does not pass by without difficulties and the real matter is to try to overcome these difficulties. I overcome these problems and difficulties by taking advice and relying on previous experiences. In addition, to defeat these problems I use new technologies and the cooperation of my colleagues to find the best solutions.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant # 04: Yes, the ways and methods we do work changed from the ways we used before. Now we use computers and different programs that make many of the tasks we used to do much easier. Also, the use of emails and internal network in different work letters and operations made our work faster and more efficient.

Researcher: What motivates you in the job, and do you feel motivated in your job?

Participant # 04: The success of the job I am performing and wanting to satisfy my God is what motivates me (and he cites some sayings of the prophet Mohammed to support what he is trying to say). In addition, I want to be a great example for my kids and to have the encouragement of my colleagues and superiors. However, I do not feel motivated at the job.

Researcher: Do you feel appreciated in your job?

Participant # 04: Unfortunately, I do not feel appreciated at work.

Researcher: How do you deal with surprises and uncertainties in your job?

Participant # 04: I try to train myself to get used to surprises and not to take hasty decisions that are based on reactions. Also, I teach myself to face matters and different issues and to have the self-confidence to not run away from responsibilities and face them.

Researcher: How do you deal with challenges in your job?

Participant # 04: I like to deal with different challenges and to have confidence and as a result these challenges add to my job experience.
Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant #04: The loyalty is to groups and individuals in the sector.

Researcher: How well do you accept higher authority?

Participant #04: I take orders from superiors with no problems.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant #04: The workplace environment is suitable; however, the work is stressful. We get stressful since we do not know our future career path.

Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant #04: Time has no value in the public sector as in the private sector.

Researcher: What is the reason for that?

Participant #04: In my opinion I think that is because the work in general in the public sector is slow and mostly follows a boring routine.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant #04: I like to spend the weekend with friends and family. Also, I enjoy using the Internet on weekends.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant #04: The family is very important especially to feel secure and well balanced. As a result, this security and balance reflects on the individual in the workplace.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant #04: Not advancing and not changing in a positive way in our society is because of the way we view and perceive things in our life. We think that we protect our society by refusing any new thing or aspect of technology and instead hold on to some negative values that we think reflect our culture which is not right to do; I think that these are only refusals for no genuine reason for changes in aspects that are coming into our society which are inevitable. In other words, the society strongly rejects any new element either in technology or any other aspect in life just because they think that they
are protecting the society from these intruding elements, and use instead the principles and old traditions that they think are related to the culture of the society. However, this is not actually true and it is rejecting something with no justification; the change is coming for sure. For example, one negative aspect of use of new elements would make the decision to reject and forbid all society to use it even if they are useful to other individuals. In addition, our culture and society under the traditions and customs point of view deprive individuals of the opportunity to experience new things because of one mistake or negative aspect that happened. That is why I think that the social phenomenon should not be judged from individual negative experiences since every person deals with an aspect differently. Also, there are some new aspects in our lives or new phenomena that few people deal with positively and we should not be against it because only we do not use it or not all people are using it.

Things we see today in our life are different from what was before or different from what we are used to. And our society and people rejects many of the social aspects only because a person or an institution failed or that it is not what people are accustomed to. I think that the people in any society have many options of traditions, values, and customs, and new phenomena and aspects to choose from. These options in my opinion are what hold the society together and every individual has the ability and option to deal with what s/he wants with what they see appropriate to their understanding and needs. They could later select what they want and in this way the society would provide many different options and the individual will have the opportunity to select what they want which will result in having diversity in our life.

**Researcher:** So you see that it is better to have choices available in the society.

Participant # 04: Yes, in our society we confiscate many of the different phenomena with the notion that we are guarding and defending our society. However, the reality is that we are aiding in making our society weaker and not being able to deal with or adapt to the new. As a result, the society becomes characterized by being fearful and made anxious by any new aspect or any different experience which it has been accustomed to. Also, people in the country are satisfied that they are described as being a ‘traditional society’ and this trait has a lot of negatives.
Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 04: I can say that the general environment in the workplace is a bizarre mix of aggressiveness, cooperation, and friendly atmosphere.

Researcher: Is there any grouping in the organization?

Participant # 04: Yes, for sure there is grouping in the organization and the loyalty of different employees goes towards persons or groups.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 04: Currently, ‘who you know’ is the way to get a job at the organization.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 04: Aspects that could improve the organization are:
Reforming of rules and regulations and examining them from time to time, the use of other rules and regulations that are more flexible and do not hinder the development of the public sector. In addition, there is looking into the concepts and goals of the services that the public sector provides and to alter them in a way that could satisfy the clients and beneficiary. Also, it is necessary to have these concepts and goals understood by the employees in the different public sectors and training them to adapt and implement these goals, in addition, to have motivation for the employees. Furthermore, the empowerment of employees and superiors in placing practical procedures to reach successful results is important and using these procedures for evaluation.

Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 04: In the Saudi society one can see the new changes at different levels as: in economics, ideas, and society which illustrate the awareness and understanding of women’s role in the country and the desire to support their role in building the country.
Researcher: How do you and other employees feel about having female employees working with you in the same organization?

Participant # 04: I think that at first there will be rejection - as our way usually in everything - for women working in the public sector. However, later the employees will be aware of women’s role in the developing of the sector and her involvement in building the country and economy and it will not be useful to prevent half of the labour market in the country and not benefiting from their knowledge and skills. Also, the problem we are facing in the country because of having a big number of foreign labour from abroad who are not nationals which influence our economy negatively. In addition, when people and male employees do feel these benefits from employing women in the market for sure they will perceive their work differently and have a positive view of them working in the society.

Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 04: Yes, I do think that e-government system will allow more job opportunities for women to work. Women in this new system will be able to do their job without the need to be face-to-face with different customers.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 04: I do believe that women’s role in the country is significant for the development. Nowadays, we are advancing very fast on many different levels economically, culturally, and socially. All of these aspects are reasons for needing huge numbers of national qualified human resources.

Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 04: I think it is not fair now to predict the advantages and disadvantages for women’s jobs before giving them the full opportunity to work and then we could evaluate.
Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 04: A woman could support the family beside the man, therefore, giving her the opportunity to work and giving her the tools as education, and training courses are essential for female advancement.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 04: The problem in the labour market for females in the country is that the needs for the market are not considered and other elements rather than the needs (as the supply and demand, training, and the employment opportunities) are the aspects that are considered. The aspects that control the female jobs are the culture, society and its values and traditions. Also, there are other problems that are in the female education institutions and their goals: where they should study, the changes happening around them, and updating their system in a more suitable way to the market and its needs.

Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 04: I do use different types of communication and it depends on the matter that is in hand. However, for personal communication I prefer using the phone or having a face-to-face communication. With family and friends I use all these types such as face-to-face, telephone, emails, and text messages. With employees either face-to-face for important issues or emails for everyday work. At work I use the telephone and emails and sometimes the fax.

Interview number: 05

Theme One: Personal Information

Researcher: What is your current position?

Participant # 05: I am a manager at the training department at the Saudi Geological Survey (SGS).

Researcher: How many years of working experience do you have?

Participant # 05: I have eight years of experience.
Researcher: What is your monthly income range?
Participant # 05: With income of 7,500 SR.
Researcher: Your age range?
Participant # 05: I am 35 years old.
Researcher: What is your education?
Participant # 05: I am a university graduate with a degree in business

Theme Two: Computer Experience
Researcher: Do you have your own computer at work?
Participant # 05: Yes, I have my own computer.
Researcher: Do you work on a computer?
Participant # 05: Yes, I do.
Researcher: How much time do you spend on the computer at work?
Participant # 05: I work on the computer for about six hours.
Researcher: How do you use the computer at work?
Participant # 05: I use my computer at work for conducting job tasks, and office work, saving data, and also to search for information online.
Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 05: Employees in the department have their computer that they use to perform their jobs.

Theme Three: Internet Experience
Researcher: Have you ever used the Internet?
Participant # 05: I use the Internet for many things.
Researcher: How often do you use the Internet daily?
Participant # 05: I usually use the Internet for around 2-4 hours a day.
Researcher: Where do you use the Internet mostly?
Participant # 05: I mostly use the Internet daily at work and sometimes at home.
Researcher: For what mostly do you use the Internet?
Participant # 05: I use the Internet mostly for emails since I have a mail group and I also use the Internet to check the sports news and updates.
Researcher: To what extent do the computer and Internet influence the Saudi family?

Participant # 05: The family is influenced by the computer and Internet positively and negatively. The positive aspects: now the wife in the family could use it for arranging the budget, for kids to learn and play at the same time and for family entertainment together. Also, I was able to teach my two daughters four and five how to use the computer and Internet in learning so many things in a fun way and I also taught them the proper way to set up and use the computer. I personally enjoy sometimes to log into the different social networks. I can communicate with different people online from both sexes with no consideration to our social constraints that exists in our everyday life in the country. However, there are some negative aspects because of the computer and Internet that we also see now in our life as being so occupied by using them and leaving other things. My wife is sometimes annoyed with me for being so busy using and surfing the Internet and being away from the family for long hours.

Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 05: I think that the family relations became stronger because of the computer and Internet because it allows the whole family members to be around it using it and interacting together and that is different from the television for example where the members do not engage and interact while watching.

Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 05: At the start the computer was used by the educated and some religious groups. However, nowadays, with the introduction of the Internet, one can notice that all society levels are using the computer and Internet.

Researcher: What do you mean when you say religious groups and why they are using this technology?

Participant # 05: I mean the very conservative religious people and they are very anxious with computers and I saw clearly when any new exhibition for computers comes up. I personally think that is because the religious people do not watch television at their homes since they relate it to bad influence and they use the computer instead to do things they want to do.
Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet? Why?

Participant # 05: No, I did not use the Internet in shopping or paying bill and the reason for that is that I do not know how to do that. Also, my English is weak and would not be able to go through all the Internet pages.

Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 05: We can go to the IT department who would later solve these problems.

Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 05: For exchange of information among employees training courses are used.

Researcher: How do the e-government system or the network system and technologies since you are not using e-government affect your work?

Participant # 05: The Internet for example influenced at work both positively and negatively. The positive aspect is that now I care to go to work early in the morning at the start of the working day to be able to use the Internet since we employees can only use the Internet two hours only, an hour during the first hour at work and the second hour is in the last hour at work. However, the negative aspect is that we are away from work at the time we are using the Internet.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 05: Now we are meeting each other at work less since we do not meet face-to-face because of the use of the Internet.

Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 05: I think that the advantages will be in that we can perform our work faster and more efficiently but the problem will be that the system will be new and not all employees will be able to use it.
Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 05: The use of technology and electronic systems will for sure make employees see less of each other face-to-face since many tasks would be done electronically through the new system. Also, I think that in the future we will be dealing with machines more and we will have less contact with humans.

Researcher: Do you think that language is an obstacle in applying the system?

Participant # 05: No, the language will not be a problem or obstacle since any systems that will be used in public sectors will be done in the Arabic language.

Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 05: There is a saying that says: “The humans are enemies to what they do not know”, and that is absolutely true in this situation since a lot of employees will refuse using the system since they do not know how to use it and it is different from what they are used to. That is because many did not take any training in computers or any new system and as a result will not understand it.

Researcher: Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 05: I think that if a well-planned and strong program or system is created then it would be easy for it to be implemented in the organization.

Theme Six: Training Experience

Researcher: Did you receive any training on computer applications?

Participant # 05: I did take some courses in computer.

Researcher: Did you receive any training on e-government application?

Participant # 05: I did not get any training on the e-government system.

Researcher: Did you take any courses in the English language?

Participant # 05: I did not take any courses in the English language.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant # 05: I did benefit from the courses I took.
Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?
Participant # 05: I deal with difficulties by asking people with experience and have management knowledge.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?
Participant # 05: I can say that the way we do our work did not change a lot since there are still many operations that we do manually and a lot of the work is done through the use of papers in the sector.

Researcher: And how do you use the computer in your work?
Participant # 05: The computer is only used in the typing of different reports and business work and the printing of these documents.

Researcher: What motivates you in the job, and do you feel motivated in your job?
Participant # 05: Nothing motivates me at the job except for some good encouraging words and good treatment from the boss.

Researcher: Do you feel appreciated in your job?
Participant # 05: Only from my boss.

Researcher: How do you deal with surprises and challenges in your job?
Participant # 05: I study the situation very well and choose the best available solution.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?
Participant # 05: The loyalty of employees should be for the sector he is working for either private or public and not to follow any person or group. However, the reality is different and the employee’s loyalty is to individuals or groups.

Researcher: How well do you accept higher authority?
Participant # 05: I do accept the higher authority smoothly. Also the management matters should always have a sturdy person who could give orders and do work fast and effectively.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?
Participant # 05: The environment is not suitable for work since the office equipment is barely available and what is available from this equipment is very old and in bad condition. I do not feel relaxed at the workplace because of these awful tools and
equipment which make the work go very slow. Also, I feel relaxed in general since my boss is understanding but the other aspects at the job such as the promotions and incentives are always a source of discomfort.

Theme Eight: Culture
Researcher: Do you think that the value of time is considered the same in the public and private sector?
Participant # 05: Time has no value in the public sector and work takes more time than needed. And employees always postpone work that is needed to be done.
Researcher: When you have time or at the weekend where do you prefer to spend your time?
Participant # 05: I like to spend the weekend with family. At other times when I have extra time I do go to the gym.
Researcher: In your opinion, is family a significant aspect in Saudi culture?
Participant # 05: Family is a very important aspect in our life. It is the main and major element in any society.
Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?
Participant # 05: Reasons for not advancing in the society are: the extremists in religion who do not accept the new, the traditional and old negative cultural beliefs that are not suitable for the era, and the weak education system and being open to other cultures and countries. For example, the mobile phone with camera was rejected by religious individuals and other people in the society. These mobile phones were not allowed to be sold in shops and many took advantage and sold them for very high prices in something like black markets. However, now because all phones that are sold in the world are with camera and it was difficult to keep rejecting, one can buy camera mobile phones anywhere in the country.

Theme Nine: Organizational Culture
Researcher: How would you describe the organizational culture’s atmosphere in the workplace?
Participant # 05: The general atmosphere depends on the personal relations; if the employee has good connections with others then he has good atmosphere and vice versa.
Researcher: Is there any grouping in the organization?

Participant # 05: There is grouping in the sector that depends on the geographical area the person is from. For example, there are some sectors that will not appoint any person who does not belong to a specific tribe.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 05: In the private or business sector if someone wants to apply they will depend on their qualification and apply for the job. However, in the public sector nepotism and who you know as relatives is the basis for getting a job.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 05: I personally think that the answer for a better and more developed organization is privatization. The privatization of the organization is the best way for its development.

Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 05: As I mentioned before there are significant reasons for not advancing in the society which are: the extremists in religion who do not accept the new, the traditional and old negative cultural beliefs that are not suitable for the era, and the weak education system and being open to other cultures and countries.

Researcher: How do you and other employees feel about having female employees working with you in the same organization?

Participant # 05: People accept women’s job in the public sector in the teaching and medical area only. However, other people are divided in two sections in the way they perceive women’s work at the private sector. The first section of people accept and do not mind their work, while the other section do not accept it at all and see that their work is not needed and insignificant and that she does not belong besides having the mix of the sexes.

Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 05: The e-government system will not give either men or women work opportunities since it will need less employees because of technology.
Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 05: I believe in women’s role in the society. Women make half of our society and they should be liberated and then give them the chance to perform their role in the society. The society will have no genuine development if women are not given their roles in our country.

Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 05: A woman should work in suitable environment. She should be working in places that are well-suited with women’s nature and working in places that are not harsh physically as working as a specialist in the desert or underground.

Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 05: The work of women could be a financial support for the family, even though women are not responsible to pay anything from their money according to our religion to the household or family.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 05: Even with rules and regulations that the government set in the workplace that does not guarantee that they could work or be activated in the labour market. For example, after the Labour of Ministry had the new regulation placed for women to be working in the lingerie shops in place of men, this action did not work in the real world and various problems occurred. Therefore, I am asking here why that did not continue and work until now and who is stopping our advancement. The society accepts this new regulation by the government, however, the extremist individuals whether official or non-official are standing in the way of this matter and they consider it as dishonourable and unethical.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 05: As I mentioned before there are significant reasons for not advancing in the society which are: the extremists in religion who do not accept the new, the traditional and old negative cultural beliefs that are not suitable for the era, and the weak education system and being open to other cultures and countries.
Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 05:
Personal communication: Face-to-face, telephone, email, and SMS.
Family communication: Face-to-face.
Communication with friends: Face-to-face, telephone, email, and SMS.
Social communication: Face-to-face.
Business communication: Face-to-face, and telephone.
Communication with employees: Face-to-face, telephone, and email.
Researcher: Is there anything that you would like to add or ask?
I wish you all the best.

Interview number 06:
Theme One: Personal Information

Researcher: What is your current position?
Participant # 06: I am director of IS and IT department in the Ministry of Foreign Affairs.

Researcher: How many years of working experience do you have?
Participant # 06: I have 15 years of working experience.

Researcher: What is your monthly income range?
Participant # 06: My income is around 13,000 SR (Saudi Riyals).

Researcher: Your age range?
Participant # 06: I am thirty seven years old.

Researcher: What is your education?
Participant # 06: I have a Bachelor’s in business management major in IT.

Theme Two: Computer Experience

Researcher: Do you have your own computer at work?
Participant # 06: I have my own computer at work.

Researcher: Do you work on a computer?
Participant # 06: I do work on the computer.
Researcher: How much time do you spend on the computer at work? In addition, how do you use the computer at work?

Participant # 06: I work on the computer around six hours at work conducting my job tasks.

Researcher: Do all employees have their own computers and use them to perform tasks?

Participant # 06: Mostly, a lot of employees have their computers.

Theme Three: Internet Experience

Researcher: Have you ever used the Internet? In addition, how often do you use the Internet daily?

Participant # 06: I use the Internet for around five hours at work.

Researcher: Where do you use the Internet mostly? And for what mostly do you use the Internet?

Participant # 06: Mostly, I use it at work to do things such as email, research and information and rarely do I use it for entertaining.

Researcher: To what extent do the computer and Internet influence the Saudi family?

Participant # 06: The family is influenced by the use of the computer and Internet and that is seen highly in researching new data and learning new interesting areas. My children enjoy playing games online with their friends and learn different subjects as well. I enjoy socializing online with others all over the world. The Internet offers me the freedom in connecting to various people from various countries and backgrounds. I am able to conduct conversations with male and female friends easily through the net without any social boundaries.

Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 06: I do see that the computer and Internet could be a reason for having less family communication. That is because of the long hours that the family members spent in using them which as a result influence the communication between family members.

Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 06: Mostly the different levels of societies are using the computer except for the elderly and people who have low levels of jobs.
Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 06: I always shop online and review different products and services. Also, I pay most of my bills online.

Researcher: Why is that?

Participant # 06: I mainly use it for the ease and speed.

Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 06: For any problems in applying the e-government system we refer to the coordinator of the project.

Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 06: To exchange information among employees the website of the e-government “Yasser” could be used.

Researcher: How does the e-government system or the network system affect your work?

Participant # 06: It actually affected me positively since technology is a great assistance in achieving different tasks at work.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 06: Also, it influences my relations positively since we could communicate faster and easier in less time.

Researcher: How is this system different from the previous system?

Participant # 06: The easy retrieval of data. Our operations are documented and more organized. As it saved our time since now we could do different tasks in less time.

Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 06: The advantages as I mentioned in previous question. All the procedures are done through a systematic order that is fast and easy. The e-government system will be good in guaranteeing the rights of clients and citizens and that is because the all procedures are documented and easy to follow and check the mistakes by
employees. In addition, there will be less or no nepotism in many aspects of executing the tasks. However, the disadvantages are in the resistance to change from the employees and the fear of using the new technology.

**Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?**

Participant # 06: The nature of the new system will affect the face-to-face communication among employees in the organization and there will be little waste of time because of that. Meeting will be only limited to important matters.

**Researcher: Do you think that language is an obstacle in applying the system?**

Participant # 06: The English language is not an issue in e-government since everything is done in Arabic.

**Researcher: Why in your opinion do employees refuse to use the new application (e-government)?**

Participant # 06: Reasons for some employees not using the system: fear of losing authority and privileges because of the use of technology and fear of catching mistakes done by employees.

**Researcher: Do you think that e-government or any new technology is accepted easily in the organization?**

Participant # 06: No the new technology will not be accepted easily. For any new system to work successfully it must be forced from higher authority and in addition must be adopted by the higher authority and government. In addition, the society in general does not accept change easily and they resist any new thing that they do not understand. However, now the government is assigning some positions as best Award for the government sector that is implanting e-government programmes successfully as the Saudi commissions for Tourism and Antiquities (SCTA).

**Theme Six: Training Experience**

**Researcher: Did you receive any training on computer applications?**

Participant # 06: Yes, I did.

**Researcher: Did you receive any training on e-government application?**

Participant # 06: No, I am one of the executive mangers of the e-government project in the Ministry of Foreign Affairs.

**Researcher: Did you take any courses in the English language?**
Participant # 06: No, I took my college degree in the United States.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant # 06: Yes, I did.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?

Participant # 06: To overcome difficulties I have objective negotiating of the problem and conducting periodicals committees. In addition, I document my work reports through the Internet.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant # 06: The use of technology is available at the workplace and helps in conducting our tasks.

Researcher: What motivates you in the job, and do you feel motivated in your job?

Participant # 06: I get motivated at work when I am able to develop and influence change through technology.

Researcher: Do you feel appreciated in your job?

Participant # 06: Yes, I do feel appreciated.

Researcher: If you have uncertainties and surprises in your job, how do you deal with them?

Participant # 06: I deal with surprises by facing them and trying to work with them professionally and objectively and challenges provide me with the motivation to work and be successful.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant # 06: Unfortunately, the loyalty is to a group or person. That is something we see at the sector and have to deal with even if you do not approve such action.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant # 06: I have no problem in accepting orders. If I am not convinced I do give my point of view. However, that is the nature of the job and there should be rules to follow in the organization.
Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 06: The workplace environment is suitable. I feel the frustration because of the work challenges and the lack of human resources and the dictatorship in the sector.

Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 06: In the private sector time is valuable where it influences the outcome of the work, however, in the public sector the issue is different where there is no reward or punishment as there are no incentives.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 06: The weekend, I like to spend with family and friends.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 06: Family is a very significant and very positive aspect. And anything good we do will influence them.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 06: Aspects that affect the developing of the country negatively are: society’s culture, media, schools which all affect the family that as a result affect the society.

Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 06: The overall of the organizational atmosphere is not cooperative.

Researcher: Is there any grouping in the organization?

Participant # 06: The grouping in the sector is very obvious where there are certain people from some geographical areas who control specific sectors.
Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 06: The problem in offering jobs and having privileges is based on ethnic and geographic background and not based on qualifications. To get a job, applications should be submitted to the Ministry of Civil Service and then the friends and the influential people could help in getting the job in a chosen sector.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 06: Aspects that could make the organization a better place are: reforming job application procedures, having punishment and reward system, and the change of employees and the recruiting of skilful employees.

Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 06: For women to work in our society there should be encouragement and legislators to have open mind. The problem is that the society is getting mixed messages from the religious individuals where they are restricting women from doing a lot of aspects in the society and one of these aspects is working.

Researcher: How do you and other employees feel about having female employees working with you in the same organization?

Participant # 06: Mostly employees don’t accept women’s job and consider it is something that is not necessary to do.

Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 06: The e-government system will give the opportunity for women to work in private and the ability to work from home.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 06: I believe in women’s role in the society since they will rise in the next generation and they will influence their ideas and concepts.
Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 06: The only negative thing I see about the women’s job is her being away from family and home.

Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 06: The job of women is an important support to the family financially as it enriches the women in their vision and work experience.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 06: I see that the obstacles are in policies, culture, and personal beliefs that are based on religious reasons.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 06: The only reason for women not advancing is the society’s cultural beliefs.

Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 06: I use different types of methods depending on the situation.

Personal communication: Face-to-face.
Family communication: Face-to-face.
Communication with friends: Face-to-face.
Social communication: Face-to-face.
Business communication: Emails.
Communication with employees: Emails.

Interview number: 07

Theme One: Personal Information

Researcher: What is your current position?

Participant # 07: I am the director of human resources at the Saudi Geological Survey.
Researcher: How many years of working experience do you have?
Participant # 07: I have 18 years of experience.

Researcher: What is your monthly income range?
Participant # 07: I earn 15,000 SR.

Researcher: Your age range?
Participant # 07: I am 42 years old.

Researcher: What is your education?
Participant # 07: I am a university graduate.

Theme Two: Computer Experience
Researcher: Do you have your own computer at work?
Participant # 07: Yes, I do have my own computer at work.

Researcher: Do you work on a computer?
Participant # 07: Yes, I do.

Researcher: How much time do you spend on the computer at work?
Participant # 07: I use the computer around three hours.

Researcher: How do you use the computer at work?
Participant # 07: I use the computer for printing, writing my work reports, and reading my work related emails.

Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 07: Yes, they all do.

Theme Three: Internet Experience
Researcher: Have you ever used the Internet?
Participant # 07: Yes, I do.

Researcher: How often do you use the Internet daily?
Participant # 07: Around two hours.

Researcher: Where do you use the Internet mostly?
Participant # 07: At home I use the Internet.
Researchers: For what mostly do you use the Internet?

Participant # 07: For reading my emails, looking into the stock market, paying my bills and looking into my bank account.

Researcher: To what extent do the computer and Internet influence the Saudi family?

Participant # 07: The family is greatly influenced by the computer and Internet.

Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 07: The negative is there is not family gathering because every one of the family members is busy with their computer. The positives are: for research and conducting some private tasks.

Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 07: The computer is used by all the society levels; directly by the educated and indirectly for the uneducated because of the importance of it in our daily life.

Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 07: I do several things online as: shopping, paying bills, having reservations.

Researcher: Why is that (if using, or not using)?

Participant # 07: The reason I use it: for its ease and the precision of the information.

Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 07: I was presented to the e-government system but did not use it. However, when faced with a problem in our system we contact the technical services for advice.

Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 07: Employees exchange knowledge by the training courses.
**Researcher:** How do the e-government system or the network system and technologies affect your work?

Participant # 07: The Internet benefited the workplace because of the ease of use and the ease of acquiring the knowledge.

**Researcher:** How does the e-government system or electronic system affect your relations with colleagues?

Participant # 07: In addition, with the use of the Internet and the electronic systems the face-to-face communication among employees became less and even between the employee and his superior the physical communication became much less. The face-to-face meetings with clients are also less because of the Internet. In addition, the following of services and applications could be done through the net without the need to be physically at the place; for example, now clients could apply for visas online to the Ministry of Foreign Affairs. Therefore, the clients could follow their application online and enquire about their work without the need to go personally to the organization.

**Researcher:** How is this system different from the previous system?

Participant # 07: The e-government new system or our network system at work is useful because it connects all the public sectors together, and reduces mistakes. The new system usually faces problems such as fear, obstacles of not understanding the new technology; however, with greater use and employment it will be better.

**Researcher:** What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 07: In general, the new systems are positive and give better opportunities for employees. However, there are always the fears of applying the new system or the lack of knowledge from the employees’ side who do not know how to apply the system. Nevertheless, if the sector provides training courses and workshops the application will be easier.

**Researcher:** Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 07: Yes, I think that with the applications of new systems the need becomes less for the face-to-face communication.

**Researcher:** Do you think that language is an obstacle in applying the system?

Participant # 07: Moreover, the English language is not a problem since the used programs are done the Arabic language.
Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 07: However, some employees don’t use the new system mainly because of the fear of the unknown; but with use this issue could be solved. Any new system usually faces problems such as fear, derived from not understanding the new technology.

Researcher: Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 07: At first, any new system is faced with challenges and difficulties because of the fear of change and not knowing the system, however, with gradual use, training, and specialized supervision, a lot of obstacles can be avoided.

Theme Six: Training Experience

Researcher: Did you receive any training on computer applications?

Participant # 07: Yes, I got different kinds of computer training.

Researcher: Did you receive any training on e-government application?

Participant # 07: No, I did not get any training.

Researcher: Did you take any courses in the English language?

Participant # 07: Yes, I did.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant # 07: Yes, I did benefit from them and I personally updated myself.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?

Participant # 07: I deal with difficulties by examining each case and find appropriate solutions.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant # 07: The computer is one of the most important aspects that changed the way I conduct work with speed and ease.

Researcher: What motivates you in the job, and do you feel motivated in your job?

Participant # 07: I feel motivated by having friends around me and having a suitable work environment.
Researcher: Do you feel appreciated in your job?
Participant # 07: Yes, I do feel appreciated at the workplace.

Researcher: If you have uncertainties and surprises in your job, how do you deal with them?
Participant # 07: In addition, it is important for me to deal with surprises and not to avoid them and to try to solve them by getting advice and examining it.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?
Participant # 07: The loyalty should be to the organization the employee is working for, however in the real world the loyalty is to groups or individuals.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?
Participant # 07: I have no problem in getting orders from my boss; however, these orders should follow rules and regulations of the sector.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?
Participant # 07: The workplace is appropriate and suitable for work with ease and, most of the time I feel relaxed at the job.

Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?
Participant # 07: In general time is valuable; however, some of the employees in the public sector are not responsible.

Researcher: When you have time or at the weekend where do you prefer to spend your time?
Participant # 07: I like to spend my weekend with family and friends.

Researcher: In your opinion, is family a significant aspect in Saudi culture?
Participant # 07: The family is a very important aspect in the society where people feel comfortable.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?
Participant # 07: The aspects that are responsible for not advancing in the society are: individual cultural difference in the background, and the difference in the cultures from one city to another.
**Theme Nine: Organizational Culture**

**Researcher:** How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 07: The overall environment is cooperative.

**Researcher:** Is there any grouping in the organization?

Participant # 07: There is grouping that exists in the sector.

**Researcher:** How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 07: Our work destinies are decided by our God at first. Also, there are different ways that a person could get a job for example by the people you know or applying for a job directly.

**Researcher:** Are there any aspects that could be tackled to make the organization a better environment?

Participant # 07: Aspects that could develop the organization are the training and increase the incentives.

**Theme Ten: Female issues**

**Researcher:** Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 07: Women have the right to work in various sectors in the workplace. Therefore, by enforcing the alterations in some areas in the labour market and change in the social cultural aspects could happen. The engrained negative cultural beliefs could be changed gradually if the right environment is provided for women in different areas. For example, the other Arab gulf areas are an example for the advancement and development of women in various fields in the market. It is important at first to create the opportunities for women to work in the society.

**Researcher:** How do you and other employees feel about having female employees working with you in the same organization?

Participant # 07: I personally do not mind women working in the organization and being active in the workplace.
Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 07: The e-government system will offer women more opportunities for women to work as they could work privately away from mixing with men in the workplace.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 07: Women are considered to be half of the society and they have a great role in advancing the country.

Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 07: The positive aspects for the work of women are participating in taking responsibilities of the family, the benefit in their ability to develop the country, getting experience, and additional income for the family. The negative is their less involvement in the family. The rules and regulations should provide opportunities for women to work.

Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 07: That is one of the great advantages that could be for the family through the support of the woman.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 07: There should be elaborate research done to study the female work opportunities in Saudi Arabia.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 07: The main reason for not advancing is the negative socio-cultural beliefs that the society holds.

Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 07: I use different methods and it depends on the situation. However, mainly I prefer the face-to-face communication in most of my cases.
Interview number: 08

Theme One: Personal Information

Researcher: What is your current position?
Participant # 08: I am a legal researcher at the Legal affairs department at Saudi Geological Survey.

Researcher: How many years of working experience do you have?
Participant # 08: I have nine years of experience.

Researcher: What is your monthly income range?
Participant # 08: I earn 8,000 SR.

Researcher: Your age range?
Participant # 08: I am thirty four years old.

Researcher: What is your education?
Participant # 08: I have a university degree in law.

Theme Two: Computer Experience

Researcher: Do you have your own computer at work?
Participant # 08: I do have my own computer.

Researcher: Do you work on a computer?
Participant # 08: Yes, I do work on my computer.

Researcher: How much time do you spend on the computer at work?
Participant # 08: I use the computer for seven hours.

Researcher: How do you use the computer at work?
Participant # 08: I use it for doing the daily work tasks, besides, serving the Internet.

Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 08: Yes, they do.

Theme Three: Internet Experience

Researcher: Have you ever used the Internet?
Participant # 08: Yes, I do.

Researcher: How often do you use the Internet daily?
Participant # 08: I use for around seven hours a day.
Researcher: Where do you use the Internet mostly?
Participant # 08: At both work and home.

Researcher: For what mostly do you use the Internet?
Participant # 08: I use it mainly for research, reading local, general knowledge and international news.

Researcher: To what extent do the computer and Internet influence the Saudi family?
Participant # 08: I personally that that the computer and Internet influenced the family and its members in their relationship together. The use of computer and Internet for long hours and in times that is not suitable.

Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?
Participant # 08: I think that the computer and Internet have both negative and positive effect on the family. The family members could use it to exchange knowledge and information. Also, individuals could use it to perform different tasks such as paying bills online and looking for different services. However, there are some negative influences on the family since members of the family use it heavily or use it at an inappropriate time which takes the members away from each other.

Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?
Participant # 08: I think that a large number of different society levels are using the computer and Internet whether educated or uneducated. I feel that it is important and people on different levels need it from time to time to conduct some work.

Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?
Participant # 08: Yes, I use it a lot.

Researcher: Why is that (if using, or not using)?
Participant # 08: I always use the Internet for shopping and paying bills because of ease and the speed. Also, I do not need to be physically at the location to do a task.
Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 08: I usually ask for assistance from the experts in the sector.

Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 08: By asking, however, not all employees are interested to know.

Researcher: How do the e-government system or the network system and technologies affect your work?

Participant # 08: The new systems usually provide better performance and speed in the work.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 08: It offers us a better system to communicate and circulate our work among each other.

Researcher: How is this system different from the previous system?

Participant # 08: It is more advanced and better to use.

Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 08: I think personally that the problem with the new systems is that we employees are not offered sufficient orientation to work with it. As I mentioned before the new systems offer better communication among employees with speed.

Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 08: Actually, we save a lot of time due to less face-to-face communication in the sector.

Researcher: Do you think that language is an obstacle in applying the system?

Participant # 08: I do think that the language is a problem as there are only a few employees who are able to use the English language.

Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 08: Employees refuse using the new systems because: not liking to advance and develop themselves and they want to use what they are used to.
Researcher: Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 08: No, any new system will not be accepted easily in the sector. Also, when any new system is implemented the employees try to bring out its disadvantages so they don’t use it.

Theme Six: Training Experience

Researcher: Did you receive any training on computer applications?

Participant # 08: Yes, I did take computer classes but it was self-paid.

Researcher: Did you receive any training on e-government application?

Participant # 08: No, I did not.

Researcher: Did you take any courses in the English language?

Participant # 08: Yes, I did.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant # 08: Yes, I did benefit from them. Practising and using them is more beneficial than just studying and taking courses.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?

Participant # 08: I deal with difficulties by trying to overcome them and advice from the experienced.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant # 08: Yes, the new technologies helped us at work.

Researcher: What motivates you in the job, and do you feel motivated in your job?

Participant # 08: I feel motivated from my own satisfaction with my work and from people around me.

Researcher: Do you feel appreciated in your job?

Participant # 08: Yes, I do feel appreciated.

Researcher: If you have uncertainties and surprises in your job, how do you deal with them?

Participant # 08: I face them and try to do what I can as fast as possible.
Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant # 08: It depends on the person and his ethics.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant # 08: I do not have problems with accepting orders from my boss. But things have to be according to the code and rules of the sectors.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 08: I feel relaxed most of the time.

Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 08: Time has no value in most public sectors and it is because there are no regulations and punishments as in the private sector.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 08: I spend the weekend with family and friends and doing hobbies.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 08: The family is fundamental and not to be taken lightly.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 08: Reasons for not advancing in the society: there are no incentives and motivations; the employee who works is the same as the employee who does not work, both of them get their salary at the end of the month.

Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 08: The organizational culture is not cooperative.

Researcher: Is there any grouping in the organization?

Participant # 08: There is grouping in the sector and that is because of reasons like: grudge, and jealousy of the others.
Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 08: Most of the time jobs are attained by nepotism which put the wrong person in the wrong place and vice versa.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 08: I think that to improve the organization the sector should look into giving employees proper incentives and supervision both internal and external as in the private sectors.

Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 08: There is no socio-cultural support in the environment for women to work and there is a negative interpretation of the religion concerning this subject.

Researcher: How do you and other employees feel about having female employees working with you in the same organization?

Participant # 08: The employees would not accept women’s jobs in the sector because of the negative religious ideas.

Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 08: The e-government system will not provide job opportunities for women since the system is based on less labour.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 08: Yes, I do believe of the role of women in developing the country, however, only if women could work in limited fields that are suitable for them.

Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 08: The negatives of women working will be, ignoring their family and home.

Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 08: Women’s job could be a financial support for the family.
Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 08: The rules and regulations should encourage and support women’s work and to find various areas for them to work at.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 08: The reason for not advancing in women’s job is the negative religious ideas.

Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 08: I use different types of communication in my life. I prefer face-to-face communication with family and friends and at work.

Personal communication: face-to-face and telephone.

Family communication: face-to-face and telephone.

Communication with friends: face-to-face and telephone.

Social communication: telephone.

Business communication: Face-to-face, telephone, and email.

Communication with employees: emails.

Is there anything that you would like to add or ask?

I hope and wish you all the best. Thank you for giving me this opportunity.

Interview number: 09

Theme One: Personal Information

Researcher: What is your current position?

Participant # 09: I am a consultant at the Ministry of Higher Education (MOHE).

Researcher: How many years of working experience do you have?

Participant # 09: Six years of experience.

Researcher: What is your monthly income range?

Participant # 09: it is around 10,000 SR.
Researcher: Your age range?
Participant # 09: I am thirty seven years old.

Researcher: What is your education?
Participant # 09: I have a PhD.

Theme Two: Computer Experience

Researcher: Do you have your own computer at work?
Participant # 09: I have my own computer at work.

Researcher: Do you work on a computer?
Participant # 09: Yes, I do.

Researcher: How much time do you spend on the computer at work?
Participant # 09: I could spend more than six hours daily.

Researcher: How do you use the computer at work?
Participant # 09: I conduct all my work tasks by using the computer so as for writing reports, email, and research. I also use it for communication, productivity, and information.

Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 09: All employees have computers to use in the workplace, however, only the employees whose job description does not require computing are not given PCs.

Theme Three: Internet Experience

Researcher: Have you ever used the Internet?
Participant # 09: Yes, I do.

Researcher: How often do you use the Internet daily?
Participant # 09: I almost use the Internet seven hours a day.

Researcher: Where do you use the Internet mostly?
Participant # 09: At home and in office.

Researcher: For what mostly do you use the Internet?
Participant # 09: I use the net at work and home for communication, research, data mining, productivity, and entertainment at home.
Researcher: To what extent do the computer and Internet influence the Saudi family?

Participant # 09: The family is influenced by the computer and Internet both positively and negatively. My two computing-related graduate degrees and history as an Internet columnist influenced my family a great deal. So, all my family members have their own computer machines including my three year old son. I have a wired network at home linking all rooms beside the wireless network. The kids accept computers as friendly machines. They see them as better alternative to Nintendo and Play station games. They also use the web wisely and positively. They are commencing on using it for communication and hopefully for productivity soon. In addition, I like to communicate with my friends and family through different social networks online. I can connect with the females in the family and exchange emails and different information online with ease where it could be difficult in the actual world. My wife could communicate with her professor online with no restriction since it is difficult for her to be face-to-face at the university. She is studying at the business school and he teaches them through a monitor screen at the school since the male teacher and female students cannot be face-to-face. In addition, the negatives are not visible to me. Maybe, my close involvement with them did not allow any inacceptable aspect to appear. However, I can see that some of them already like playing with the computer rather than with their siblings.

Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 09: Yes. In my belief, any technology is harmful, especially in our society, unless their use is attended and supervised by elders.

Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 09: It is hard to generalize any opinion, especially when it comes to your questions. I cannot say that a certain category of the society uses the computer. I also cannot say that “all” classes of society use it. There is a spectrum of distribution. People use it based on need which is determined by job requirements nature of jobs and personal needs. The latter includes personal investments in stocks. A boost in laptop sales was created as Saudi banks started online trading services. So, this use is driven by that incentive.
Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 09: Yes.

Researcher: Why is that (if using, or not using)?

Participant # 09: It is safe, easy and VERY convenient. I shop from US stores that offer things I cannot find in the local market.

Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 09: IT department is responsible for any trouble and they have IT support for employees. We have a 300 number for tech support and troubleshooting.

Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 09: In-service training is the way.

Researcher: How do the e-government system or the network system and technologies like Internet affect your work?

Participant # 09: Positively. I am highly productive. The last time I wrote a study using regular pen and paper was when I was 22 years old (a college student). Since then, I did everything electronically. If something is required on paper, I just give it because it is slow and impractical. My choice of the Internet is for speed, quality, productivity, quantity, sustainability and feasibility. In addition, the e-government system should provide better production and services in the sector. Some sectors that use some aspects of e-government find and enjoy its benefits. Also, the full implementation of e-government will offer transparency to many aspects in the sector.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 09: I am more connected. My list of friends who go online is getting bigger. My co-workers who go online know me better. We socialize electronically and communicate on an informative basis. I feel this is positive and I believe it is so because people online behave differently and allow you to see more of them than they would formally.
Researcher: How is this system different from the previous system?

Participant # 09: This the first time e-government system is being used. Earlier, there were different attempts but they were primitive - even ‘stone-age’ - forms of e-government.

Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 09: The new system allows speed, scope, accuracy, tracking, assessment, and productivity. Employees are more mobile and connected. A lot of effort is redirected and rechanneled instead of wasting it on old methods.

Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 09: No difference, the social behaviour is still the same; however, we do a lot of our work by communicating electronically instead of wasting time.

Researcher: Do you think that language is an obstacle in applying the system?

Participant # 09: Yes, I think that the English language is the language of IT, whether we like it or not; the Arabization (system in Arabic) still lags behind.

Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 09: Employees refuse to use the new application due to failure to accept change. Change is hard and the Saudi environment is identified in many research studies as highly change-resistant.

Researcher: Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 09: Yes, if supported by financial incentives, the faculty started using computers more when a 25% raise was promised. Furthermore, people started buying laptops and mastered the net when the stock exchange went online. I can say that “Money Talks”.

Theme Six: Training Experience

Researcher: Did you receive any training on computer applications?

Participant # 09: No, I did not get any training. I have a degree in computer.

Researcher: Did you receive any training on e-government application?

Participant # 09: No. I was part of the designing team.
Researcher: Did you take any courses in the English language?
Participant # 09: No. I am a professor of linguistics.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?
Participant # 09: Inapplicable.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?
Participant # 09: I enjoy my work and I do not face difficulties in the job.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?
Participant # 09: There is always the technology that develops the ways we do our tasks at the job.

Researcher: What motivates you in the job, and do you feel motivated in your job?
Participant # 09: Achievement and satisfaction of the boss keeps me motivated at the job.

Researcher: Do you feel appreciated in your job?
Participant # 09: Yes, I do.

Researcher: How do you deal with challenges in your job?
Participant # 09: I do not have challenges; I create them and enjoy beating them.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?
Participant # 09: The loyalty of employees should be toward the organization.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?
Participant # 09: Yes, I just ask when I have any points that need clarification. I always get directions in a form or a request. It is up to me to figure out how to handle it depending on my experience. In fact, 97% of the times I understand what he wants. I do not give the boss any hard time giving me instructions or orders. After all, he is the boss.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?
Participant # 09: The work environment is ideal. I feel tired sometimes but I am enjoying it.
Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 09: Time is a major issue especially for high ranking officials. However, lower management does not care that much. I am describing a general vision based on observation, so these are my assumptions.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 09: My preferred place is my ranch with my family and parents.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 09: Family is my life. I am actually surprised you are asking this question, you could ask this question in another culture and not the culture of Saudi Arabia.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 09: Change in Saudi Arabia is faster than most countries in the world. In fact, it is too fast for others to catch up. It is taking all directions: positive and negative.

Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 09: I could say that the organizational culture is cooperative in general. However, it is more comfortable when we employees have our breakfast together. This atmosphere is relaxing and the employees get to meet with each other in a friendly environment.

Researcher: Is there any grouping in the organization?

Participant # 09: Talking about this is like talking about a gang or something like that. I cannot deny or prove it.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 09: For getting a job the majority get nominated through the Civil Service Ministry or through direct application.
Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant #09: There is nothing perfect and there are many aspects that could be developed in the organization to make it a better environment.

Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant #09: Yes, in some areas but still more is needed.

Researcher: How do you and other employees feel about having female employees working with you in the same organization?

Participant #09: The need for women in our sector is limited.

Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant #09: The new system could offer opportunities to women jobs if utilized smartly.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant #09: I believe in the role of women in the society and they can help in the developing of the country.

Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant #09: The positive aspects for women’s work: education, awareness, better upbringing of kids, and change. The negatives are: being a fatigued wife, sleeping all day, and the husband losing his rank as being number one.

Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant #09: Women’s work could support the family as it could destroy it. The base of this should be mutual planning, understanding, and shared futuristic vision.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant #09: The government in general is supportive. However, society is changing slowly and there is lack of awareness of the importance of women’s jobs.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?
Participant # 09: Many, yet, the first factor is the woman herself. Women still wait for things to be changed for them. In a world like this, women have to contribute to their progress and positive change. Women are still waiting for things to be changed for them.

**Theme Eleven: Communication**

**Researcher:** What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 09: I use different and all these methods, however, it depends on the people and situation.

Personal communication: Fact-to-face, telephone, emails, and SMS.

Family communication: phone.

Communication with friends: telephone and SMS.

Social communication: telephone, and SMS.

Business communication: Fact-to-face, telephone, emails, and SMS.

Communication with employees: Fact-to-face, telephone, emails, SMS and fax.

**Is there anything that you would like to add or ask?**

Wish you luck.

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**Interview number: 11**

**Theme One: Personal Information**

**Researcher:** What is your current position?

Participant # 11: I am the chief auditor at the Saudi Geological Survey (SGS).

**Researcher:** How many years of working experience do you have?

Participant # 11: I have 12 years of experience.

**Researcher:** What is your monthly income range?

Participant # 11: My income is 10,000 SR.

**Researcher:** Your age range?

Participant # 11: I am thirty three years old.

**Researcher:** What is your education?

Participant # 11: I have a university Bachelor’s degree.
Theme Two: Computer Experience

Researcher: Do you have your own computer at work?

Participant # 11: Yes, I do.

Researcher: Do you work on a computer?

Participant # 11: Yes, I do.

Researcher: How much time do you spend on the computer at work?

Participant # 11: I use it for around seven hours.

Researcher: How do you use the computer at work?

Participant # 11: I use it for work for writing up my reports, working on financial file and auditing different applications.

Researcher: Do all employees have their own computers and use them to perform tasks?

Participant # 11: No, they do.

Theme Three: Internet Experience

Researcher: Have you ever used the Internet?

Participant # 11: Yes.

Researcher: How often do you use the Internet daily?

Participant # 11: I work around an hour.

Researcher: Where do you use the Internet mostly?

Participant # 11: At home.

Researcher: For what mostly do you use the Internet?

Participant # 11: I mostly use the Internet for checking my emails and for gaining knowledge and information.

Researcher: To what extent do the computer and Internet influence the Saudi family?

Participant # 11: The positive aspect is the speed of getting the information for the family members. The negative aspect is the easy access to harmful web pages since the website is open to all kinds of information.
Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 11: In my opinion the computer and Internet do not influence the family relations positively. The influence is negative somehow since it takes up a lot of time which as a result prevents people from keeping up with other family relatives.

Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 11: All society levels use the computer and Internet and it is not restricted to specific people.

Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 11: Yes.

Researcher: Why is that?

Participant # 11: It is easy to do many things online. It provides fast and easy way to pay my bills as phone, electricity, and my credit cards.

Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 11: I contact the IT services. However, we are not applying e-government yet.

Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 11: To understand the new system we could do that by being up dated and looking into everything new. Also, practice is the best way to be able to use any system.

Researcher: How do the e-government system or the network system and technologies affect your work?

Participant # 11: In fact the new technological systems make our work better and faster.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 11: It did not affect it, we just use the system.

Researcher: How is this system different from the previous system?

Participant # 11: The ease in performing tasks by the use of new technologies.
**Researcher:** What are the advantages and disadvantages of using the e-government system or any electronic system?

Participant #11: This system will transfer all paper documents to digital data that should make work much easier. Also, what is good about the new system is that the clients could send in information by the net. However, lack of knowledge from employees is a negative aspect and that is why they do not want to use the system.

**Researcher:** Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant #11: I think that the connection among employees in the sector will be more effective if the staff is trained to use the system properly. Also, the new systems will have positive effect because there will be less paper waste. The face-to-face communication will be less as well since there are a lot of tasks at the job that could be done electronically. Even a lot of meeting and phone calls could be less since the technology will provide other ways of communication that is faster and easier.

**Researcher:** Do you think that language is an obstacle in applying the system?

Participant #11: The systems we use are used in the Arabic language.

**Researcher:** Why in your opinion do employees refuse to use the new application (e-government)?

Participant #11: The reasons for employees not using the system are: objection and resistance to everything new, refusing change, the age of the users, and the lack of training for employees.

**Researcher:** Do you think that e-government or any new technology is accepted easily in the organization?

Participant #11: At first there will be those who are with the system and others who are against the system but in the end it will be applied.

**Theme Six: Training Experience**

**Researcher:** Did you receive any training on computer applications?

Participant #11: Yes.

**Researcher:** Did you receive any training on e-government application?

Participant #11: No.

**Researcher:** Did you take any courses in the English language?

Participant #11: Yes.
Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant #11: Yes, I did benefit.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?

Participant #11: Facing difficulties is by being patient and use the best solution to solve the problem from its roots.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant #11: At the sector now we somehow have now less paper and most of the communication and work are done electronically.

Researcher: What motivates you in the job, and do you feel motivated in your job?

Participant #11: The motivation is either monetary or emotional and the monetary incentive is really low because this is a public sector.

Researcher: Do you feel appreciated in your job?

Participant #11: I also feel appreciated at work.

Researcher: If you have uncertainties, challenges and surprises in your job, how do you deal with them?

Participant #11: With surprises I do not take fast decisions and think thoroughly.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant #11: The loyalty of the employee is for himself and his future.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant #11: I do take orders and to be successful at work your superior should be pleased with your work.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant #11: The physical work surroundings are suitable and I feel relaxed because of the understanding among department colleagues.
Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 11: Time is very significant and it is very important to me personally. However, in the public sector this aspect is very elastic but this is not the case in the private sector.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 11: I spend the weekend with family and then with friends.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 11: Family is very important. I feel that a person without a family is like an orphan.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 11: The Reasons for not advancing in the society are: negative cultural and traditional beliefs, useless policies and regulations, and weak education systems.

Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 11: The organizational atmosphere is cooperative.

Researcher: Is there any grouping in the organization?

Participant # 11: The grouping exists in the public and private sector.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 11: Getting the job depends on nepotism and then qualification.

Researcher: Are there are any aspects that could be tackled to make the organization a better environment?

Participant # 11: Being transparent and fair is important for a better organization.
Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 11: The development of the society currently laid the ground for women’s job acceptance and allowing them to work. One can see women in different areas in the labour market as media, medicine, architecture and others.

Researcher: How do you and other employees feel about having female employees working with you in the same organization?

Participant # 11: Now we can see women working in various fields and it is becoming natural to see them working in the media and medical field, however, with being careful and conservative.

Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 11: The new system will allow the women to work especially with updating their skills now in computer programs and other specialized fields.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 11: I believe in the role of women in the society as she can hold different roles that follow Islamic spirit.

Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 11: The negative aspects for women’s jobs are: mix among male and female, and disregard for home and family. The positive aspects are: building a well-balanced society and competing with men and being creative.

Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 11: The income support from women’s job is necessary at this time when all aspects of life are getting more difficult in terms of a better life and educating the family.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 11: The rules and regulations enforced by government are significant for better successful labour market that is accepted globally.
Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 11: The factors that are responsible for women not developing in the society are: fear by men of women’s success, women not self-confident, and the preference of men over women in the job.

Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 11: Personal communication: face-to-face.
Family communication: face-to-face.
Communication with friends: telephone.
Social communication: face-to-face.
Business communication: telephone.
Communication with employees: emails.

Researcher: Is there anything that you would like to add or ask?

I hope that I could provide a little help for the researcher in this study and asking our God to offer you the best.

Thank you

Interview number: 12

Theme One: Personal Information

Researcher: What is your current position?

Participant # 12: I am a programmer at the Saudi Geological Survey (SGS).

Researcher: How many years of working experience do you have?

Participant # 12: I have 6 years of experience.

Researcher: What is your monthly income range?

Participant # 12: My income is 9,000 SR.

Researcher: Your age range?

Participant # 12: I am twenty seven years old.
Researcher: What is your education?
Participant # 12: I have a university Bachelor’s degree in computing.

Theme Two: Computer Experience
Researcher: Do you have your own computer at work?
Participant # 12: Yes, I do.
Researcher: Do you work on a computer?
Participant # 12: Yes, I do.
Researcher: How much time do you spend on the computer at work?
Participant # 12: I use it for around seven hours.
Researcher: How do you use the computer at work?
Participant # 12: I work doing a lot of programming, use Microsoft office and I check my emails.
Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 12: Around 85% of employees have a computer, only 40% use them.

Theme Three: Internet Experience
Researcher: Have you ever used the Internet?
Participant # 12: Yes.
Researcher: How often do you use the Internet daily?
Participant # 12: I use it for around three hours but not daily.
Researcher: Where do you use the Internet mostly?
Participant # 12: At home.
Researcher: For what mostly do you use the Internet?
Participant # 12: I mostly use the Internet for checking my emails and for gaining knowledge and information. In addition, I like to check sport sites and the different multimedia programs.
Researcher: To what extent do the computer and Internet influence the Saudi family?
Participant # 12: The parents are not strongly influenced by the computer and Internet they only use it to pay bills and other important tasks. However, my parents get really
annoyed and frustrated at my long hours of using and being in front of the computer instead of talking and being with them.

**Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?**

Participant # 12: As I mentioned before the computer and Internet could influence the family negatively and result also in less family communication. Therefore, there should be management in using the computer in an ideal manner. So with the respect for time and family then the computer and Internet will be a blessing and all will want to learn.

**Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?**

Participant # 12: All levels of society without exception are using the Internet. On one hand, the educated uses it and get frustrated with the different public sectors online because of the weak application of the real concept of electronic government and want this system to be suitable and running fast. On the other hand, there is the problem of the older generation of people over the age of 45 where they are not accepting the system and don’t want to learn it. Also, this problem is getting better where now they are learning the system because of the stocks online and Internet banking. The other levels of society are also using the computer and Internet, for example, it is evident in the huge number of forums on the net where most are not educated.

**Theme Four: E-Commerce Experience**

**Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?**

Participant # 12: Yes.

**Researcher: Why is that?**

Participant # 12: However, I prefer to use of the ATM because of the fear of hackers online.

**Theme Five: E-government System**

**Researcher: If faced with a problem in the system the employee should go to whom to solve it?**

Participant # 12: I contact the IT services.
Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 12: There could be exchange of information among employees by the use of Internet and mobile phone massages.

Researcher: How do the e-government system or the network system and technologies affect your work?

Participant # 12: Technology helps us in doing our job in a better manner.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 12: It did not affect it.

Researcher: How is this system different from the previous system?

Participant # 12: The new system provides better and easy communication among employees.

Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 12: The e-government system is not applied yet in our sector. However, it should offer fast and easy access to information needed in the workplace.

Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 12: I think that communication among employees and staff in the sector has become less frequent with the use of the electronic systems, so we meet only for important aspects of the job.

Researcher: Do you think that language is an obstacle in applying the system?

Participant # 12: The English language is not a problem since the programs could be done in Arabic.

Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 12: Employees refuse the use of the system because it is new and they don’t know how to employ it and they don’t have enough awareness of the program.

Researcher: Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 12: Yes, but it will time some time before it gets fully implemented in the sector.
Theme Six: Training Experience
Researcher: Did you receive any training on computer applications?
Participant # 12: Yes, at different colleges.

Researcher: Did you receive any training on e-government application?
Participant # 12: No.

Researcher: Did you take any courses in the English language?
Participant # 12: Yes.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?
Participant # 12: Yes, I did benefit.

Theme Seven: Work environment
Researcher: How do you deal with difficulties in your job?
Participant # 12: I deal with difficulties by the advice of other with experience.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?
Participant # 12: Not a lot changed since I was employed.

Researcher: What motivates you in the job, and do you feel motivated in your job?
Participant # 12: There is no motivation at the job where there is no encouragement or thanks. Also, there is no overtime or being paid extra if stayed at work after hours. All employees at the end of the month will get their salaries whether they worked hard or not.

Researcher: Do you feel appreciated in your job?
Participant # 12: I feel appreciated by the boss only and colleagues at work.

Researcher: If you have uncertainties, challenges and surprises in your job, how do you deal with them?
Participant # 12: I deal with surprises and have no problem in that, and for the challenges I like to face it at the workplace.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?
Participant # 12: The loyalty to the sector is very weak.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?
Participant # 12: I have no problem in accepting orders from the boss.
Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 12: The office is suitable to work and I feel relaxed in the environment.

Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 12: The time aspect is not a very important thing in the sector and the work could be always postponed.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 12: I like to spend time with my friends and family. Also, in doing my hobbies I mostly try to avoid the use of the computer.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 12: The family is very significant for our society and Islamic principles. The parents are appreciated and respected.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 12: Reasons for not advancing are: the person is not faithful to the values he has, and the issue of being dependant on others. So, if we solved these two matters we would be in a better standing as a country.

Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 12: The general environment in the department is cooperative and friendly with colleagues.

Researcher: Is there any grouping in the organization?

Participant # 12: Unfortunately, there is grouping in the sector. For example, if an employee is related to a group or has his loyalty to a strong person at the workplace, then he will advance fast in the job even if he does not have the proper qualification and vice versa.
Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 12: For getting a job nepotism could be an aspect but, nowadays, the qualifications also play a role in getting a job.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 12: Aspects that could develop the sector: the employee should feel responsible and conduct his job properly.

Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 12: No, I do not think that anything is laid down to support Saudi females in the workplace.

Researcher: How do you and other employees feel about having female employees working with you in the same organization?

Participant # 12: Some employees do accept women’s jobs in the sector where others don’t accept that. Personally, I do not have any objection to women working in the same organization or any other organization.

Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 12: The e-government could offer women more opportunity in getting jobs, in addition, the system allow the more privacy for women since not always face-to-face is required.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 12: Women’s role is very important for the advancement of any country.

Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 12: I really cannot say since I never worked with women. But maybe they will be overwhelmed with the huge responsibilities they are going to have if they have a family.
Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 12: The woman’s job could support the family and be involved in the labour market but it should be with the consideration of her family responsibilities.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 12: The rules and regulations by the government could provide women with support in the labour market. The government could find different factories that are operated by females in doing different kinds of soft labour. Besides, there could be other plans that provide women more work opportunities. However, there should be consideration for their needs and respect for our Islamic rules.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 12: There are no genuine opportunities for females in the business market.

**Theme Eleven: Communication**

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 12:
- Personal communication: telephone.
- Family communication: face-to-face.
- Communication with friends: telephone and emails.
- Social communication: face-to-face.
- Business communication: emails.
- Communication with employees: emails and telephone.

Researcher: Is there anything that you would like to add or ask?

I wish you all the best in your education.

Thank you

**Interview number: 13**

**Theme One: Personal Information**

Researcher: What is your current position?

Participant # 13: I am a legal researcher at the Saudi Geological Survey (SGS).
Researcher: How many years of working experience do you have?
Participant # 13: I have 7 years of experience.

Researcher: What is your monthly income range?
Participant # 13: My income is 7,000 SR.

Researcher: Your age range?
Participant # 13: I am twenty seven years old.

Researcher: What is your education?
Participant # 13: I have a university Bachelor’s.

Theme Two: Computer Experience
Researcher: Do you have your own computer at work?
Participant # 13: Yes, I do.

Researcher: Do you work on a computer?
Participant # 13: Yes, I do.

Researcher: How much time do you spend on the computer at work?
Participant # 13: I use it for around three hours.

Researcher: How do you use the computer at work?
Participant # 13: I use it for printing and researching and other related work.

Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 13: Yes, they do.

Theme Three: Internet Experience
Researcher: Have you ever used the Internet?
Participant # 13: Yes.

Researcher: How often do you use the Internet daily?
Participant # 13: I use it for around three hours.

Researcher: Where do you use the Internet mostly?
Participant # 13: At home and at work.

Researcher: For what mostly do you use the Internet?
Participant # 13: I mostly use the Internet for checking my emails and for gaining knowledge and information.
Researcher: To what extent do the computer and Internet influence the Saudi family?

Participant # 13: The family today is influenced by the computer and Internet. The Internet came into the houses and family members are using them and are open to many areas that were not available in the past. Individuals are reading about different countries and getting to know new cultures around them. If any idea came to mind they could know more about and research it in more detail.

Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 13: In some way we can say that is true, however, I see that the computer and Internet could be as a tool to be more close to family members and other relatives. One could send emails about different topics and exchange ideas. The text messages as well could be a way that individuals could communicate and know more about each other.

Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 13: I can say that yes maybe all levels of the society are using the computer and Internet. It is seen today in many places in coffee shops, libraries, and other places.

Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 13: No, I do not.

Researcher: Why is that?

Participant # 13: I feel that shopping online is not safe and my personal and account information could be stolen.

Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 13: I contact the experts in the sector.
Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 13: The employees could exchange information by talking to each other and by having different workshops.

Researcher: How do the e-government system or the network system and technologies affect your work?

Participant # 13: It made my work go faster.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 13: We can circulate data easier and faster.

Researcher: How is this system different from the previous system?

Participant # 13: The new system should offer better and easy communication among employees and among clients.

Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 13: We did not apply the e-government system in our sector yet.

Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 13: The employees in the sector could be able to communicate through the system and share data together.

Researcher: Do you think that language is an obstacle in applying the system?

Participant # 13: No, it will not be a problem since the programs are done in the Arabic language.

Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 13: They refuse to use the system because they do not know how to use it, not willing to learn, and the fear that they will not succeed.

Researcher: Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 13: Yes, if the system is applied properly and staff are trained to use it.

Theme Six: Training Experience

Researcher: Did you receive any training on computer applications?

Participant # 13: Yes, at different colleges.
Researcher: Did you receive any training on e-government application?
Participant #13: No.

Researcher: Did you take any courses in the English language?
Participant #13: Yes.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?
Participant #13: Yes, I did benefit.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?
Participant #13: I usually ask the recommendation of people who are knowledgeable and have experience.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?
Participant #13: New technologies introduced in the sector changed some of the ways we do work.

Researcher: What motivates you in the job, and do you feel motivated in your job?
Participant #13: I like dealing with new aspects at the job and that makes me motivated.

Researcher: Do you feel appreciated in your job?
Participant #13: Yes, I do.

Researcher: If you have uncertainties, challenges and surprises in your job, how do you deal with them?
Participant #13: I try to deal with them with a calm attitude in order to have a clear mind and find a solution.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?
Participant #13: The loyalty should be for the sector.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?
Participant #13: Yes, I do accept higher authority, only orders that follow the rules and regulations.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?
Participant #13: The environment is considered to be appropriate.

Theme Eight: Culture
Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 13: Time is not valued here and this concept is taken lightly. Employees do not bother a lot with being on time or having work deadlines.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 13: I like to spend my time with my friends.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 13: The family concept is important and a person without a family feels lonely.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 13: I think that there is a lack of people with brains with a high level of maturity. Also the lack of trust and sincerity in the society with the power to change are the reasons for not advancing in our country.

Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 13: I find the organizational culture is a little aggressive with a little cooperation with some staff.

Researcher: Is there any grouping in the organization?

Participant # 13: Unfortunately, there is grouping in the sector. The group always looks for their interest and if things are against them there will be problems.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 13: For getting a person to get a job in the workplace the person should know a person who has the power to do that.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 13: Self supervision is a very important aspect to consider for a better organizational environment.
Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 13: Long time is needed to bring up and lay the environment for the Saudi women to be able to work freely.

Researcher: How do you and other employees feel about having female employees working with you in the same organization?

Participant # 13: People have negative ideas and feelings about females working in a mixed environment especially if they are not in the Abayia (a black dress that is worn by Saudi females).

Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 13: I am not sure if this system will offer females more job opportunities.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 13: Women’s role is important, however, they should work in areas that are only related to women and there is no mixing between male and female at the workplace.

Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 13: I think that there are some advantages, however, if there is mixing of the sexes the disadvantages are more.

Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 13: Yes, I think that women’s jobs can offer support for the family especially in these hard days when everything is expensive.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 13: The rules and regulations by the government could provide women with support in the labour market; however, it should follow our Islamic rules.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 13: The lack of awareness of the female about her role in the society and the lack of female awareness of her religion, traditions, and customs.
Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 13:

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Personal communication: face-to-face.
Family communication: face-to-face.
Communication with friends: telephone.
Social communication: face-to-face.
Business communication: emails.
Communication with employees: emails and telephone.

Researcher: Is there anything that you would like to add or ask?

Thank you

Interview number: 14

Theme One: Personal Information

Researcher: What is your current position?

Participant # 14: I am an assistant programmer in the business development department.

Researcher: How many years of working experience do you have?

Participant # 14: I have four years of experience.

Researcher: What is your monthly income range?

Participant # 14: My monthly income is around 6,000 SR (Saudi Riyals).

Researcher: Your age range?

Participant # 14: I am 25 years old.

Researcher: What is your education?

Participant # 14: I have a diploma in computer (programming).

Theme Two: Computer Experience

Researcher: Do you have your own computer at work?

Participant # 14: Yes, I do have a computer at work.

Researcher: Do you work on a computer?

Participant # 14: Yes, I do.
**Researcher:** How much time do you spend on the computer at work?

Participant # 14: I spend four hours on my computer at work.

**Researcher:** How do you use the computer at work?

Participant # 14: I use the computer to conduct my work for the job as filling applications, printing, and sending emails.

**Researcher:** Do all employees have their own computers and use them to perform tasks?

Participant # 14: About 80% of employees in this department have their computers.

**Theme Three: Internet Experience**

**Researcher:** Have you ever used the Internet?

Participant # 14: Yes.

**Researcher:** How often do you use the Internet daily?

Participant # 14: I use the Internet for around five to seven hours daily.

**Researcher:** Where do you use the Internet mostly?

Participant # 14: At home and in café.

**Researcher:** For what mostly do you use the Internet?

Participant # 14: I use the computer for reading and researching, email, and some educational subjects.

**Researcher:** To what extent do the computer and Internet influence the Saudi family?

Participant # 14: Family is influenced by the Internet in a positive way. The family members could use it in the conducting of household chores, the school subjects for the kids, and entrainment.

**Researcher:** In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 14: No, I do not see that there is an influence on the family communication.

**Researcher:** Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 14: The use of Internet and computer are not confined to specific society level. There are uneducated people who know how to use the computer and are very good at it. Also, I think that the use of the computer depends on the person and his hobbies.
Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant #14: Yes, I did.

Researcher: Why is that (if using, or not using)?

Participant #14: I use the Internet for shopping since it saves a lot of time and effort.

Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant #14: I seek the help of experts in this area to solve the problem.

Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant #14: Employees exchange information through reading and research and getting information from people with experience.

Researcher: How do the e-government system or the network system and technologies affect your work?

Participant #14: The Internet affects me positively in the research of information and checking emails for work. In addition, the Internet affects the speed of work in sending documents and reports by work email and internal network.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant #14: The system gives us the opportunity to exchange data and information related to work fast and easy. Now we are not wasting time in waiting for paper work to be delivered to our offices instead we can just log on and be in business.

Researcher: How is this system different from the previous system?

Participant #14: I do not know any previous system.

Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant #14: The e-government is not activated in our sector.

Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant #14: The use of the new technologies helps our work a lot; however, we still use paper often in our workplace.
**Researcher:** Do you think that language is an obstacle in applying the system?

Participant # 14: It could be an obstacle since not all have the knowledge of the language.

**Researcher:** Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 14: Employees refuse to use the system because they do not want to learn and have the fear of failing and because of ignorance, resistance to change, and lack of knowledge.

**Researcher:** Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 14: Also, I think that the e-government system is not ready socially and there is not social and cultural infrastructure.

**Theme Six: Training Experience**

**Researcher:** Did you receive any training on computer applications?

Participant # 14: Yes, I did get training at the college.

**Researcher:** Did you receive any training on e-government application?

Participant # 14: No, I did not.

**Researcher:** Did you take any courses in the English language?

Participant # 14: Yes, I did.

**Researcher:** If you got any training in any of these courses, did you learn and benefit from them?

Participant # 14: I just benefited a little since we did not practice the English language out of the college and not all know how to speak.

**Theme Seven: Work environment**

**Researcher:** How do you deal with difficulties in your job?

Participant # 14: I deal with difficulties with the advice of the experienced.

**Researcher:** Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant # 14: The workplace changed from before with the uses of computer and machine equipment such as printers, fax, and other things.

**Researcher:** What motivates you in the job, and do you feel motivated in your job?

Participant # 14: I do not feel motivated either emotionally, technically, or monetary.
**Researcher:** Do you feel appreciated in your job?

Participant # 14: I feel appreciated at work.

**Researcher:** If you have surprises and challenges in your job, how do you deal with them?

Participant # 14: I deal with surprises and challenges with calmness and recommendations from the experienced.

**Researcher:** In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant # 14: The loyalty of employees either public or private should be to the sector. However, that is not the case.

**Researcher:** How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant # 14: In addition, I accept orders from my boss and if I have any ideas I would inform him about them.

**Researcher:** In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 14: The physical environment for the workplace is suitable. Also, I feel relaxed because of my colleagues around me.

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**Theme Eight: Culture**

**Researcher:** Do you think that the value of time is considered the same in the public and private sector?

Participant # 14: Frankly, time does not have the same value in public sector as in the private sector. Time in the organization is boring and slow. That is because there is no motivation either emotionally or monetarily and there is not much consideration for this sector.

**Researcher:** When you have time or at the weekend where do you prefer to spend your time?

Participant # 14: I like to spend my time with friends going to the sea and doing other hobbies.

**Researcher:** In your opinion, is family a significant aspect in Saudi culture?

Participant # 14: The family is significant since it is responsible for bringing up members of the society. So if the members are good then they will affect the society in the positive way.
Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 14: Reasons for not advancing in the society: lack of knowledge and reading, not listening to the others, and resistance to change.

Theme Nine: Organizational Culture
Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 14: The organization as whole is not cooperative but my department is very cooperative. That is because of the grouping and there is no equality among employees.

Researcher: Is there any grouping in the organization?

Participant # 14: The grouping is evident in all public sectors. The reason for that is to get authority, position, and being close to people with influence, and getting raises. This results in not considering qualifications and education.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 14: The employee gets a job based on nepotism mostly, and the others by regular application. This aspect is not only in the public sector but also in the private sector.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 14: Moreover, reasons that could develop the organization: proper training for employees, having motivations and incentives for employees at all levels: emotionaly and monetarily. Also, to develop the sector there should be appreciation for employees.

Theme Ten: Female issues
Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 14: In general the environment is not designed for women to work. That is because of the cultural beliefs in the society and the traditions and customs that are engrained in society which do not approve. As a result, women are confined and restricted to a small part in the labour market. Even the education of women is confined
to selected fields. In addition, the overall perspective of women working is not a positive look.

**Researcher:** How do you and other employees feel about having female employees working with you in the same organization?

Participant # 14: The view of women’s work in the sector differs from one person to another. Personally, I believe that women’s work is a necessity for the whole of the society. However, there are others who see it as taboo and do not follow the cultural beliefs so it is not accepted.

**Researcher:** Do you believe that the e-government system would offer females more job opportunities?

Participant # 14: If females have the requirements and knowledge then there will be more opportunities for them to work. In addition, if the government supports the women jobs by rules and regulations then that will be a development not for only the workplace but for the whole country.

**Researcher:** From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 14: I believe in the role of woman in the society. She has an important role in the family as she has an important role in the organization and society. We can see that evident in other countries.

**Researcher:** In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 14: A woman’s job has positives and negatives. Positives: there is coherence in the society between men and women, the benefit from her point of views and ideas where it could be different from the man. The negative: ignorance of home for the work.

**Researcher:** Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 14: The women’s job is for sure support for the family. That will influence the family in a positive way.

**Researcher:** How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 14: Furthermore, the rules and regulation by the government confined women in very limited fields.
Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 14: In addition, the aspects for not advancing for women’s job: fear of failure at work, fear of people’s perspective of women working that is based on the cultural beliefs and customs.

Theme Eleven: Communication
Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 14:
Personal communication: Face-to-face.
Family communication: Face-to-face.
Communication with friends: Face-to-face and telephone.
Social communication: telephone.
Business communication: telephone.
Communication with employees: Face-to-face and telephone.

Researcher: Is there anything that you would like to add or ask?
Wish you the best and Thank you.

Interview number: 15
Theme One: Personal Information
Researcher: What is your current position?
Participant # 15: I am the head of Information Technology and Logistic Support.

Researcher: How many years of working experience do you have?
Participant # 15: I have twenty four years of experience.

Researcher: What is your monthly income range?
Participant # 15: My monthly income is around 14,000 SR (Saudi Riyals).

Researcher: Your age range?
Participant # 15: I am 44 years old.

Researcher: What is your education?
Participant # 15: I have a Master’s Degree.
Theme Two: Computer Experience

Researcher: Do you have your own computer at work?
Participant # 15: Yes, I do have a computer at work.

Researcher: Do you work on a computer?
Participant # 15: Yes, I do.

Researcher: How much time do you spend on the computer at work?
Participant # 15: I spend three to five hours on my computer at work.

Researcher: How do you use the computer at work?
Participant # 15: I use my computer to conduct my work at the job by performing research for management and business development. Also, checking my work emails and to seek the local and international news.

Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 15: Most of the employees have computers, only a little number of employees who do not have and they are not as educated.

Theme Three: Internet Experience

Researcher: Have you ever used the Internet?
Participant # 15: Yes.

Researcher: How often do you use the Internet daily?
Participant # 15: I use the Internet for around two to three hours daily.

Researcher: Where do you use the Internet mostly?
Participant # 15: Both at work and home.

Researcher: For what mostly do you use the Internet?
Participant # 15: I use the computer for reading and researching, email, and the gaining of knowledge.

Researcher: To what extent do the computer and Internet influence the Saudi family?
Participant # 15: The family is influenced by the computer and Internet. The advantages are: awareness and knowledge for the family members, learning the use of technology for knowledge and entertainment, the involvement of the family members young and old, boys and girls in having common ideas, being independent and self-confident in addressing different ideas and subjects freely, and being open to the world.
and breaking the language barrier. The disadvantages are: the negative changes in ideas and principles of family members and acquiring negative behaviour and concepts that contradict out culture, spending long hours using the computer and Internet that affect health in terms of obesity, weak eye-sight and others.

**Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?**

Participant # 15: There are positives and negatives for the computer and Internet regarding family communication. The positives: the closeness of family and society in the exchange of knowledge and information, as it creates a suitable environment for work in relaxing surroundings in conducting tasks that are available to all. The negatives are: aspects that are related to traditions and culture which are affected negatively such as the visiting of family and neighbours.

**Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?**

Participant # 15: A big percentage of society levels do use the computer, however, the others need to learn the use of computer and Internet.

**Theme Four: E-Commerce Experience**

**Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?**

Participant # 15: Yes, I did.

**Researcher: Why is that (if using, or not using)?**

Participant # 15: I use the Internet for shopping since it saves him a lot of time and effort; also, there is no crowd and paper work to do. In addition, there is less pollution from the use of paper and ink.

**Theme Five: E-government System**

**Researcher: If faced with a problem in the system the employee should go to whom to solve it?**

Participant # 15: We offer IT support for employees since I am the head of logistic support. I hope that when the e-government system is implemented that we could offer employees better methods to perform their job.
Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 15: The exchange of knowledge could be done if there are standard rules and procedures to take care of such matters. There should be uncomplicated procedures that could be followed easily by employees in the sector if any information is needed.

Researcher: How do the e-government system or the network system and technologies affect your work?

Participant # 15: The Internet has affected me in a positive way since work has become more productive, less time wasting, and allowing exchange of experiences among employees and departments. The Internet has increased my communication with friends by the use of emails that contain a lot of useful information that enrich our knowledge.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 15: The new system strengthens our communication together since we could circulate information and different interesting subjects online.

Researcher: How is this system different from the previous system?

Participant # 15: The new electronic system is beneficial in that it has a coherent system to connect all the public sectors together for easier procedures among them and the people using the system.

Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 15: The advantage of the new system: rapid execution of work, ease of exchange of information and ideas for development, the connection among public sectors, less cost and pollution, and the change of the world perceiving us. The disadvantages: the increase of unemployment, the bad use of the system in terms of trampling over the rights of others.

Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 15: Face-to-face communication will be less because of the use of the electronic system for exchanging work. However, meetings will be conducted for important matters in the sector.

Researcher: Do you think that language is an obstacle in applying the system?

Participant # 15: The system will not face the English language problem since there is an Arabic system for e-government.
Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 15: The reasons why some employees will not use the system: the fear of the unknown, and not knowing the system.

Researcher: Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 15: I believe that the new system will not be easily adopted in the organization since many employees do not understand the system, and it is considered to be too nebulous for them.

Theme Six: Training Experience

Researcher: Did you receive any training on computer applications?

Participant # 15: Yes, I did get training at university and different computer institutions.

Researcher: Did you receive any training on e-government application?

Participant # 15: No, I did not but I have very little involvement in the e-government committee that is still under construction.

Researcher: Did you take any courses in the English language?

Participant # 15: I have a degree in English.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant # 15: Yes, I did benefit.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?

Participant # 15: I deal with difficulties by patience and solving every issue depending on the availability of human resources, financial resources and technology.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant # 15: I usually like to change and try new things to develop myself.

Researcher: What motivates you in the job, and do you feel motivated or appreciated in your job?

Participant # 15: I get motivated by trying new things and challenges for self-satisfaction, but I do not feel motivated or appreciated at the job.
Researcher: If you have surprises and challenges in your job, how do you deal with them?

Participant # 15: I deal with surprises depending on each individual issue and examining the different aspects. Also, I deal with challenges trying to understand them and gaining confidence.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant # 15: The loyalty is for the organization. However, in the real world that is not fully true.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant # 15: I accept orders from my superior because he is the boss and have the responsibility, and maybe one day I will be the boss and be responsible as well.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 15: There is depression and lack of cooperation among most of the employees in the organization. Also, the workplace environment does not help in achieving goals at work and that is not because of the furniture but because of the controlled and traditional system that does not consider the human resources as an asset for the organization. In addition, I do not feel comfortable because of the negative systems in the sector where there is no collaboration among employees and the laziness of them. Also, there is grouping in the organization.

Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 15: Time has no value in the organization. Employees take a lot of time in conducting their work, for example the task that take couple of minute is done in two days or more.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 15: I spend the weekend with the family.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 15: Family is significant and it is where individuals learn.
Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 15: The aspects that are responsible for not advancing society are: not having positive aspects for changing, and not learning from other countries’ experiences in advancements and technology development.

Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 15: The overall environment in the organization is not supportive.

Researcher: Is there any grouping in the organization?

Participant # 15: There is grouping around the person who has the authority and power.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 15: For getting a job nepotism and relatives are used.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 15: The organization could be better by selecting the appropriate persons to fill the appropriate positions; also by changing the system from bureaucracy to a more flexible system that works better for the organizational environment.

Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 15: There are some changes in perceiving the role of woman in the society and her relationship with men where men do accept women’s jobs in various aspects of work. In addition, there is the need to avoid some of the negative aspects that women could face in the workplace so we could benefit from the involvement of women in the workplace.

Researcher: How do you and other employees feel about having female employees working with you in the same organization?

Participant # 15: There are various fields where women work and compete with men and other fields need to be more suitable for women to work at them.
Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 15: I believe that the e-government system gives more opportunities for women to work with providing a better environment for them.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 15: Women’s role is significant and the foundation for the society.

Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 15: The advantages for women’s jobs: participating in the building of society and financial support for the family beside the man. The disadvantages could be that women could be misunderstood and used by others.

Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 15: Women’s jobs are important because they could support themselves and family if there is no man in the family.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 15: Without the existence of supporting rules and regulations, there will be no workplace that would offer women the opportunity to work. Women should be trained so they would be able to have better chances in the labour market.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 15: The reasons for not advancing and developing for women’s job are: negative cultural beliefs, and the disregarding of Islamic principles that encourage women’s work.

Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 15:

Personal communication: Face-to-face.
Family communication: Face-to-face, emails and SMS.
Communication with friends: emails and SMS.
Social communication: emails and SMS.
Interview number: 16
Theme One: Personal Information
Researcher: What is your current position?
Participant # 16: I am the head of the Revenue Unit.
Researcher: How many years of working experience do you have?
Participant # 16: I have eight years of experience.
Researcher: What is your monthly income range?
Participant # 16: My monthly income is around 8,000 SR (Saudi Riyals).
Researcher: Your age range?
Participant # 16: I am thirty one years old.
Researcher: What is your education?
Participant # 16: I have a university degree.

Theme Two: Computer Experience
Researcher: Do you have your own computer at work?
Participant # 16: Yes, I do have a computer at work.
Researcher: Do you work on a computer?
Participant # 16: Yes, I do.
Researcher: How much time do you spend on the computer at work?
Participant # 16: I spend four to five hours on my computer at work.
Researcher: How do you use the computer at work?
Participant # 16: I use my computer to conduct my work at the job and I use Excel program to perform different work tasks.
Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 16: Yes.
Theme Three: Internet Experience

Researcher: Have you ever used the Internet?

Participant # 16: Yes.

Researcher: How often do you use the Internet daily?

Participant # 16: I use the Internet for around two to three hours daily.

Researcher: Where do you use the Internet mostly?

Participant # 16: At home.

Researcher: For what mostly do you use the Internet?

Participant # 16: I use the computer for different things like checking my emails, reading and researching, and entertainment.

Researcher: To what extent do the computer and Internet influence the Saudi family?

Participant # 16: Nowadays, the computer in the house is very important since it is for exploration, learning, and research. Also, there are some negative aspects to it if used improperly. People could waste a lot of time using them. Another concern would be that some people would use it in a way that contradicts our Islamic teaching.

Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 16: The long hours of using the Internet have a negative effect on family relations and the education of the children. In addition, it is useful for the communication of the family and relatives with the exchange of emails and chatting.

Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 16: Today, the computer and Internet are used by all society levels to a very large percentage including the new generation and people of different ages. This is seen in the spread of the Internet cafés in the country where all ages and social levels attend these places.

Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 16: Yes, I did.
**Researcher:** Why is that (if using, or not using)?

Participant # 16: I use the Internet for paying bills and shopping because of the ease of use, but I am concerned sometimes since it is a risk.

**Theme Five: E-government System**

**Researcher:** If faced with a problem in the system the employee should go to whom to solve it?

Participant # 16: I could contact the IT.

**Researcher:** How do employees exchange and share information in order to understand the e-government system?

Participant # 16: The exchange of knowledge among employees is done through training courses. Also, for the understanding of the system there should be awareness programs in the different media areas.

**Researcher:** How do the e-government system or the network system and technologies affect your work?

Participant # 16: The advantage of the Internet is that it benefited me in learning and the acquiring of information which affects my job positively and in the communication with colleagues in the Messenger and chat. The negative aspect is the use of the Internet for things other than work purposes.

**Researcher:** How does the e-government system or electronic system affect your relations with colleagues?

Participant # 16: Now we can communicate online and exchange data. The system gives us the opportunity to save time and effort.

**Researcher:** How is this system different from the previous system?

Participant # 16: The biggest difference in the use of the new system is the decline of the paper medium and the use of the computer which makes the work easy and fast.

**Researcher:** What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 16: The advantage is in saving time and conducting work fast and the disadvantage could be in some technical problem and the time spent in learning the system.
Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant #16: Now employees can use the system to communicate online without the need to see each other.

Researcher: Do you think that language is an obstacle in applying the system?

Participant #16: The English language is not an obstacle in the use of the e-government because of the use of the Arabic language in the new system.

Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant #16: Some of the employees would not use the system because of not knowing the system and they were not offered any practice or training.

Researcher: Do you think that e-government or any new technology is accepted easily in the organization?

Participant #16: The implementation of the new system will need to go through different stages and to spread awareness in the sector for users to be able to adopt without difficulty. The e-government system is successful in the Ministry of Interior Affairs in the area of issuing passports.

Theme Six: Training Experience

Researcher: Did you receive any training on computer applications?

Participant #16: Yes, I did get training at some computer institutions.

Researcher: Did you receive any training on e-government application?

Participant #16: No.

Researcher: Did you take any courses in the English language?

Participant #16: Yes.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant #16: Yes, I did benefit.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?

Participant #16: There is some pressure in work when the workload is big; however, when it is not left to accumulate I feel more relaxed and less stressed out.
Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant # 16: The way of communication between employees is face-to-face, telephone, besides having now emails which make our work easier and faster. Therefore, the communication among employees in the workplace became easier with the use of the Internet.

Researcher: What motivates you in the job, and do you feel motivated or appreciated in your job?

Participant # 16: There are various motivations. There is the monetary and emotional. I think in the public sector there is emotional motivation. However, I do not feel any motivation at the workplace.

Researcher: If you have surprises and challenges in your job, how do you deal with them?

Participant # 16: There are a lot of surprises and challenges at the workplace; however, I will deal with it according to its importance. Also, the overcoming of the challenges let me gain more experience and feel motivated.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant # 16: The loyalty should be for the organization since the employee is part of this institution.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant # 16: I accept orders from my superior; however, there is no problem in giving my point of view.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 16: The work environment is suitable. I feel relaxed because I am working in the same field I graduated from.

Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 16: Time is very valuable and should be respected so things could be accomplished on time and fast. There should be rules in our sector as in the private sector that employees should follow and understand.
Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 16: I spend the weekend with the family and friends.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 16: Family is a significant aspect in the life of the employee, and if he has harmony with the family he will as a result have harmony at the workplace.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 16: Reasons for not advancing in the country are: no encouragement, less awareness, education level, and the fear of going through the experience.

Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 16: The general environment is friendly but there are also unfriendly employees as well.

Researcher: Is there any grouping in the organization?

Participant # 16: For sure in any organization either private or public there is grouping (religious, and others).

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 16: For individuals to get jobs depends mostly on nepotism and then other aspects that could help the process as education and experience.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 16: The aspects that could develop the sector are: discarding of paper procedures and the use of programs, the understanding of employees, and the empowerment and involvement of employees with the managers.

Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 16: Nowadays, the changes, the cultural differences and globalization helped in the importance of women’s job.
Researcher: How do you and other employees feel about having female employees working with you in the same organization?

Participant # 16: The male and female employee has their role in the sector and the interaction between them should be respectable. Also, both should be cooperative to complete the tasks needed for the job. I think that awareness and high education would help support this relationship.

Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 16: E-government will give opportunities for women to work especially in the technology field.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 16: I believe that women have their role in the developing of the country and that by their part in education, medicine and other fields.

Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 16: The advantages of women working are: participating in the developing of the society and increase of awareness. The disadvantage is that they cannot balance work and home.

Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 16: By supporting the family financially, she can take part of the responsibility for it.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 16: The rules and regulations strongly assist women in the workplace and help in working in different areas. From these rules and regulations that support women in the workplace are the rules of sexual harassment which as a result produce a better and more suitable work environment.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 16: The traditions and customs that perceive that women’s work is not appropriate. Another reason for not developing in life is the refusal of people to accept the idea of women working in some areas and I think that this depends strongly on their education.
Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 16:
Personal communication: Face-to-face and telephone.
Family communication: Face-to-face, emails and SMS.
Communication with friends: telephone, emails and SMS.
Social communication: telephone and SMS.
Business communication: telephone and emails.
Communication with employees: telephone and emails.

Interview number: 17
Theme One: Personal Information

Researcher: What is your current position?
Participant # 17: I am the director of information technology department.

Researcher: How many years of working experience do you have?
Participant # 17: I have 29 years of experience.

Researcher: What is your monthly income range?
Participant # 17: My monthly income is around 19,000 SR (Saudi Riyals).

Researcher: Your age range?
Participant # 17: I am 50 years old.

Researcher: What is your education?
Participant # 17: I have a university degree.

Theme Two: Computer Experience

Researcher: Do you have your own computer at work?
Participant # 17: Yes, I do have a computer at work.

Researcher: Do you work on a computer?
Participant # 17: Yes, I do.

Researcher: How much time do you spend on the computer at work?
Participant # 17: I spend four to five hours on my computer at work.
Researcher: How do you use the computer at work?
Participant # 17: I use it for email, conducting and writing work reports and seminars, and research and information for his job.

Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 17: Employees in the department - some of them have computers and others are without where their job description does not acquire it. In addition, some employees don’t like to change or develop.

Theme Three: Internet Experience

Researcher: Have you ever used the Internet?
Participant # 17: Yes.

Researcher: How often do you use the Internet daily?
Participant # 17: I use the Internet for around two to five hours daily.

Researcher: Where do you use the Internet mostly?
Participant # 17: Both at home and work.

Researcher: For what mostly do you use the Internet?
Participant # 17: I use the Internet for email, research and information, and shopping online.

Researcher: To what extent do the computer and Internet influence the Saudi family?
Participant # 17: The new generation is using the Internet and computer a lot where all their time is spent on that; for example, the chat and entertainment take up all their time which they could use in other ways. The younger generation uses the computer and Internet and prefers it to family and relatives visiting. However, the use of Internet for long hours takes away the young boys and girls from performing their praying and religious duties.

Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?
Participant # 17: Yes, for sure the computer and Internet influence the family communication as I mentioned before. The family members and the young boys and girls are involved with the use of this technology for long hours which affects their
communication with the family. Now they prefer to entertain online to going to relatives where in the past they enjoyed these visits.

**Researcher:** Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 17: Most of society levels use the Internet and computer; however, the educated use them more than others.

**Theme Four: E-Commerce Experience**

**Researcher:** Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 17: Yes, I did.

**Researcher:** Why is that (if using, or not using)?

Participant # 17: Since the banks made available this service I was one of the first who used their service. I pay my bills from my account and I also purchase some products as computer tools and products that are not available in the local market.

**Theme Five: E-government System**

**Researcher:** If faced with a problem in the system the employee should go to whom to solve it?

Participant # 17: For any problems we contact the specialist and we also could log on “Yasser” website.

**Researcher:** How do employees exchange and share information in order to understand the e-government system?

Participant # 17: The employees could use the Internet where a lot of information is available and they could check “Yasser” website.

**Researcher:** How do the e-government system or the network system and technologies affect your work?

Participant # 17: The new technologies and Internet influenced my work. At work now I can use emails to send and receive official documents; also I can accomplish a lot of my work tasks online fast where in the past it took a week to get done. However, the problem is that an email could reach a different person by mistake.

**Researcher:** How does the e-government system or electronic system affect your relations with colleagues?

Participant # 17: Also the new technologies such as the Internet affected my work with others in the sector where we could exchange information and documents in a fast and
easy way. In the past this process could take up weeks to be done even if it was in the same city. However, as I mentioned before an email could reach a wrong person which could result in many problems.

**Researcher:** How is this system different from the previous system?

Participant # 17: The new systems provide speed and ease of use especially when individuals know how to use it.

**Researcher:** What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 17: The advantage is in saving time and conducing work fast, however, there should be proper training if any new system should be employed.

**Researcher:** Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 17: With this kind of system the individuals use the machines heavily with less human communication. I feel that such aspect would influence the employees in a negative way since they will lose the human contact. Therefore, the new system will influence the face-to-face communication among employees since they use technology and machines to communicate either for work or personal aspects which could be a negative aspect.

**Researcher:** Do you think that language is an obstacle in applying the system?

Participant # 17: The English language could be an obstacle but the programs that we use in the sector are all in the Arabic language.

**Researcher:** Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 17: Some employees don’t like to use the new system because: not knowing the system, little training provided by the sector, and fear of failure. Also, the employee is afraid of being let go because of not being able to use the system.

**Researcher:** Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 17: It is not easy to employ the new system since there is not enough training. There should be training for all the employees of the sector.
Theme Six: Training Experience

Researcher: Did you receive any training on computer applications?

Participant # 17: Yes, I did get training at the some colleges but I developed myself as well.

Researcher: Did you receive any training on e-government application?

Participant # 17: No.

Researcher: Did you take any courses in the English language?

Participant # 17: Yes at the beginning of my work career.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant # 17: Yes, I did benefit from them and now I am in a good position at my job because of these training courses.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?

Participant # 17: I deal with difficulties with being wise and looking forward positively.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant # 17: I use the computer since I started of this job and little changed for me with the new system.

Researcher: What motivates you in the job, and do you feel motivated or appreciated in your job?

Participant # 17: I do not feel motivated at work.

Researcher: If you have surprises and challenges in your job, how do you deal with them?

Participant # 17: I deal with challenges and try to examine the matter closely.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant # 17: The loyalty is to a person and not the sector.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant # 17: I accept orders from my superior where it does not conflict with rules and regulations.
Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 17: The place is suitable but under stress and depression.

Theme Eight: Culture
Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 17: The time is not valued, and if the time were valued then the employees would receive appreciation for doing the tasks in a very short time. There is no consideration for appointment at most levels personally and professionally.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 17: I like to spend time between the family and entertainment. Also, I like to be involved in my hobbies and visiting friends when I have free time.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 17: Family is important where the persons could relax and feel secured. In our culture the family relationships are very strong and significant. In addition, a female could not do a lot of her own things in our country without the existence of the Mahram (brother, father and other close relatives).

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 17: Reasons for not advancing in the society are: there is no quality education and not looking after raising the young properly, not following the proper principles of Islam, and the consideration of the looks of things rather than the quality of them. Also, not appreciating the time.

Theme Nine: Organizational Culture
Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 17: The work environment is a mix of cooperation and aggression. There are also the hostile individuals and they are known in the sector, therefore, we avoid them.

Researcher: Is there any grouping in the organization?
Participant # 17: The grouping exists in the society which influences the workplace as a result. Even if one could not see these groupings and bias they exist in the society and in the public sectors.

**Researcher:** How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 17: For getting a job that depends on nepotism and ‘who you know’. The available jobs are first for relatives and friends and then for others. The qualification comes at the end.

**Researcher:** Are there any aspects that could be tackled to make the organization a better environment?

Participant # 17: From my point of view, I believe that for advancing in the sector the country still needs more time to achieve that in the public sector. In addition, to achieving this we need to start from the proper education and bringing up of our children. Future mums for the new generations should understand the significance of their role to raise their children based on ethics and principles. Also, the selecting of schools is an important aspect since it plays an important role in raising the awareness of the individuals.

**Theme Ten: Female issues**

**Researcher:** Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 17: I am convinced of the importance of women’s jobs. However, I do not believe the young females can take responsibility in this generation. I do not think that they have the knowledge and awareness to be responsible in the workplace.

**Researcher:** How do you and other employees feel about having female employees working with you in the same organization?

Participant # 17: The Saudi society is still under control and pressure of old negative cultural beliefs and not all accept the female at the job. Also, nowadays, a lot of individuals are coming from rural communities and bringing with them their cultural baggage, therefore, they are less likely to accept seeing women working at the job. Their idea of women is their mother staying at home and taking care of kids.
Researcer: Do you believe that the e-government system would offer females more job opportunities?

Participant # 17: E-government will decrease the opportunities and there will be fewer jobs and not more because of the system. Also, the work will be boring because of the repeated routine.

Researcer: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 17: I believe in the role of woman in society especially in building a strong and healthy family. She is the foundation of every society having the ability to raise a good family. She makes up half of the society and is a better option than the use of foreigners to work in our organizations.

Researcer: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 17: As I said before no society could advance without women being part of the development. They make up half of the society and they could play a significant role in the developing and advancement of the country. However, they should have the ability and the knowledge to do their part and most of all to be responsible.

Researcer: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 17: For sure women provide financial support for the family especially that everything now is becoming very expensive the living expenses are very high. However, I think they should raise their families first to bring up educated and knowledgeable offspring and then work for extra financial support. Because having a small number of well raised children is better than having a lot, which will be a burden to society.

Researcer: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 17: In the workplace now there are some rules and regulations that support the female in the workplace.

Researcer: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 17: Aspects for not advancing in women’s job could be the nature of women in the Saudi society since they depend on the man in most aspects of daily life. In addition there are the traditions and customs that are mixed together between the rural and urban areas.
Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 17:
Personal communication: Face-to-face, telephone, and SMS.
Family communication: Face-to-face, telephone, and SMS.
Communication with friends: Face-to-face, telephone, emails and SMS.
Social communication: telephone and emails.
Business communication: telephone and emails and meetings face-to-face when needed.
Communication with employees: telephone and emails and meetings face-to-face when needed.

Researcher: Is there anything that you would like to add or ask?

I wish success and thank you.

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Interview number: 18

Theme One: Personal Information

Researcher: What is your current position?

Participant # 18: I am a mining engineer at the Saudi Geological Survey (SGS).

Researcher: How many years of working experience do you have?

Participant # 18: I have seven years of experience.

Researcher: What is your monthly income range?

Participant # 18: My monthly income is around 7,000 SR (Saudi Riyals).

Researcher: Your age range?

Participant # 18: I am thirty five years old.

Researcher: What is your education?

Participant # 18: I have a Bachelor’s degree.

Theme Two: Computer Experience

Researcher: Do you have your own computer at work?

Participant # 18: Yes, I do have a computer at work.

Researcher: Do you work on a computer?

Participant # 18: Yes, I do.
Researcher: How much time do you spend on the computer at work?
Participant #18: I spend four to around three hours on my computer at work.

Researcher: How do you use the computer at work?
Participant #18: I conduct different tasks related to my job and check my work emails.

Researcher: Do all employees have their own computers and use them to perform tasks?
Participant #18: Yes.

Theme Three: Internet Experience

Researcher: Have you ever used the Internet?
Participant #18: Yes.

Researcher: How often do you use the Internet daily?
Participant #18: I use the Internet for around two to four hours daily.

Researcher: Where do you use the Internet mostly?
Participant #18: At the office at work.

Researcher: For what mostly do you use the Internet?
Participant #18: I use the Internet for email, research and information, and entertainment.

Researcher: To what extent do the computer and Internet influence the Saudi family?
Participant #18: The family is influenced by the computer and Internet in a positive way. Now the family members are able to expand their knowledge by the use of the Internet. They could look for different information about various subjects that interest them. Also, they could check different websites and know more about the world.

Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?
Participant #18: There are various aspects we see in today’s society that was not seen before. The younger generation is open to many things; however, it is more complicated. As a result, we can see a lot of negative attitudes and thoughts that our youngsters have. So I feel that there are some negatives because of the Internet and that leads to having weaker family ties.
Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 18: I personally see that the computer and Internet are used by many levels of the Saudi society.

Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 18: Yes, I did.

Researcher: Why is that (if using, or not using)?

Participant # 18: I prefer this method since it offers me the speed and ease when using. I also like to check on new products that sometimes I do not find at the local market.

Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 18: We usually call the person who has the IT knowledge in the sector.

Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 18: The employees in the sector exchange their knowledge by the training courses. We also exchange our ideas and knowledge by the use of work emails in the job.

Researcher: How do the e-government system or the network system and technologies affect your work?

Participant # 18: The new technologies give me the opportunity to work and exchange data without the need to go from one place to another. Just by a click of the mouse some aspects of my work are done.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 18: I can see that the electronic system offers us a way to communicate and exchange information that we need in an easy way. This way saved us a lot time enabling us to conduct work faster.

Researcher: How is this system different from the previous system?

Participant # 18: Usually new systems bring new methods and solutions to our work.
Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 18: The advantage is in saving time and conducting work fast, however, there should be proper training if any new system should be employed.

Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 18: The new systems could result in less face-to-face communication between employees because they could do a lot through the system. However, I think that is a positive aspect since there is less waste of time doing our job.

Researcher: Do you think that language is an obstacle in applying the system?

Participant # 18: The English language could not be an obstacle the programs used are all in the Arabic language.

Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 18: Some employees do not want to use the new system because they lack the knowledge of implementing it. Also, I think that some of the employees feel it is difficult to use.

Researcher: Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 18: I think it could be accepted if there were the proper implementation processes in terms of the technology and the training for employees.

Theme Six: Training Experience

Researcher: Did you receive any training on computer applications?

Participant # 18: Yes, I did get training at the some colleges and at work.

Researcher: Did you receive any training on e-government application?

Participant # 18: No.

Researcher: Did you take any courses in the English language?

Participant # 18: Yes.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant # 18: Yes, I did benefit from them.
Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?

Participant # 18: I try to deal with difficulties in my job by thinking carefully and trying to do it gradually.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant # 18: Only little things have changed for doing my job at the workplace.

Researcher: What motivates you in the job, and do you feel motivated or appreciated in your job?

Participant # 18: I feel motivated at work from having a good and friendly environment.

Researcher: If you have surprises and challenges in your job, how do you deal with them?

Participant # 18: I deal with challenges and try to examine the matter closely.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant # 18: The loyalty is for a person in the sector and not for the public sector.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant # 18: I accept orders from my boss and I do not have any problem in doing that.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 18: I feel comfortable in the work environment but sometimes I feel stressed out when I have too much to do.

Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 18: The time is a valuable concept and it should be respected. However, that does not happen a lot of the time. People do not respect time and we can see various examples of that in our work and social life.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 18: I like to spend most of my time with my family.
Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 18: Family is significant and I feel that I am lost without it.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 18: Personally I think that there is no motive to advance and only there are some who are willing to put in some effort to develop and advance.

Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 18: The work environment, general, is supportive but sometimes it is not.

Researcher: Is there any grouping in the organization?

Participant # 18: The grouping exists in the workplace.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 18: For getting a job some people try to find someone they know to help them in doing that. Some others would apply and try to depend on their qualification.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 18: I think that if there is proper incentives in public places there will be better quality of work from employees. Also, there should be training courses and workshops for the development of the staff.

Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 18: Only little has been done to support and pave the way for females in the labour market. I believe that change has to come from within in order to be able to make changes in our culture so better opportunities will exist.

Researcher: How do you and other employees feel about having female employees working with you in the same organization?

Participant # 18: I do not feel that employees are ready yet to work with females in the sector.
Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 18: Maybe, it could provide female with new opportunities; however, they should be skilful and knowable in order to be able to work.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 18: I believe that women have an important role to provide for the society.

Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 18: A woman’s job is acceptable; however, it should be in areas that respect her nature. Also, in our culture it is not adequate for a woman to work in environments where men and women work and mix together.

Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 18: Yes, they could provide additional support for the family.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 18: There are only some poor rules and policies that exist for women in the workforce, but still more should be issued. Also, not all of these policies are active in the real world.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 18: Our environment and culture are still not ready to advance in female matters; even if there is the will from the government, society needs to be embracing such aspects.

Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 18:

Personal communication: Face-to-face and telephone.

Family communication: Face-to-face.

Communication with friends: Face-to-face, telephone, emails and SMS.

Social communication: telephone and emails.

Business communication: telephone and emails and meetings face-to-face when needed.
Communication with employees: telephone and emails and meetings face-to-face when needed.

Researcher: Is there anything that you would like to add or ask?

Thank you.

Interview number: 19

Theme One: Personal Information

Researcher: What is your current position?

Participant # 19: I am legal affairs manager at the legal department.

Researcher: How many years of working experience do you have?

Participant # 19: I have thirteen years of experience.

Researcher: What is your monthly income range?

Participant # 19: My monthly income is around 21,000 SR (Saudi Riyals).

Researcher: Your age range?

Participant # 19: I am thirty seven years old.

Researcher: What is your education?

Participant # 19: I have a Bachelor’s degree.

Theme Two: Computer Experience

Researcher: Do you have your own computer at work?

Participant # 19: Yes, I do have a computer at work.

Researcher: Do you work on a computer?

Participant # 19: Yes, I do.

Researcher: How much time do you spend on the computer at work?

Participant # 19: I spend four to around three hours or more.

Researcher: How do you use the computer at work?

Participant # 19: I organize my files, use Microsoft office, and check on my work emails.

Researcher: Do all employees have their own computers and use them to perform tasks?

Participant # 19: Other employees also have their own computers and work on them.
Theme Three: Internet Experience

Researcher: Have you ever used the Internet?

Participant # 19: Yes.

Researcher: How often do you use the Internet daily?

Participant # 19: I use the Internet for around three to four hours daily.

Researcher: Where do you use the Internet mostly?

Participant # 19: At both home and office.

Researcher: For what mostly do you use the Internet?

Participant # 19: I use the Internet for email, research different subjects, and entertainment.

Researcher: To what extent do the computer and Internet influence the Saudi family?

Participant # 19: I have a small family and their use of the computer and Internet is in a constructive manner. They know how to use it properly and to benefit from their time. I can say that the computer and Internet have influenced my family positively since it’s used for knowledge and researching new things.

Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 19: I think that depends on how the individuals use the computer and Internet. The ideal way is to organize your time so no task would take more time than what is needed. Also, we can find people who are so involved in the usage that it influences them in their relations with others and even their close friends.

Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 19: I think that in our generation today all levels of the society are using the computer and benefiting from this technology. However, different individuals have different uses for the computer and Internet. The young, for example, would use it to get information about their subjects at school and also looking up the new games and songs. Nevertheless, the mature individuals would look at aspects that are related to their job and would also read news and look up newspapers. Also, as we can feel today, for example, the less educated people who are working on stocks are using the computer to find the updates about their stocks.
Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 19: Yes, I did.

Researcher: Why is that (if using, or not using)?

Participant # 19: The Internet offers me a better alternative because I would rather pay all my bills online than to do that in person. I do that for the reason that I can do that by only a click of a mouse without the need to waste time and effort.

Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 19: I usually ask the IT staff if any problem occurred in the system.

Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 19: Usually we exchange knowledge by talking and communication about what we know. I personally find that useful since a colleague could highlight an aspect that I did not know about.

Researcher: How do the e-government system or the network system and technologies affect your work?

Participant # 19: The use of new technologies does not affect the user negatively; however, if the user lacks an understanding of technology then this technology does not benefit him. I personally see these technologies as a blessing since I could do a lot in little time. This especially applies to the use of internal emails where the work gets to the intended person in seconds and I do not have to leave my office. I could also explain what I want in the email without the need to call personally.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 19: As I mentioned before, the ease of getting and receiving work through the sector network has facilitated our work a lot for us. I really get frustrated now when I have a problem with my computer at work and I have to do things manually.
Researcher: How is this system different from the previous system?

Participant # 19: The new systems usually bring better and improved services, but still I cannot determine how the e-government system is since we did not apply it yet in our sector.

Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 19: The new system is a positive aspect that could enhance the sector. However, I think it will take time before it will get implemented properly. The employees in the sector are not ready and there is no training on the system yet.

Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 19: Less face-to-face communication will result in some aspects; however, the human touch should not be underestimated. A lot of important things in the sector should be done having face-to-face meeting among employees and meeting of top managers are significant.

Researcher: Do you think that language is an obstacle in applying the system?

Participant # 19: Language is not an issue of concern since the new system could be adaptable. Usually the new systems are transformed into the Arabic langue for easy implementation.

Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 19: Employees would refuse the use of the system because of the fear of unknown, laziness, dictatorship and being habitual, and not being aware of benefits of the system.

Researcher: Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 19: The new system could be employed if obstacles are removed. Also, an important aspect is to prepare employees to use the system in gradual steps and have a trial time for all to employ the system.

Theme Six: Training Experience

Researcher: Did you receive any training on computer applications?

Participant # 19: No I did not, I taught myself.
Researcher: Did you receive any training on e-government application?
Participant # 19: No. We still just hear about the system but nothing in the real world happening.

Researcher: Did you take any courses in the English language?
Participant # 19: Yes.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?
Participant # 19: I benefited a little from the English courses but I did better in the real practicing of the language.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?
Participant # 19: I do face the different difficulties in the job. I do that by trying to know the reasons for that then putting down possible solutions and then selecting what I see as the best at the time to solve the matter.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?
Participant # 19: There are some tools in the job that makes our tasks much easier. However, the accomplishment of our tasks our jobs should from within because the technologies in the workplace are only tools to conduct work faster.

Researcher: What motivates you in the job, and do you feel motivated or appreciated in your job?
Participant # 19: I feel motivated when I accomplish a task at the job that teaches me something new and opens up my understanding. For me personally I enjoy doing an assignment that lets me think in a new direction and perspective.

Researcher: If you have surprises and challenges in your job, how do you deal with them?
Participant # 19: I am faced with various surprises at work and I always try to use my experience to deal with them. The challenges strengthen my ability at work and I see them as a motive to let all be creative.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?
Participant # 19: The loyalty of employees in the sector should be for the organization itself.
Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant # 19: I do accept higher authority with no problem.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 19: The workplace physically is appropriate and I feel that I have what I need to do my job.

Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 19: Unfortunately, time has no value at all. This is a problem that we all face and I think there should be solutions to deal with this aspect. Time influences the quality of work that public sectors generate.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 19: The weekend is spent with family and friends. Hobbies also are something I like to do at the weekend.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 19: Family is significant since it is the most important element for success. The family is the basis of our lives and our social and professional success and achievement is based on it.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 19: In our society there are many concepts and elements that could be responsible for not advancing. In my opinion I could say that family, education, socio-cultural aspect, and the overall attitude of the individuals in the society.

Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 19: On a personal level I can describe the organizational culture as unappealing and does not assist in being productive. It also does not help to elevate the individual or the organization.
Researcher: Is there any grouping in the organization?

Participant # 19: The grouping exists in the workplace. It is one of the concepts that the employee gets to learn from the start of his working career or even before.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 19: For getting a job, one could apply for a job and depend on qualifications and education and one could depend on the people he knows. However, the most known and effective way to get a job is by “who you know”.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 19: In my opinion to improve the organization there should be reform for the society in all its elements and the reform of the individual starting from young age until being an adult.

Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 19: No, I think that the culture is not yet developed and still there should be more to be done in educating people in the society.

Researcher: How do you and other employees feel about having female employees working with you in the same organization?

Participant # 19: Different employees have different views about women’s job. However, for me personally, I can say that I accept the female participation the organization. Nevertheless, her work should be in respect to our religion and to have a dedicated place for her.

Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 19: I think that now there are various available areas that the female could work at, however, the e-government could provide more opportunities.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 19: Women in the society are very significant and essential and in various aspects they could be better than men. In my opinion the significance of women’s work in the society is known in our religion and history.
Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 19: In my personal opinion the disadvantages come from the people when they deal in a negative manner with the concept. However, women’s jobs have all the advantages if done in a proper manner that follows and is controlled by our religious and social beliefs.

Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 19: Of course, women’s jobs provide financial support that the family needs. Nevertheless, it also provides emotional and social support and I wish that the Saudi family would acknowledge such benefits and have an awareness of that.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 19: The rules and regulations that we have today are only organizational procedures that were created just to satisfy the current trend and the globalization drift.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 19: Our environment and culture are still not ready to advance in female matters, even if there is the will from the government, the society should be the one to embrace such aspects. Thus there are no benefits for females on the job and there are still many restrictions. A lot of time is still needed to produce complete rules and regulations that support the women and also men in the labour market.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 19: Not understanding women’s role in the society is a negative factor in the society.

Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 19:
Personal communication: Face-to-face.
Family communication: Face-to-face.
Communication with friends: Face-to-face, and telephone.
Social communication: Face-to-face, and telephone.
Business communication: telephone and emails and face-to-face when needed.
Communication with employees: telephone and emails and face-to-face when needed.

**Researcher:** Is there anything that you would like to add or ask?

I wish you all the best in your research study. I hope that you come out with good results and recommendations that will assist in our advancement in this country.

Thank you

**Interview number: 20**

**Theme One: Personal Information**

**Researcher:** What is your current position?

Participant # 20: I am a manager at the business management department.

**Researcher:** How many years of working experience do you have?

Participant # 20: I have twenty five years.

**Researcher:** What is your monthly income range?

Participant # 20: My monthly income is around 9,000 SR.

**Researcher:** Your age range?

Participant # 20: I am forty four years old.

**Researcher:** What is your education?

Participant # 20: I have a diploma degree in marketing.

**Theme Two: Computer Experience**

**Researcher:** Do you have your own computer at work?

Participant # 20: Yes.

**Researcher:** Do you work on a computer?

Participant # 20: Yes, I do.

**Researcher:** How much time do you spend on the computer at work?

Participant # 20: I spend around ten hours daily.

**Researcher:** How do you use the computer at work?

Participant # 20: I use it to print reports and answer question from different clients.
Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 20: Yes.

Theme Three: Internet Experience
Researcher: Have you ever used the Internet?
Participant # 20: Yes.
Researcher: How often do you use the Internet daily?
Participant # 20: I use it for five hours.
Researcher: Where do you use the Internet mostly?
Participant # 20: At home.
Researcher: For what mostly do you use the Internet?
Participant # 20: I use it for research and information and emails.
Researcher: To what extent do the computer and Internet influence the Saudi family?
Participant # 20: The positives for the family: benefit from research and information, finding information for school, and the speed of finding the information needed. The negatives: long hours spent on the net that affect the education level of students and the use of chat with friends for hours.
Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?
Participant # 20: The computer and Internet affect the family relations since the kids spend hours on using them and being away from the family and even the adult family members have the same issue. In addition, now a lot of relatives are relying on sending text messages during holidays instead of visiting. This is an aspect that we did not see in the past and now people are doing it more and more.
Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?
Participant # 20: Nowadays, all levels of society use the computer and Internet. I personally believe that anyone who does not know how to use the use of the computer these days is considered to be ignorant and illiterate.
Theme Four: E-Commerce Experience
Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?
Participant # 20: Yes.
Researcher: Why is that (if using, or not using)?
Participant # 20: I pay most of my bills online and I also like to buy some products online.

Theme Five: E-government System
Researcher: If faced with a problem in the system the employee should go to whom to solve it?
Participant # 20: I contact the experts in the sector who are responsible for such problems.
Researcher: How do employees exchange and share information in order to understand the e-government system?
Participant # 20: By taking training courses and we all also exchange with other colleagues what we know.
Researcher: How do the e-government system or the network system and technologies affect your work?
Participant # 20: It helped in having my work organized and easy to retrieve.
Researcher: How does the e-government system or electronic system affect your relations with colleagues?
Participant # 20: Our face-to-face meetings became less because the use of the Internet. Our work is done in a fast and easy manner.
Researcher: How is this system different from the previous system?
Participant # 20: The new system is different in that it is fast and sufficient. In addition, now we use it to conduct a lot of our work tasks and we have less paper work.
Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?
Participant # 20: The positives for the new system: conducting of work tasks is fast and easy. The negatives: the employee is not able to use the system, and not understanding the system.
Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 20: In addition, the Internet helped in conducting the tasks faster with other departments; however, it affected the face-to-face where it became few meetings.

Researcher: Do you think that language is an obstacle in applying the system?

Participant # 20: I think that the English language is an issue since the computers need the English language even if the system is in the Arabic language.

Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 20: Fear of not knowing the new system is the reason why employees don’t accept the system.

Researcher: Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 20: Also, if there is full awareness with the system then the implementation will be easy.

Theme Six: Training Experience

Researcher: Did you receive any training on computer applications?

Participant # 20: Yes, I got training.

Researcher: Did you receive any training on e-government application?

Participant # 20: No, but I attended the seminar about the e-government in the public sector.

Researcher: Did you take any courses in the English language?

Participant # 20: Yes.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant # 20: Yes, I did.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?

Participant # 20: I discuss the matter with my friends and others with experience.
Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant # 20: The change in the work now is that it uses the computer and software programs that make the tasks done fast and easy.

Researcher: What motivates you in the job, and do you feel motivated in your job?

Participant # 20: The managers or superiors have a significant role in the motivation of the employees and there should be no difference in the treating of one employee and another.

Researcher: Do you feel appreciated in your job?

Participant # 20: Yes, I do feel appreciated.

Researcher: If you have uncertainties in your job, how do you deal with them?

Participant # 20: I deal with surprises by accepting them and dealing with them and try to act as normal.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant # 20: The loyalty of the employee is for the organization.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant # 20: I accept orders from my superior and I have no problem with that.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 20: In the workplace the place is suitable for work. Also, at work I try to be relaxed and not show if I was stressed out.

Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 20: Not all employees value time. Also, not all employees in the sector are on time where 60% are on time and 40% are not. At meetings they try to be on time since that will influence the clients they are meeting and working with.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 20: I like to spend time with my family and friends.
Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 20: The family is significant and it is considered to be the foundation of the individual.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 20: The aspects that could affect the developing of the society, is the family since it can play a role in developing the country by promoting proper beliefs and principles. As a result, the children could affect the society in a positive way.

Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 20: The overall environment is cooperative in the workplace.

Researcher: Is there any grouping in the organization?

Participant # 20: Yes, there is grouping in the organization. For example, the director of a company has his own grouping and employees working with him in different departments have their groups as well.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 20: Nowadays, the qualification is not the way to get a job; nepotism is the way to get a job and it plays an important role.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 20: The aspects that could develop the sector are having a suitable workplace, and the machines to conduct jobs.

Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 20: Nowadays, there should be complete awareness of women’s role in developing the society. Women have a positive and significant role in the advancement of the country’s economy and do not belong at home only.
Researcher: How do you and other employees feel about having female employees working with you in the same organization?

Participant # 20: I believe that the employee should respect women at the workplace and, in addition, give them support. Also, a stress free environment should be provided for women to be able to work and they should find support always.

**Researcher: Do you believe that the e-government system would offer females more job opportunities?**

Participant # 20: E-government could provide work opportunities for the women to work. And it offer desk work instead of field work which suits women’s nature.

**Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?**

Participant # 20: I believe in women’s role in the society. Women in other countries are successful and are involved in the developing of their societies.

**Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?**

Participant # 2: The disadvantage of women working is that they could not balance work and family. Women will not take care of the children and husband.

**Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?**

Participant # 20: The advantage is that women’s jobs could provide additional support for the family since life is getting more costly every day.

**Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.**

Participant # 20: The different sectors should provide the appropriate place for women to work in. Women have proved their ability in both the public and private sector and they should be supported in the workplace for best results.

**Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?**

Participant # 20: Reasons for not advancing: individuals in the society not understanding or aware of the role of women. They believe that the proper place for women is to be at home. However, if the society’s perspective changed in our country a lot of things could change as well.
Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 20:
Personal communication: Face-to-face.
Family communication: Phone.
Communication with friends: Emails.
Social communication: Phone.
Business communication: Face-to-face.
Communication with employees: Face-to-face.

Interview number: #21

Theme One: Personal Information

Researcher: What is your current position?

Participant # 21: I am the manager of employee affairs in the Ministry of Foreign Affairs.

Researcher: How many years of working experience do you have?

Participant # 21: I have 22 years of experience.

Researcher: What is your monthly income range?

Participant # 21: My income is 15,000 SR.

Researcher: Your age range?

Participant # 21: I am forty nine years old.

Researcher: What is your education?

Participant # 21: Bachelor’s university degree.

Theme Two: Computer Experience

Researcher: Do you have your own computer at work?

Participant # 21: Yes.

Researcher: Do you work on a computer?

Participant # 21: Yes.

Researcher: How much time do you spend on the computer at work?

Participant # 21: I use it for around four hours.
Researcher: How do you use the computer at work?
Participant # 21: I perform some of my tasks using the computer like gathering data and organizing it, writing up reports, and printing.

Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 21: Yes employees who are able to use computers have one.

Theme Three: Internet Experience
Researcher: Have you ever used the Internet?
Participant # 21: Yes.

Researcher: How often do you use the Internet daily?
Participant # 21: I use Internet around three hours.

Researcher: Where do you use the Internet mostly?
Participant # 21: At home.

Researcher: For what mostly do you use the Internet?
Participant # 21: I mostly use it for checking my emails and for research and knowledge.

Researcher: To what extent do the computer and Internet influence the Saudi family?
Participant # 21: I think that the family is influenced by computer and Internet both positively and negatively. For example, my kids are enjoying the use of the Internet and I can see that they are learning a lot. They know a lot of things that I did not know when I was at their age and they are more exposed to the world, but I feel that they are much more occupied with the usage. Also, my wife is very frustrated and annoyed because I spend my free time browsing the net and reading newspapers instead of being with her.

Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?
Participant # 21: Yes, I can sense that with my kids because now I see them less because they are using the Internet a lot at home. However, as I mentioned before they are aware and know a lot of aspects in life which make me so proud that they are benefiting and not wasting their time.
Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 21: Yes, computers and Internet are used by all levels of the society. However, I see that as a negative aspect since from my perspective only people who are responsible should use the Internet since there are a lot of things that against our beliefs and ideas. Now as you know the Internet is open to a lot of information that is good and bad and it should be only used by accountable individuals who can differentiate between the positive and negative aspects on the web.

Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 21: Yes, I did.

Researcher: Why is that (if using, or not using)?

Participant # 21: I enjoy using the Internet because it facilitates paying my bills online without the need to do that physically.

Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 21: I usually refer to the area responsible for dealing with such problems or the project manager.

Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 21: We can refer to the “Yasser” website and find needed information.

Researcher: How do the e-government system or the network system and technologies affect your work?

Participant # 21: It influences me at work positively since I can do a lot of my work through the internal system of the sector and circulate data among employees.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 21: It made our work easier since we could communicate instantly among each other. Also, I could circulate any announcements related to work easily among employees where it took longer in the past. All employees could be updated with the news about the sector and other matters in less time.
Researcher: How is this system different from the previous system?
Participant # 21: It made many aspects at the job easier because of the use of technology.

Researcher: What are the advantages and disadvantages of using the e-government system or any electronic system?
Participant # 21: Technology will no doubt provide many advantages for conducting our work; however, I feel that we place more emphasis on the importance of the system with less focusing on the human use of the system.

Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?
Participant # 21: We use the system most of the time between employees and that saves us a lot of time and effort but we still need to meet for important aspects related to the job.

Researcher: Do you think that language is an obstacle in applying the system?
Participant # 21: The English language is not an obstacle because the system is done in the Arabic language.

Researcher: Why in your opinion do employees refuse to use the new application (e-government)?
Participant # 21: The employees usually refuse the new system because of the huge fear they have towards the system. They are unable to understand it so they do not want to deal with it.

Researcher: Do you think that e-government or any new technology is accepted easily in the organization?
Participant # 21: Any new technology needs time to be used properly. The gradual introduction to the system and allowing enough time is the key to gaining the full potential of the new technology.

Theme Six: Training Experience
Researcher: Did you receive any training on computer applications?
Participant # 21: I got it at work and other special institutions.

Researcher: Did you receive any training on e-government application?
Participant # 21: Only a little.
Researcher: Did you take any courses in the English language?
Participant # 21: Yes.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?
Participant # 21: Yes, I did benefit from them.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?
Participant # 21: I face them and try to solve them from my previous experiences.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?
Participant # 21: Of course with the use of the different technology at work.

Researcher: What motivates you in the job, and do you feel motivated in your job?
Participant # 21: I like to develop and advance myself to stay motivated at work.

Researcher: Do you feel appreciated in your job?
Participant # 21: A little.

Researcher: If you have uncertainties and surprises in your job, how do you deal with them?
Participant # 21: I deal with the matter and refer to others to get some input of the situation.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?
Participant # 21: The loyalty of the employee is towards a group in the sector. The employee does that to protect his/her interests at the workplace.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?
Participant # 21: Yes, I do accept higher authority. The superior at the job have wider perspective and know about different aspects of work that I do not know about and at the end of the day he is the one responsible for the outcomes of our work at the sector.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?
Participant # 21: The environment is comfortable and when I get stressed out I try to control myself and be cool in order to be able to deal with the matter professionally.
Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 21: In an ideal world time should be valued at all times. However, this is not the case in the sector. A lot of time is wasted and that impacts on the quality of work produced. Work takes more time than it should and that is because lack of time management and respect.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 21: I spend time with family and friends.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 21: The family is very important for the individuals. Family is the shelter for all of us to forget all the burdens of everyday life.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 21: Different reasons such as: not being bothered, wasting time, no comeback from negative behaviours, and nepotism.

Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 21: I can say overall it is friendly at most times.

Researcher: Is there any grouping in the organization?

Participant # 21: There are groupings in the organization at different levels, at the higher levels as executives and at lower levels as employees.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 21: There are different ways such as: applying for the job, nepotism with having the qualification, and nepotism alone.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 21: Things like nepotism and time should be reconsidered in the public sectors. These two aspects are very important for improving the sector since it leads to other consequences at the workplace.
**Theme Ten: Female issues**

**Researcher:** Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 21: Actually no, a lot should be done in order for Saudi women to enter the workplace. Many rules and regulations are missing in the system to support the existence of the female in the labour market.

**Researcher:** How do you and other employees feel about having female employees working with you in the same organization?

Participant # 21: There are intelligent and bright females in various fields. These are huge and significant assets to the country and they are handicapped because of limitations. Saudi females should be working in the public sector and that could help to overcome the influence narrow minded people in the society. Here we only have a small percentage of females working; however, the other public sectors do not have females in their workplace.

**Researcher:** Do you believe that the e-government system would offer females more job opportunities?

Participant # 21: Yes, I think it could provide more opportunities.

**Researcher:** From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 21: Yes, as I mentioned before, women are big assets that we should develop and take care of so we could benefit from their experience and advance our country. We should depend on them instead of having a lot of foreign workers in many fields.

**Researcher:** In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 21: As I mentioned before we could benefit from their knowledge and not neglect the quality and skills they have. Negatives could be that they should balance between family and work so they would not neglect the family.

**Researcher:** Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 21: Absolutely, females could provide financial and intellectual support. The financial support is an additional help that they could provide to the family and also being part of the financial decisions at the household. In addition, there is the intellectual support they provide for their family since they have the knowledge and
learn from being involved with others at the workplace and assist in the developing of the society.

**Researcher:** How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 21: There should be rules and regulations that allow more involvement of females in the developing of our country by giving them the opportunities to work in more fields and places.

**Researcher:** What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 21: The mentally of men in our society is a major element for delaying our advancement. In addition, another reason is the passivism of females in asking and fighting for themselves in the society.

**Theme Eleven: Communication**

**Researcher:** What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 21: Personal communication: telephone and face-to-face.
Family communication: face-to-face, telephone, and SMS.
Communication with friends: face-to-face, telephone, and SMS.
Social communication: face-to-face.
Business communication: face-to-face and email.
Communication with employees: face-to-face, telephone, and email.

**Interview number: 22**

**Theme One: Personal Information**

**Researcher:** What is your current position?

Participant # 22: I am an executive secretary at the Ministry of Higher Education.

**Researcher:** How many years of working experience do you have?

Participant # 22: I have fifteen years of experience.

**Researcher:** What is your monthly income range?

Participant # 22: My monthly income is 10,000 SR.
Researcher: Your age range?
Participant # 22: I am thirty five years old.
Researcher: What is your education?
Participant # 22: I have a higher diploma.

Theme Two: Computer Experience
Researcher: Do you have your own computer at work?
Participant # 22: Yes.
Researcher: Do you work on a computer?
Participant # 22: Yes, I do.
Researcher: How much time do you spend on the computer at work?
Participant # 22: I use it more than ten hours.
Researcher: How do you use the computer at work?
Participant # 22: I use it for printing, programs, and the search for data.
Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 22: Yes, all have computers but not all use them to conduct their work.

Theme Three: Internet Experience
Researcher: Have you ever used the Internet?
Participant # 22: Yes, a lot.
Researcher: How often do you use the Internet daily?
Participant # 22: I use around seven hours daily.
Researcher: Where do you use the Internet mostly?
Participant # 22: Both home and work.
Researcher: For what mostly do you use the Internet?
Participant # 22: I use it for research, looking for information, and for knowledge.
Researcher: To what extent do the computer and Internet influence the Saudi family?
Participant # 22: The influence of computers and Internet are enormously obvious on the family; we can see that in the amount of time spent on the computer and Internet which has resulted in positive and negative aspects. The positive: acquiring knowledge and information, open to other countries, and the exchange of knowledge and
experience. The negative aspect is that computers and Internet have influenced communication in the family.

**Researcher:** In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 22: Nowadays, the family is greatly influenced by the computer and Internet. The gathering of the family members, and the meetings involving face-to-face communication among families has become less frequent. They now heavily depend on email, SMS messages and so on because of its speed and it’s much easier; as a result, fewer family meetings occur because of this technology.

**Researcher:** Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 22: In our society computers and the Internet are available for all society levels. However, there is the exception of some people who live in the rural areas who are far away from technology and others who cannot afford to buy or because of lack of knowledge.

**Theme Four: E-Commerce Experience**

**Researcher:** Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 22: Yes, I did a lot.

**Researcher:** Why is that (if using, or not using)?

Participant # 22: I use Internet for many reasons. Most important reasons for using Internet are for not facing the crowd, saving time, and ease. Now there is a lot of congestion in the streets when one wants to go from one place to another so this method helps me to do what I want fast with no need to face such a crowd and waste time when I could be doing something else instead. I take care of paying my bills and enjoy shopping online as well.

**Theme Five: E-government System**

**Researcher:** If faced with a problem in the system the employee should go to whom to solve it?

Participant # 22: We contact the IT department who will deal with the matter.
Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 22: Exchange of information in the sector is done through knowledge sharing among employees and by taking training courses.

Researcher: How do the e-government system or the network system and technologies affect your work?

Participant # 22: The effect of the Internet is positive at the job and that is because of various reasons. The internal Internet system provides ease of finding information, ease of acquiring the rules and laws among the employees in different departments that are related to the sector, and ease of finding effective ways of communication among the different departments of the sector.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 22: In fact e-government is employed in our sector in a very limited manner and not all know how to use or benefit from it. Therefore, the influence of this system is minor where there is a big lack of know-how in the sector and its employees. The e-government program is not yet employed wholly and its use is partial.

Researcher: How is this system different from the previous system?

Participant # 22: The new system is different from other previous systems in the speed, ease, and exchange information among employees.

Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 22: The positive aspects for using the new system are the speed of conducting tasks and to save time and effort. The negative aspects are: the difficulty of knowing a new system which requires time to learn and employ by all in the sector. Also, the use of the employment internally would be easy compared to externally with other organizations and other countries where knowledge of language is important and can be an issue.

Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 22: The new electronic systems make employees use their computers more to conduct work and see people less. A lot could be done without the need to be face-to-face and that is limited to important matters in the sector.
**Researcher:** Do you think that language is an obstacle in applying the system?

Participant # 22: Internally dealing with employees in the sector - there is no problem in the language; however, when dealing externally with other international institutions we will face problems because of the lack of the language.

**Researcher:** Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 22: Employees in the sector refuse to use the system because of different reasons. These reasons include: lack of knowledge and not knowing how to benefit from the system, lack of understanding of the system, and not employing the system yet in all organizations.

**Researcher:** Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 22: The system could be employed easily in the organization if there is training for employees and introducing the system to them beforehand.

**Theme Six: Training Experience**

**Researcher:** Did you receive any training on computer applications?

Participant # 22: Yes, I did. I got different courses at various centres.

**Researcher:** Did you receive any training on e-government application?

Participant # 22: No, very limited introduction.

**Researcher:** Did you take any courses in the English language?

Participant # 22: Yes, I did take English courses at specialized training institutions.

**Researcher:** If you got any training in any of these courses, did you learn and benefit from them?

Participant # 22: I did benefit from these courses and it provided me with the knowledge to use new technologies and dealing with others in the workplace.

**Theme Seven: Work environment**

**Researcher:** How do you deal with difficulties and challenges in your job?

Participant # 22: I deal with difficulties in the job based on my previous experiences and my knowledge in the field. Also, I base my decisions on the regulations and rules of the sector.
**Researcher:** Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant # 22: The methods in conducting tasks in the organization changed greatly and the use of computers and other electronic tools.

**Researcher:** What motivates you in the job, and do you feel motivated in your job?

Participant # 22: The motivation in the job are different and it could done through: the work that is based on team work, the emotional and monetary rewards, training for all employees who work effectively, and the consideration of the higher management by providing bonuses and promotions.

**Researcher:** Do you feel appreciated in your job?

Participant # 22: I do feel appreciated and that is emotionally and financially.

**Researcher:** If you have uncertainties and surprises in your job, how do you deal with them?

Participant # 22: I try to deal with surprises in a positive way and not ignore them.

**Researcher:** In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant # 22: The loyalty of employees should be toward the sector but that is not always the case in the real world.

**Researcher:** How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant # 22: I accept orders from my superior and that is for the work sake and going by the rules and regulations of the sector.

**Researcher:** In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 22: The work atmosphere is appropriate and it has all the required supplies and equipment we need to do our work. In addition, I feel comfortable and that is because I am aware of the requirements of my job and doing what is required of me and that is the result of my education, knowledge, experience, and training.

**Theme Eight: Culture**

**Researcher:** Do you think that the value of time is considered the same in the public and private sector?

Participant # 22: With no doubt time is significant in the public sector. However, the employee should be qualified, hardworking, and have loyalty to the sector.
Nevertheless, most of the employees in the public sector do not consider time and it has no value and the reason for that is the lack of loyalty to the sector and the lack of qualifications.

**Researcher:** When you have time or at the weekend where do you prefer to spend your time?

Participant # 22: I prefer spending my time with family and on his hobbies.

**Researcher:** In your opinion, is family a significant aspect in Saudi culture?

Participant # 22: Family is important in building the society. Family completes the individual and vice versa.

**Researcher:** In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 22: The aspects responsible for not advancing the society are: lack of knowledge and education, absence of awareness, not advancing with others in the world, and not being open to other societies, and the ideas and negative cultural beliefs that are engraved in the country.

**Theme Nine: Organizational Culture**

**Researcher:** How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 22: The atmosphere of the organizational culture is cooperative that influence my job performance.

**Researcher:** Is there any grouping in the organization?

Participant # 22: Grouping among employees is evident but in my department we do not have that since most are educated and knowledgeable.

**Researcher:** How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 22: In the public sector nepotism is evident in getting a job but in the private sector it depends mostly on the qualifications and education of the person and if they know someone who could help it would be an advantage.

**Researcher:** Are there any aspects that could be tackled to make the organization a better environment?

Participant # 22: Aspects that could make the sector a better place are: recruiting qualified personal, training, the existence of tools that help in finishing tasks, motivations, and providing a periodical report about the organization.
Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 22: Islam gave women the opportunity to work with considerations. Currently, the country is greatly encouraging women’s jobs because of the globalization, high cost of living, and living needs.

Researcher: How do you and other employees feel about having female employees working with you in the same organization?

Participant # 22: Personally, I encourage women’s jobs but with consideration to Islamic rules that protects them.

Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 22: The new e-government system creates jobs for women. These jobs mostly will be related to dealing with new technologies and women should be trained in order to be skilled in this area.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 22: No doubt women have a very significant role in the development of the society and they complete the building of the country. If they have been trained previously and have the knowledge and skills then they will be a strong positive element in the advancement of the society which will result in the benefit of all in the end.

Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 22: The positive aspects of women’s jobs are: decrease in unemployment and poverty, offering highly skilled female employees that could provide for society, the reserve of financial and economic resources, effort in building the country by male and female.

Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 22: Women’s jobs could provide for the family especially in the costly economy today.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 22: When rules and regulations limit or confine women on the job it will result in obstruction of their role in the labour market. However, if these rules and
regulations were flexible and gave women better and more opportunities then this would reflect on them in the real world where they would be doing their best which would promote the advancement of the country.

**Researcher:** What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 22: Aspects that hinder the development of women’s job are: old and classical customs and traditions that are in the society, depriving women of education, lack of academic services, women’s huge responsibilities which obstruct them from working and the huge unemployment among in men in the country.

**Theme Eleven: Communication**

**Researcher:** What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 22:

Personal communication: Face-to-face.

Family communication: Face-to-face and telephone.

Communication with friends: Face-to-face, telephone, emails, and SMS.

Social communication: Face-to-face, telephone, and email.

Business communication: Face-to-face, telephone, and fax.

Communication with employees: Face-to-face, telephone, and fax.

**Interview number: 23**

**Theme One: Personal Information**

**Researcher:** What is your current position?

Participant # 23: I am an assistant manager at the Ministry of Higher Education.

**Researcher:** How many years of working experience do you have?

Participant # 23: I have seven years of experience.

**Researcher:** What is your monthly income range?

Participant # 23: My monthly income is 10,000 SR.

**Researcher:** Your age range?

Participant # 23: I am thirty years old.
Researcher: What is your education?
Participant # 23: I have a higher diploma in business management.

Theme Two: Computer Experience
Researcher: Do you have your own computer at work?
Participant # 23: Yes.
Researcher: Do you work on a computer?
Participant # 23: Yes, I do.
Researcher: How much time do you spend on the computer at work?
Participant # 23: I use it more than four hours at work.
Researcher: How do you use the computer at work?
Participant # 23: I use it for printing, programs, and mostly in Microsoft office.
Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 23: Yes, all have computers and use it for their work.

Theme Three: Internet Experience
Researcher: Have you ever used the Internet?
Participant # 23: Yes, a lot.
Researcher: How often do you use the Internet daily?
Participant # 23: I use around five hours daily.
Researcher: Where do you use the Internet mostly?
Participant # 23: Both home and work.
Researcher: For what mostly do you use the Internet?
Participant # 23: I use it for research, looking for information, for knowledge, and communication with friends. I use the different social networks online especially forums. I can express my ideas with others and negotiate different subjects. I can communicate with both genders and the interest in the subject is what gathers us together in the forum.
Researcher: To what extent do the computer and Internet influence the Saudi family?
Participant # 23: The family is influenced by the computer and Internet today since every house now has them. The family members are now more exposed to the outside
world through the use of the Internet. They can get a lot of information and know about any subject.

**Researcher:** In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 23: The computer and Internet do not influence the family relations. People use them to benefit from them and enjoy their time.

**Researcher:** Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 23: Currently most of the people are using the computer and Internet and the people who do not know are learning to enjoy the usage of the Internet.

**Theme Four: E-Commerce Experience**

**Researcher:** Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 23: Yes, I did a lot.

**Researcher:** Why is that (if using, or not using)?

Participant # 23: I can buy some software online. I can find good prices and it easier and faster.

**Theme Five: E-government System**

**Researcher:** If faced with a problem in the system the employee should go to whom to solve it?

Participant # 23: We contact the IT services at the organization.

**Researcher:** How do employees exchange and share information in order to understand the e-government system?

Participant # 23: Exchange of information in the sector is done through knowledge sharing among employees and by taking training courses.

**Researcher:** How do the e-government system or the network system and technologies affect your work?

Participant # 23: Now it became easier to find different documents through the system. It takes a couple of minutes when it used to take long hours in the past. Also, it is very fast which influences the outcome of our work.
**Researcher:** How does the e-government system or electronic system affect your relations with colleagues?

Participant #23: Now we are more in touch with each other and we have continuous communication. Our work is done fast and any mistakes can be spotted and fixed quickly.

**Researcher:** How is this system different from the previous system?

Participant #23: In the past we took hours or even days to look for some files especially if the file had an old date. Now the system provides us with ease of searching for different data fast and easy. Also, now I do not use a lot of paper. I can do a lot of things through the system.

**Researcher:** What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant #23: Better communication among employees, fast, easy to search for data, and to circulate requires files in seconds. Also, I develop my skills with the use of new technologies. In addition, if the e-government system is fully implemented then employees could do a lot of their jobs through the e-government system since there is work that requires contact with more than one government sector. In other words, instead of the employee going to these public sectors one by one he is able to do all of these things online through the e-government system. However, we are not fully using all the features of the program that we could benefit from. Furthermore, we sometimes face problems when the computer shuts down and we have to stop our work.

**Researcher:** Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant #23: With this system we were able to communicate more than we used to. The network in the workplace allows us to contact each other more and faster through the system. In the past an employee had to take the work and files from one office to another and this process takes hours and sometimes days to complete. I also see that even though we are seeing each other less face-to-face, we are conducting more work.

**Researcher:** Do you think that language is an obstacle in applying the system?

Participant #23: The system is in Arabic in the sector. But I think that English would be useful in the sector to be used sometimes.
Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 23: Some employees refuse to use the new application because they do not know how to use it. Also, the old people are not willing to learn since they have little time left for them in the sector.

Researcher: Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 23: Yes, I think that it would be easy to employ a system if employees were trained to use it properly.

Theme Six: Training Experience

Researcher: Did you receive any training on computer applications?

Participant # 23: Yes, I did.

Researcher: Did you receive any training on e-government application?

Participant # 23: An introduction.

Researcher: Did you take any courses in the English language?

Participant # 23: Yes, I did.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant # 23: I did benefit from these courses.

Theme Seven: Work environment

Researcher: How do you deal with difficulties and challenges in your job?

Participant # 23: I take the advice of others who have more experience.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant # 23: Yes, it changed especially with the new e-government system even if we are not using it fully.

Researcher: What motivates you in the job, and do you feel motivated in your job?

Participant # 23: Yes, I am motivated at the end of the month when I get my salary.

Researcher: Do you feel appreciated in your job?

Participant # 23: Yes, I feel that I am appreciated form my boss.
Researcher: If you have uncertainties and surprises in your job, how do you deal with them?

Participant # 23: In this situation I prefer to take recommendations from my boss since he should know better and has more experience.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant # 23: The loyalty should be to the sector.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant # 23: I do not have a problem getting orders from the boss.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 23: Yes, I do have a relaxing environment.

**Theme Eight: Culture**

**Researcher:** Do you think that the value of time is considered the same in the public and private sector?

Participant # 23: The value of time is considered only by some people and not all. In the private sector time is important and cannot be wasted and employees have a schedule that they should follow. However, in the public sector that is not the case and employees do not respect the time in the organization. The private sector is a profit organization and time is sensitive to its work but the private sector is a non-profit organization. Another important aspect is that the employee in the public sector will at the end of the month get his salary regardless of whether he worked partially or fully.

**Researcher:** When you have time or at the weekend where do you prefer to spend your time?

Participant # 23: I like to spend my time with family and friends.

**Researcher:** In your opinion, is family a significant aspect in Saudi culture?

Participant # 23: The family in the Saudi culture is very important. The individual feels that they have a support system to lean on when needed.

**Researcher:** In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 23: The government has a big role in promoting advancement in the society and accepting change.
Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 23: There is a friendly and cooperative environment in our organization.

Researcher: Is there any grouping in the organization?

Participant # 23: Yes, there is grouping in the organization. Nevertheless, I think that this sometimes plays a role but at other times it does not since there are rules and regulations of the organization that we all have to follow to the end.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 23: The employees could apply for a job and support that with a strong person who could give them support.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 23: A very important aspect that should be considered in the organization is the training of their employees in the sector.

Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 23: The culture can now accept women’s jobs in the workplace. However, there are still elements in the society that should be changed to allow more female involvement in the workplace. The women should be allowed to enter new fields of work and not be restricted to education fields and hospitals. The spread of awareness should also be a way to support the female at the job.

Researcher: How do you and other employees feel about having female employees working with you in the same organization?

Participant # 23: Personally I have no problem in that, however, others do not feel the same. I also know some working females who work better and are more responsible than men.

Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 23: This program will provide females with more job opportunities. Especially, she could work privately without facing people. From my point of view I
think that the government should support this more since it will give the Saudi female the chance to work and to have a suitable environment without mixing between men and women.

**Researcher:** From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 23: She plays an important role in the society and now she is participating in many fields and succeeding.

**Researcher:** In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 23: The disadvantage is that she will not be able to balance between her family and her work. The advantage is that she will add to the workplace a new perspective that will benefit the workplace.

**Researcher:** Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 23: Nowadays, female’s work will be huge support that the family needs.

**Researcher:** How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 23: There is only some support but still that is not enough. A lot should be done in the labour market to allow more female participation.

**Researcher:** What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 23: The cultural beliefs, traditions and customs, and religious restrictions all play a strong role in the delaying of the advancement of the Saudi female.

**Theme Eleven: Communication**

**Researcher:** What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 23:

Personal communication: Face-to-face.

Family communication: Face-to-face and telephone.

Communication with friends: Face-to-face, telephone, emails, and SMS.

Social communication: Face-to-face, telephone, and email.

Business communication: Face-to-face, telephone, email, and fax.

Communication with employees: Face-to-face, telephone, email, and fax.
Interview number: 24

Theme One: Personal Information

Researcher: What is your current position?
Participant # 24: I am an assistant manager in the Human Resources department at the Ministry of Foreign Affairs.

Researcher: How many years of working experience do you have?
Participant # 24: I have five years of experience.

Researcher: What is your monthly income range?
Participant # 24: My monthly income is 8,000 SR.

Researcher: Your age range?
Participant # 24: I am twenty eight years old.

Researcher: What is your education?
Participant # 24: I have a Bachelor’s degree in business administration.

Theme Two: Computer Experience

Researcher: Do you have your own computer at work?
Participant # 24: Yes.

Researcher: Do you work on a computer?
Participant # 24: Yes, I do.

Researcher: How much time do you spend on the computer at work?
Participant # 24: I use it more than four hours at work.

Researcher: How do you use the computer at work?
Participant # 24: I use it to conduct some of my tasks and for typing and filing documents.

Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 24: Yes, all have a computer and use it for their work.

Theme Three: Internet Experience

Researcher: Have you ever used the Internet?
Participant # 24: Yes, a lot.
Researcher: How often do you use the Internet daily?

Participant # 24: I use for a long time maybe ten hours daily.

Researcher: Where do you use the Internet mostly?

Participant # 24: Both at home and work.

Researcher: For what mostly do you use the Internet?

Participant # 24: I use it for research, reading newspapers specializing in sports, information and knowledge, and sports.

Researcher: To what extent do the computer and Internet influence the Saudi family?

Participant # 24: The computer and Internet without a doubt have an influence on the family. Most of the families now have the computer and Internet in their houses - all family members are using them. The family members are open now to new ideas and information. I can indulge my love of sports by searching for all the information I need about it through the Internet. Also, I am a member of special forums and networks that specialize in sports. I can gain a lot of knowledge and enjoy communication with others who like sports as well. I was surprised to discover that a lot of girls have an interest in sports and are in these networks.

Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 24: Technology influences the family in Saudi Arabia. The use of the Internet in the household impacts on the time members of the family spends together. But still the time management is the key in such matters.

Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 24: Maybe, now most use the computer and Internet in our society. However, there are still the older generations who are not using them.

Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 24: Yes, I did a lot.
Researcher: Why is that (if using, or not using)?

Participant # 24: I like to use the Internet for paying all my bills online. Also, I enjoy buying products online from different parts of the world and searching for the best prices.

Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 24: We contact the IT services who should take care of such matters.

Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 24: Through the circulation of data through the internal network and by having training.

Researcher: How do the e-government system or the network system and technologies affect your work?

Participant # 24: It helps in conducting my work faster. Also, I save a lot of time especially when searching for files related to old employees in the sector.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 24: It makes communication between us go fast and smooth.

Researcher: How is this system different from the previous system?

Participant # 24: I did not use a previous system.

Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 24: Not understanding the system is the most difficult aspect.

Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 24: Maybe, there is some relationship but at our department we meet a lot with different employees in person.

Researcher: Do you think that language is an obstacle in applying the system?

Participant # 24: No, the system is in the Arabic language. However, I prefer English because I feel it is easier.
Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 24: Lack of knowledge and fear of not being able to apply the system.

Researcher: Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 24: Usually, at first every change is difficult.

Theme Six: Training Experience
Researcher: Did you receive any training on computer applications?

Participant # 24: Yes, I did.

Researcher: Did you receive any training on e-government application?

Participant # 24: An introduction and we use some aspects of it.

Researcher: Did you take any courses in the English language?

Participant # 24: Yes, I did.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant # 24: I did benefit from these courses.

Theme Seven: Work environment
Researcher: How do you deal with difficulties and challenges in your job?

Participant # 24: I take the advice of the more experienced.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant # 24: Technology helped in speeding up some tasks.

Researcher: What motivates you in the job, and do you feel motivated in your job?

Participant # 24: I do not feel motivated but I feel motivated if I get praise from my boss.

Researcher: Do you feel appreciated in your job?

Participant # 24: Sometimes.

Researcher: If you have uncertainties and surprises in your job, how do you deal with them?

Participant # 24: I take my time in thinking of them and ask my boss for the best way to deal with the situation.
Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant # 24: It is toward a group.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant # 24: Yes, I have no problem in that.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 24: In general it is fine.

Theme Eight: Culture
Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 24: Time is very flexible here. And there is no time management.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 24: With my friends.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 24: Yes, it is very significant and the backbone for all of us.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 24: I can say old traditions and customs that many still have.

Theme Nine: Organizational Culture
Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 24: Friendly in general but there are individuals who are not friendly.

Researcher: Is there any grouping in the organization?

Participant # 24: Yes, there is.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 24: From applying and then finding someone in the organization who could help in that matter.
Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 24: Improving the skills of employees by having periodical training courses that could benefit them.

Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 24: No, little has been done in this matter. A lot of individuals are still living in the dark ages.

Researcher: How do you and other employees feel about having female employees working with you in the same organization?

Participant # 24: In general, I think there is no problem since they have their own section and we do not mix.

Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 24: It could offer some extra jobs but not something major.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 24: Women have an important role in the development of our country. They could provide important aspects that men cannot provide.

Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 24: She could be independent and have confidence which will allow her to give more to the family. However, work could take up a lot of her time.

Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 24: She could provide the financial support that the family needs.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 24: More should be done in the real world. Females are still struggling and not finding suitable job opportunities.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 24: I could say it’s the rigid thinking of men in our society.
Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 24:
Personal communication: Face-to-face and telephone.
Family communication: Face-to-face, telephone and SMS.
Communication with friends: Face-to-face, telephone, emails, and SMS.
Social communication: Face-to-face, telephone, and email.
Business communication: Face-to-face, telephone, email, and fax.
Communication with employees: Face-to-face, telephone, email, and fax.

Interview number: 25

Theme One: Personal Information

Researcher: What is your current position?
Participant # 25: I am a business developer at the Saudi Geological Survey.

Researcher: How many years of working experience do you have?
Participant # 25: I have eleven years of experience.

Researcher: What is your monthly income range?
Participant # 25: My monthly income is 20,000 SR.

Researcher: Your age range?
Participant # 25: I am forty-four years old.

Researcher: What is your education?
Participant # 25: I have a PhD in business management.

Theme Two: Computer Experience

Researcher: Do you have your own computer at work?
Participant # 25: Yes.

Researcher: Do you work on a computer?
Participant # 25: Yes, I do.

Researcher: How much time do you spend on the computer at work?
Participant # 25: I use it for all my work activities.
Researcher: How do you use the computer at work?
Participant # 25: I use it for printing, programs, and mostly in Microsoft office.

Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 25: Yes, all have a computer and use it for their work.

Theme Three: Internet Experience
Researcher: Have you ever used the Internet?
Participant # 25: Yes, a lot.

Researcher: How often do you use the Internet daily?
Participant # 25: I can say most of the time.

Researcher: Where do you use the Internet mostly?
Participant # 25: Both home and work.

Researcher: For what mostly do you use the Internet?
Participant # 25: I use it for research, looking for information, and for communicating with friends and colleagues.

Researcher: To what extent do the computer and Internet influence the Saudi family?
Participant # 25: Family members are busy a lot of the time in using the Internet. Everyone in the family has a computer and log on to the net to check different subjects. My ten year-old girl, for example, is learning a lot from the net and connects with her friends. She likes to play games with her friends online. Personally, I use the computer for reading newspapers and looking into different subjects. Forums and social networks are useful in getting to be updated about my favourite subject, sports. I can communicate with others about the new upcoming events and negotiate various ideas. The social network allowed me to be updated since there are participants who add every item of news instantly. In addition, the Internet gives the liberty for all in Saudi to gather in one forum without regard to the gender issue which is very sensitive in our society. Therefore, I can see that the computer and Internet do influence the family but mostly in a positive manner. The only negative I see is that the family is so busy most of the time in using them.
Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 25: The family members are using the Internet a lot which influences communication with each other. Maybe they are talking less and not connecting. The relatives are not visiting sometimes and rely on emails and messages to exchange their news about each other. That could be happening sometimes, I think, but still that does not mean that relatives are not gathering. Maybe they are gathering less than they used to.

Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 25: No, I do not think so since there some individuals do not have the knowledge or are not educated.

Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 25: Yes, I do a lot.

Researcher: Why is that (if using, or not using)?

Participant # 25: I rely on the Internet for paying all my bills through my bank system online. I do that because it is easy and fast, however, sometimes I find problems with accessing the Internet. We still have problems with the access where sometimes it is slow and sometimes it disconnects for no reason even though we pay very high prices for Internet access here if compared to other countries.

Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 25: I try to fix it myself or I contact the specialized area for that.

Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 25: Through using emails and taking training courses.

Researcher: How do the e-government system or the network system and technologies affect your work?

Participant # 25: It offers me speed and I can do more in less time. Information is more acceptable and I do not ask for information if I just could search for it on the system.
Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 25: Actually, it helps a lot in our exchanges of information that are related to work. However, we still rely heavily on manual work and using the paper media.

Researcher: How is this system different from the previous system?

Participant # 25: It gives us the opportunity to communicate in an easy and fast manner. Also, the new technology software is very useful in our job even though we still depend a lot on using paper in the workplace.

Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 25: We still use the e-government completely in the workplace. Some were introduced to the project but not activated yet at the sector. In general it should offer a coherent and unified system that we all could refer to. However, it could take time before we all could use it in the job. In addition, most of the programs we adapt were intended for developed countries and I think there should be some modifications before we could apply it. Also, the organization should offer training in order for employees to know the different procedures of using the system since they lack the application skills. In addition, we have a budget that is dedicated to the e-government project; however, the rigid procedures are stopping the advancement and implementation of the project.

Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 25: Through using the internal network at the workplace a lot of unnecessary face-to-face meetings are avoided. Instead we could do what we want through the system.

Researcher: Do you think that language is an obstacle in applying the system?

Participant # 25: In general, no, since the system is in Arabic. However, when the system is done in Arabic sometimes it is a little confusing since the translation of some action and orders is not clear or I am not used to it.

Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 25: Employees refuse to use the system because they do not understand how to use the system or are afraid to use the system. Others will even go against it and do not want to employ it at all.
Researcher: Do you think that e-government or any new technology is accepted easily in the organization?

Participant #25: At first it will not be welcomed since it is new; however, later when employees are trained and are using the system it will be accepted.

Theme Six: Training Experience

Researcher: Did you receive any training on computer applications?

Participant #25: Yes, I did.

Researcher: Did you receive any training on e-government application?

Participant #25: An introduction but nothing is done yet.

Researcher: Did you take any courses in the English language?

Participant #25: Yes, I did.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant #25: I did benefit from these courses. Practise the keyword, practising the way to benefit from what you learn.

Theme Seven: Work environment

Researcher: How do you deal with difficulties and challenges in your job?

Participant #25: I think about and explore the matter from different aspects. Also, I take the advice and recommendations of others.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant #25: Yes, with the use of technology.

Researcher: What motivates you in the job, and do you feel motivated in your job?

Participant #25: Different challenges and new aspects in the job motivate me.

Researcher: Do you feel appreciated in your job?

Participant #25: Not very much.

Researcher: If you have uncertainties and surprises in your job, how do you deal with them?

Participant #25: Also, I take the advice of others and do not take fast decisions.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant #25: The loyalty is not toward the sector. I see that because the low salaries that employees take which influence their attitude in the workplace.
Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant #25: Yes, I do. However, I always prefer to give my point of view of what I think of the matter. I sometimes have conflict when he wants me to do things that do not conform to the rules and regulations of the organization.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant #25: In general it is comfortable.

Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant #25: The value of time is not considered in the public sector. The employees tend to postpone work and not do it on time, i.e. “what is not done today could be done tomorrow”. A lot of employees do not come on time and are late for their work. Therefore, to overcome this matter the organization employs the thumb attendance system. This is a biometric time clock and attendance tracking system that replaces the typical time clock employed to track employees in the organization. However, it still did not fix the matter and employees have tried to break it in different ways.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant #25: I spend my time with my family first and when I have time I see friends.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant #25: Family comes first.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant #25: The people who ignore positive ideas that could develop the country made by responsible individuals. The people who cling to the different cultural beliefs and traditions that are not based on true Islam and impact on our lives strongly.
Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 25: In the department it is friendly; however, that is not the same in the whole organization.

Researcher: Is there any grouping in the organization?

Participant # 25: For sure there are groups in the organization, so: “if you do not belong to a group you are easy to hunt”.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 25: The positions are very limited and the employment opportunities are difficult to find. That is why people have to know someone in power in order to get a job.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 25: There are a lot of developmental studies that are ignored by the boss that could help in advancing the organization. There should be an organized and planned program for the developing of the organization. The e-government is not yet initiated in the sector mostly because of the lack of planning for implementation and rigid procedures.

Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 25: No, I feel that the socio-cultural environment has not helped at all. Indeed, if anything, it has fought against female existence in the workplace. Some have the idea that females are taking the place of some males in the job and they do not find that pleasant since the male unemployment rate is high and men are not finding jobs easily. However, I personally see that females are more active and dedicated in their work than men are.

Researcher: How do you and other employees feel about having female employees working with you in the same organization?

Participant # 25: Some do not welcome her existence while the others feel that she is successful in what she does.
Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 25: No, I do not think that. The e-government is an electronic system that may eliminate some employees either men or women in the workplace.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 25: Yes, I do see that she is an important part in the development of our society. However, not all females are responsible - some are whereas others are not. Yet the responsible ones are very reliable individuals who have goals and are successful in the workplace.

Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 25: Working females have the opportunity to be open to new experiences and learning every day to expand their knowledge. However, it will be a challenge for them to strike a balance between family and work. Also, women could be faced with different kinds of harassment at the job since men are not used to them in the sector.

Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 25: Yes, she could provide additional support to the family.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 25: I do not see tangible rules and policies in the government that help the female in the workplace.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 25: Narrow perspective of Islam and negative cultural beliefs in our society.

Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 25:
Personal communication: Face-to-face.
Family communication: Face-to-face telephone and SMS.
Communication with friends: Face-to-face, telephone, emails, and SMS.
Interview number: 26

Theme One: Personal Information

Researcher: What is your current position?

Participant # 26: I am the director of the female IT Division at the Ministry of Foreign Affairs.

Researcher: How many years of working experience do you have?

Participant # 26: I have about ten years of experience.

Researcher: What is your monthly income range?

Participant # 26: About 9,000 Saudi Riyals.

Researcher: Your age range?

Participant # 26: I am 39 years old.

Researcher: What is your education?

Participant # 26: I have a Bachelor’s degree.

Theme Two: Computer Experience

Researcher: Do you have your own computer at work?

Participant # 26: Yes I have my own computer at work that I use for the job.

Researcher: Do you work on a computer?

Participant # 26: Yes, I use it for different activities to perform my work.

Researcher: How much time do you spend on the computer at work?

Participant # 26: At work I use it most of the time; most of my work is done by the computer.

Researcher: How do you use the computer at work?

Participant # 26: I use it for writing reports and doing other tasks that are related to the job.
Researcher: Do all employees have their own computers and use them to perform tasks?

Participant # 26: Yes, at our department most of the employees have their own computers.

Theme Three: Internet Experience

Researcher: Have you ever used the Internet?

Participant # 26: Yes, I use Internet a lot.

Researcher: How often do you use the Internet daily?

Participant # 26: I spend long hours using the Internet, maybe, ten hours or more a day at work and at home.

Researcher: Where do you use the Internet mostly?

Participant # 26: Both at work and home.

Researcher: For what mostly do you use the Internet?

Participant # 26: I use it for information, research, things that I need for work, in addition, I use it for entertaining in terms of looking for songs, and different areas that interest me. I like to read about different subjects, but sometimes I find some problems during research since not all sites are open or they are restricted. Also, there are some Arabic websites that are not clear due to little or partial information being made available. However, sometimes I lose myself and get distracted because research takes me to some other areas that do not interest me.

Researcher: To what extent do the computer and Internet influence the Saudi family?

Participant # 26: Most of the homes now have Internet; however, the needs of young individuals are different from those of the mature ones. On the one hand, the older or mature individuals are searching for things like news websites and reading the newspapers online and looking for different subjects that are of interest. On the other hand, the young are different where their search depends on their attitudes and likes in the use of the Internet. In addition, I feel that here we have a lot of time to waste and the Internet is one of the ways to use time. People log on to the net looking for aspects that are not permitted and most of these are prohibited and restricted online; however, they still find ways to get through.
Also there is the problem that in schools students are not exposed to the Internet and the use of it in education which shows their lack of knowledge. Furthermore, we are a conservative society. In my opinion the existence of the Internet is a revolution by itself and we can get to know a lot from it. For instance, I am not able to go anywhere here by myself and I have to have someone to drive me or a brother or father to take me out. Now I do not feel that I have to nag a lot about going out since I can do many things by the use of the Internet. I can see and go places and no one need supervise me to check on my actions. I can get to know boys and girls and communicate with no restrictions from anyone in the society.

**Researcher:** In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

**Participant # 26:** I personally feel that the computer and Internet are positive aspects that make one get information and knowledge that are useful and valuable. However, when one of the family members is not feeling well emotionally or has family problems they will look for things that they are missing from their life. In no time the individual will be addicted and use this technology heavily to find out what is absent in their surroundings which will result in less family communication. Nonetheless, other family members who are relaxed and have no family problems will use the computer and Internet just to check on aspects of interest and information for their own benefit and will not be so obsessed.

**Researcher:** Are the computer and Internet used by all levels of society in Saudi Arabia?

**Participant # 26:** Yes, they are used by different people in the society, for example the young and the mature all depend in the end on their interests as I mentioned before. The mature individual would search for news, different information about medicine, entertainment, and other different sites. The young depend on their background, ideas, how they are raised, and their interests, for example, technology. There are individuals who want to benefit and learn and would look for sites that develop such concerns. There are also individuals who are looking only for entertainment. In addition, girls would use it to look for fashion and different related subjects or look into what other people are doing in the world and try to gain knowledge and be open to other societies. Furthermore, computers and the Internet are used by both the educated and uneducated.
but everyone has their own way of using them. However, the uneducated face limitations sometimes because of the lack of knowledge.

**Theme Four: E-Commerce Experience**

*Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?*

Participant # 26: Actually, I do not know how to use the Internet for buying products or paying bills.

*Researcher: Why is that (if using, or not using)?*

Participant # 26: I would like to do that sometimes but I face the problem that I do not know how to do the process or finish the transaction if I like something or want to buy something. In addition, at schools, English is not taught from the early years at school. As a result, we face problems when getting online since a large number of sites are in English.

**Theme Five: E-government System**

*Researcher: If faced with a problem in the system the employee should go to whom to solve it?*

Participant # 26: At first I try to fix the problem myself and if I do not find a solution I would then go to a person who has more experience in this domain and if s/he was not able to help me then I would go to the specialist in this area to solve the problem. In the workplace the specialist or IT staff should be available for problems like this on the spot for any future matters and in addition there should be a periodical maintenance plan.

*Researcher: How do employees exchange and share information in order to understand the e-government system?*

Participant # 26: There should be training for all employees for different matters or systems in the workplace and answers to their different questions about the system.

*Researcher: How do the e-government system or the network system and technologies affect your work?*

Participant # 26: In many areas the new technologies helped us in doing our work. Also, my colleagues and I like to explore and understand the new technology and how it could be applied to our work.

*Researcher: How does the e-government system or electronic system affect your relations with colleagues?*
Participant # 26: It affects us positively where we can circulate information easily and do work faster. However, I feel that some employees are not so clear where they want to keep some data for themselves.

**Researcher: How is this system different from the previous system?**

Participant # 26: We have not used the e-government system yet but our previous system is a little outdated and there are a lot of aspects that need to be changed in order to be more productive. Also, not all are aware of how to apply the different aspects of any new system and sometimes rely on a person to do things and go for advice when needed whereas others lack the knowledge to do so.

**Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?**

Participant # 26: The advantage that the new system provides is that it facilitates the communication among the employees and other employees in the sector and it also facilitates the communication between employees and their clients. The client also could get information easily and faster. However, the disadvantages are that any system always needs to be updated and maintenance should be done from time to time which tends to be neglected most of the time. In addition, there should be dedicated budgets for such matters to enable performance of these different tasks.

**Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?**

Participant # 26: Yes, I think that the use of such a system will limit the amount of face-to-face communication among employees and if they have any question then they could use the phone to clear up different matters.

**Researcher: Do you think that language is an obstacle in applying the system?**

Participant # 26: No, it will not be an obstacle since all the programs that we use are in Arabic. However, I think that we should know English since it is the base for most of the new systems and applications.

**Researcher: Why in your opinion do employees refuse to use the new application (e-government)?**

Participant # 26: Employees refuse to use the new system simply because they do not know the system or how to use it. Also, they are not qualified enough to use such systems.

**Researcher: Do you think that e-government or any new technology is accepted easily in the organization?**
Participant # 26: No, the new system will not be accepted easily. Maybe a small percentage of will accept, however, most of employees will not accept the system.

**Theme Six: Training Experience**

**Researcher:** Did you receive any training on computer applications?

Participant # 26: Yes, I did.

**Researcher:** Did you receive any training on e-government application?

Participant # 26: No.

**Researcher:** Did you take any courses in the English language?

Participant # 26: No, only at school.

**Researcher:** If you got any training in any of these courses, did you learn and benefit from them?

Participant # 26: Yes, I did benefit from what I took.

**Theme Seven: Work environment**

**Researcher:** How do you deal with difficulties in your job?

Participant # 26: I prefer to have negotiations with my superiors to deal with difficulties at work.

**Researcher:** Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant # 26: Yes, many tasks became easier because of the use of many electronic devices besides the use of some software on the computer.

**Researcher:** Do you feel appreciated in your job?

Participant # 26: I do not feel appreciated at work and sometimes I do work that is not mine. Also, jealousy is a problem we face at the workplace.

**Researcher:** If you have uncertainties in your job, how do you deal with them?

Participant # 26: I try to deal with the matter as best I can and learn from my previous experiences.

**Researcher:** How do you deal with challenges in your job?

Participant # 26: I usually see that challenges make the work sometimes more interesting and away from the routine. The work would be motivating with the existence of challenges at work. I enjoy sometimes dealing with different challenges at work especially when the outcome is positive.
Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant # 26: Of course, the loyalty of employees should go towards the sector. Unfortunately, in real life that is not the case. The loyalty goes to groups or specific people. In fact, I can say the person who is loyal to her/his job does not stay long in the workplace.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant # 26: Usually, I do accept the higher authority but the problem is that most of the managers or supervisors are rude and aggressive and shout most of the time at their employees.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 26: The physical working conditions are not as satisfactory and there is always the lack of budget to update and fix. We usually bring ourselves some items that make us feel better and have a better environment.

Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 26: The value of time is important, however, things do not work that way. Also, the public sector and the private sector have different working hours. The public sectors should be on time since they deal with many people from different businesses and individuals as well. The workload is heavy in public sectors and as a result there should be consideration for time. However, the problem with the employees in the public sector is that they usually do not consider time and would postpone a lot of the work tasks until later. There should be supervision of them in order for employees to be on time.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 26: I prefer to spend my time with family and friends.

Researcher: In your opinion, is family a significant aspect in Saudi culture?
Participant # 26: Family is an important aspect in our lives since we all relate and go back to. It is an important base members can rely on in different situations.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 26: I personally think that our way of thinking in some aspects in our lives could be an important reason for not making positive changes and not being open to others or to the world. Another reason would be the narrow view a lot of individuals have and sticking to old customs and traditions that prevent our advancement. Furthermore, huge budgets have been allocated to developing our society on different levels but we cannot see something concrete in the real world.

Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 26: In general it is comfortable but stressful sometimes.

Researcher: Is there any grouping in the organization?

Participant # 26: That is normal in many Arab societies and we are one of these societies.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 26: In our society and culture, to get a job, you should know someone with authority or who is important so one can get a job. It has become nowadays, very difficult to do the opposite, i.e. looking for a job with no support from a person with influence. A lot of the ads that are in the newspapers for jobs are only decoration since the job is already filled by someone.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 26: There should be committees that ought to be responsible for the development of the public sectors which should follow up on all matters and issues they go through. Apart from that, they should play an important role in supervising physically these workplaces and make changes accordingly and solve problems that come up. Also, there should always be new employees that come into the sector to introduce new blood into the workplace. Besides, it is important to have the seniors after
their retirement as advisors to the sector to benefit from their experience and background.

**Theme Ten: Female issues**

**Researcher:** Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 26: Nowadays, women are finding a lot of support from different levels in our society whereas that was not the case in the past. We can see more females in different jobs and workplaces and even Saudi females working as fashion designers which are a very new aspect in our culture. However, there are still a lot of taboo matters that surround women and advancements need to be made in a gradual way. In addition, the support that is provided for women, however, is limited and does not meet the ambitions of Saudi females. Also, the areas women work in are still restricted and many other new areas are needed. The culture is not providing enough to support the females’ ability to work and to liberate them from the negatives in the society.

**Researcher:** How do male employees feel about having female employees working in the same organization?

Participant # 26: I think that men do not take women seriously at the job and they want to seize this opportunity to entertain and waste time with them.

**Researcher:** Do you believe that the e-government system would offer females more job opportunities?

Participant # 26: I feel that this system could provide some job opportunities for women. Also, women could work from home and be able to be productive without being in the workplace physically.

**Researcher:** From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 26: I think that the role of the female in the society is very important in order to be productive and be part of the development of our country. In the developed countries females play a significant role where they are part of many different workplaces. They are even working as ministers and ruling countries.

**Researcher:** In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 26: The advantages are that the women play an important role in the country and are productive. Also, they are able to understand other females and what they are going through. Women provide a new perspective on different aspects in the
workplace; besides they are more understanding and less aggressive than men and more flexible. However, the disadvantages are that the female would be working in a mixed environment sometimes which not all like or allow. Also, they could be misunderstood by others, and their ideas could be put down and be penalized since they are new and men were there long before and such ideas have been introduced before.

**Researcher:** Could the working female provide additional support for the family beside the contribution of the working male in the family?

**Participant # 26:** A lot of households are supported by working women nowadays since there are a lot of men who are not working.

**Researcher:** How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

**Participant # 26:** I personally feel that little is done in the area of policies that would aid the female in the workplace. There are some rules and policies however that are not activated properly.

**Researcher:** What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

**Participant # 26:** The customs and traditions that are engrained in our society play an important role in being behind in many areas in life. For example, there are until now many people who criticize Saudi female reporters or TV announcers or businesswomen who work in public.

**Theme Eleven: Communication**

**Researcher:** What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

**Participant # 26:**

Personal communication: For personal communication I could use the telephone, and fact-to-face communication.

Family communication: For family I could use telephone, fact-to-face communication, and SMS messages.

Communication with friends: For friends I could use telephone, fact-to-face communication, and SMS messages.

Social communication: In social communications I could use fact-to-face communication and telephone.
Business communication: I use meetings as in face-to-face communication, phone conversations, SMS, and faxes.
Communication with employees: With employees I use face-to-face communication, phone conversations, and emails.

**Researcher: Is there anything that you would like to add or ask?**
I am proud to be part of this contribution. Thank you

**Interview number: 27**

**Theme One: Personal Information**

**Researcher: What is your current position?**
Participant # 27: I am the secretary of the female IT Division at the Ministry of Foreign Affairs.

**Researcher: How many years of working experience do you have?**
Participant # 27: I have about 5 years of experience.

**Researcher: What is your monthly income range?**
Participant # 27: About 4,000 Saudi Riyals.

**Researcher: Your age range?**
Participant # 27: I am 29 years old.

**Researcher: What is your education?**
Participant # 27: I have an associate degree in secretarial work.

**Theme Two: Computer Experience**

**Researcher: Do you have your own computer at work?**
Participant # 27: Yes, I have my own computer at work that I use for the job.

**Researcher: Do you work on a computer?**
Participant # 27: Yes, I do work on my computer.

**Researcher: How much time do you spend on the computer at work?**
Participant # 27: At work I apply a lot of my work on using the computer.

**Researcher: How do you use the computer at work?**
Participant # 27: I use it for writing reports and doing other tasks that are related to the job.
Researcher: Do all employees have their own computers and use them to perform tasks?

Participant # 27: Yes, at our department most of the employees have their own computers.

Theme Three: Internet Experience

Researcher: Have you ever used the Internet?

Participant # 27: Yes, I use Internet a lot.

Researcher: How often do you use the Internet daily?

Participant # 27: I use the Internet for a lot, maybe, I could say from five to six hours.

Researcher: Where do you use the Internet mostly?

Participant # 27: I use the Internet mostly at work.

Researcher: For what mostly do you use the Internet?

Participant # 27: I use the Internet to get information on some of my job activities to find ways to do it more efficient.

Researcher: To what extent do the computer and Internet influence the Saudi family?

Participant # 27: I really see that now many families are using the computer and Internet in their homes and at Internet cafés. I think that in some way it has changed many aspects of our life since we are able now to get information fast and get many points of view that were not available to our previous generation. I can say that the families are highly influenced by the new technologies such as the computer and Internet. Also, it gives me personally the opportunity to do things I cannot do in Saudi Arabia. I am able to communicate on the social networks with different people all over the world of both sexes. I can talk and exchange ideas and even use my camera to see them. I feel that I am learning a lot and I am open to other societies that I would not be able to get to know if there were no Internet.

Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 27: I can say that that could be true sometimes. Now the family members are using the computer and Internet at home for many different reasons. Therefore, one could find that this aspect could affect the family communication in the household. My brother, for example, spends hours on the net playing games with his friends online.

Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?
Participant # 27: No, I do not think that the computer and Internet are used by all people. There are individuals who cannot afford to pay for the Internet services since it costs a lot in our country.

**Theme Four: E-Commerce Experience**

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 27: Yes, I like to check on new products that interest me online and compare prices. Also, sometimes I pay phone bills online.

Researcher: Why is that (if using, or not using)?

Participant # 27: I actually use it for better prices that I can find online and also not all products I want are available in the local market so I like to get them online.

**Theme Five: E-government System**

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 27: Usually when we face a problem at work we go to the IT group available to fix different problems.

Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 27: For exchanging information about any system we usually chat and communicate with other employees in the workplace.

Researcher: How do the e-government system or the network system and technologies affect your work?

Participant # 27: Actually the workplace network helped us in doing our jobs faster and also we could communicate much easier this way.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 27: The network for example gave the employees the opportunity to share information and exchange knowledge much better.

Researcher: How is this system different from the previous system?

Participant # 27: I do not know about any previous systems.

Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?
Participant # 27: It helps in collecting and gathering information needed in faster manner. It also saves a lot of our time.

**Researcher:** Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 27: I think now with the use of these systems, employees in the workplace do not need to be physically in the same place to get work done. Now we are able to communicate and get our jobs done electronically without the need to be face-to-face, which helps us tremendously since we are able to do so much in less time.

**Researcher:** Do you think that language is an obstacle in applying the system?

Participant # 27: Maybe, it would be an obstacle for people who do not speak the English language.

**Researcher:** Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 27: I personally think that employees refuse to apply new systems because they lack computer experience and are not aware of ways to use the system. In addition, the lack of language could be another reason for that. Also, employees resist change and feel lazy to learn a new thing.

**Researcher:** Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 27: No, and that is due to the reasons I mentioned before.

**Theme Six: Training Experience**

**Researcher:** Did you receive any training on computer applications?

Participant # 27: Yes, I did.

**Researcher:** Did you receive any training on e-government application?

Participant # 27: No.

**Researcher:** Did you take any courses in the English language?

Participant # 27: No, only at school.

**Researcher:** If you got any training in any of these courses, did you learn and benefit from them?

Participant # 27: Yes, I did benefit.
Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?

Participant # 27: If faced with any difficulties at my work I usually ask my colleagues if they faced something similar and what did they do to overcome it.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant # 27: Not so much actually.

Researcher: Do you feel appreciated in your job?

Participant # 27: Yes, I do feel appreciated and get motivated sometimes when I get recognized for the job I am doing.

Researcher: If you have uncertainties in your job, how do you deal with them?

Participant # 27: I think about them at first and then try to deal with them with the best of my knowledge.

Researcher: How do you deal with challenges in your job?

Participant # 27: I just take a deep breath and try to work with it as best as I can.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant # 27: This matter depends on the situation and the job.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant # 27: I accept orders from my superiors; however, if they are wrong I do discuss the matter with them.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 27: It is average.

Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 27: Actually time is not considered at all. The public sector does not value time as much as the public and I feel that is because there is no supervision and a system that could monitor the employees in the workplace.
Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 27: I like to spend time with my family and friends.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 27: Yes, it is very significant. I think I personally cannot live without my family. They are all the support I need.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 27: The government should be the one responsible for making changes and advances in the society. For advancement, sometimes the government should force through positive change; for example, in the 1930’s female education was forced through by the government and that resulted in a country where females were educated and could provide for development for their country.

Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 27: I can say it is good, I feel comfortable.

Researcher: Is there any grouping in the organization?

Participant # 27: Yes, there is. I think that this exists everywhere. At work there are groupings based on tribe, background, and others based on common interests.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 27: Nepotism is mostly and always needed to get a job. You would have to be lucky to get a job without Nepotism.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 27: Yes, I think that the employees should take new courses from time to time to be up-to-date with the new in the business world. Also, getting a job should be based on qualifications and education and not based on “who you know”.
Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 27: In some way, however, a lot of work should be done for a better environment. More work should be done at a governmental level and at a social level.

Researcher: How do male employees feel about having female employees working in the same organization?

Participant # 27: The male employees like the idea of having female employees as long as they are not relatives.

Researcher: Why do you think that?

Participant # 27: That is because they feel mortified by the attitude of others if she is a relative since not all the individuals accept this matter of females working.

Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 27: Yes, I think that any new system could offer new opportunities for anyone.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 27: Of course, women are half of the society and this half cannot be unproductive.

Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 27: I think that the woman’s work is totally advantageous since she gets more confidence; expands knowledge, and gets a learning experience, and income.

Researcher: Could the working female provide additional support for the family beside the contribution of the working male in the family?

Participant # 27: That is one of the great advantages of females working in the workplace.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 27: Of course, the rules and policies that are enforced by the government could give females in Saudi Arabia a better opportunity. It could help them in entering the job market since there are certain rules that all should follow and they would not be fighting to get their right for work. The workplace could offer them more and better opportunities. As a result, females would not be limited and be more active in the
society and there would be less dependence on the foreign workers working in the workplace.

**Researcher:** What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 27: In fact, that is true. We are a society that relies heavily on our customs and traditions. However, not all are so positive or accurate that we should follow them blindly. Now that people are changing everywhere and advancing, I think that we should do the same by keeping our positive traditions only and not our negative ones.

**Theme Eleven: Communication**

**Researcher:** What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 27:
Personal communication: For personal communication I could use the telephone, SMS, and fact-to-face communication.
Family communication: For family I could use telephone, fact-to-face communication, and SMS messages.
Communication with friends: For friends I could use telephone, fact-to-face communication, and SMS messages.
Social communication: In social communications I could use face-to-face communication and telephone.
Business communication: I use meetings as in face-to-face communication, phone conversations, SMS, and faxes.
Communication with employees: With employees I use face-to-face communication, phone conversations, and emails.

**Researcher:** Is there anything that you would like to add or ask?

I am proud to be part of this contribution. Thank you

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**Interview number: 28**

**Theme One: Personal Information**

**Researcher:** What is your current position?

Participant # 28: I am an HR/Recruitment Manager at Ministry of Foreign Affairs.
Researcher: How many years of working experience do you have?
Participant # 28: I have 15 years of experience.

Researcher: What is your monthly income range?
Participant # 28: My monthly income ranges from 20,000 SR.

Researcher: Your age range?
Participant # 28: I am thirty nine years old.

Researcher: What is your education?
Participant # 28: I have a Master’s Degree.

Theme Two: Computer Experience
Researcher: Do you have your own computer at work?
Participant # 28: Yes.

Researcher: Do you work on a computer?
Participant # 28: Yes.

Researcher: How much time do you spend on the computer at work?
Participant # 28: I spend around five hours.

Researcher: How do you use the computer at work?
Participant # 28: I use it for conducting different tasks of my work such as writing reports and printing.

Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 28: Yes, they do.

Theme Three: Internet Experience
Researcher: Have you ever used the Internet?
Participant # 28: Yes.

Researcher: How often do you use the Internet daily?
Participant # 28: From one to two hours.

Researcher: Where do you use the Internet mostly?
Participant # 28: At home.
Researcher: For what mostly do you use the Internet?
Participant # 28: I use it for research, information, looking for new in my work area, and entertainment.

Researcher: To what extent do the computer and Internet influence the Saudi family?
Participant # 28: I personally feel it has influenced us positively since we can stay connected to the others. It facilitates our communication even when everyone is in a different place. Now I can communicate with my friends who are in different countries and know about them even if we did not talk to each other. I feel that the Internet is a breath of fresh air that we girls could have away from our restricted life in our country. However, there should be boundaries that I respect and do not cross the line.

Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?
Participant # 28: In some of the families this could be the case. However, in other families where they have awareness and understanding this is unlikely to happen. They will be responsible and respect family gatherings and the Internet could be used at other times.

Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?
Participant # 28: I think that not all levels of society are using the computer and Internet. There is the older generation that is not used to such technologies and lacks the ability to use them.

Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?
Participant # 28: Yes.

Researcher: Why is that (if using, or not using)?
Participant # 28: The use of Internet facilitates the payment procedures for me tremendously. Now I do not have to make a trip by car to make my payment. I can do that in the comfort of my home by the use the Internet.
Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 28: We usually (when faced with a problem in the system) ask for assistance from our IT services. In this case we have to wait for them to come to be able to repair the problem.

Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 28: Usually, we take training courses or previous employees could teach and train a new employee to the system.

Researcher: How do the e-government system or the network system and technologies affect your work?

Participant # 28: The new technology system assisted our work in many ways. It provides us with the information we need. A lot of time is saved and we could conduct our work faster because the ease of communication among employees.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 28: It offers us ease in communication with different employees through the use of the Internet system. In addition, it has a positive impact on the relations among employees because of the fast communication.

Researcher: How is this system different from the previous system?

Participant # 28: Ease of communication and saving time.

Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 28: The advantages of the use of new technologies: that we are able to conduct our work in a shorter time, have our work documented, organize the work, and have records and statistics. The disadvantages are: failure in the system, for example, if the system for any reason goes down our work has to stop which will delay or affect important steps that depend on the computer system, and if the system gets damaged that will result in the loss of all information and records available.
Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 28: I think that there are many aspects of our job that depend on the system; however, there are other aspects where face-to-face communication is significant.

Researcher: Do you think that language is an obstacle in applying the system?

Participant # 28: The system is usually done in the Arabic language so all employees will be able to use it.

Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 28: Employees are afraid of not being able to use the new system and they prefer to use the way they already know.

Researcher: Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 28: If the system was user friendly then I think it could be accepted easily especially if training is given for the employees on any new system.

Theme Six: Training Experience

Researcher: Did you receive any training on computer applications?

Participant # 28: No.

Researcher: Did you receive any training on e-government application?

Participant # 28: No.

Researcher: Did you take any courses in the English language?

Participant # 28: No.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?

Participant # 28: I usually ask individuals who work in the HR field and especially the ones that have more experience and ask my manager as well. In addition, I search the Internet for information to expand my knowledge.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant # 28: I depend a lot on the computer in my job.
Researcher: What motivates you in the job, and do you feel motivated in your job?
Participant # 28: I feel motivated when I work with people who we share trust together, appreciation, training, and benefits.

Researcher: Do you feel appreciated in your job?
Participant # 28: No, I do not feel appreciated.

Researcher: If you have uncertainties in your job, how do you deal with them?
Participant # 28: If I do not know something I do check and search before I take any action. I usually reply to such matters saying “I will check on this matter and get back to you”.

Researcher: How do you deal with surprises in your job?
Participant # 28: There is always a solution for everything, and I do not panic and deal with the matter.

Researcher: How do you deal with challenges in your job?
Participant # 28: I motivate myself by facing the challenge and saying that I could do it and sometimes my colleagues helps me.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?
Participant # 28: If the organization is respectful and has good culture, loyalty should go towards the organization.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?
Participant # 28: Yes, I do accept higher authority and give my input sometimes.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?
Participant # 28: The work environment is comfortable.

Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?
Participant # 28: The value of time is important; however, I feel that the private sector considers and values time more than the public sector.

Researcher: When you have time or at the weekend where do you prefer to spend your time?
Participant # 28: I like to spend my weekends with family and friends.
Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 28: Yes, it is the foundation of our culture. Our Islamic religion gives great importance to family and that is reason we should respect and honour our families.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 28: Individuals in the society who are affected by negative traditions and customs and individuals who are considered to be extremist in the Islamic religion.

Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 28: It is relaxing and friendly and the relationships are based on trust.

Researcher: Is there any grouping in the organization?

Participant # 28: Yes, there is but I do not participate in it.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 28: Nepotism plays a significant role when looking for a job. If you know someone who has power then you get a good job.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 28: Personally, the organization should be designed to promote a better environment for employees. As a result, the sector would have an improved work production and psychological state in the general workplace.

Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 28: No not yet. Women still find it hard to get better and greater opportunities at the workplace. However, currently I can see some changes happening in the area of female jobs in the country.
Researcher: How do male employees feel about having female employees working in the same organization?

Participant # 28: I think that some of them believe in women’s work ability, however, others do not believe in their ability at all and would rather have men working in the organization.

Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 28: Maybe, it could provide new jobs for women but I do not know if it provides any career path for them.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 28: From my personal observation, I found that the Saudi women are more committed, hardworking, and believing in self-improvement than men. And yes women can have a more significant and serious role in the society in addition to their dedication to that role.

Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 28: This is a very big subject to go into, although, I can say that some of the advantages are: the positive impact on women’s psychology (she becomes stronger and more self-confident), better intellectual functioning, and monetary incentives. The disadvantages are: work could affect women’s freedom, and could have negative impact on the house and family.

Researcher: What do you mean by “work affect freedom” here?

Participant # 28: I mean freedom of time. The reason for that is that the woman will be busy all the time and spend a lot of time at work. For example, personally, I want sometimes to take a long vacation and I cannot because of my commitment to work. I want to take some courses on subjects that interest me but I do not have the time for that, and I want to take care of myself more by doing exercise but time is tight. The time I have left I spend with the family since I sometimes come home late from work.

Researcher: Could the working female provide additional support for the family besides the working male in the family?

Participant # 28: Yes, the working female could provide additional support to the family. These days it is important to be able to get extra income for the family since everything is becoming very expensive.
Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 28: Still more should be done. Women are still restricted a lot in the workplace and only certain jobs are available; for example, women do not work as engineers. I hope one day will come when we all can work in whatever field we want with no restrictions or limitations.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 28: I think that the negative cultural beliefs, being closed to new ideas, and taking the narrow perspective of religion are some of the reasons for not progressing our society.

Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 28:
Personal communication: telephone and face-to-face.
Family communication: face-to-face, telephone, and SMS.
Communication with friends: face-to-face, telephone, and SMS.
Social communication: face-to-face.
Business communication: face-to-face and email.
Communication with employees: face-to-face, telephone, and email.

Interview number: 29
Theme One: Personal Information

Researcher: What is your current position?

Participant # 29: I am the director’s assistant in IT at the Ministry of Foreign Affairs.

Researcher: How many years of working experience do you have?

Participant # 29: I have four years of experience.

Researcher: What is your monthly income range?

Participant # 29: My monthly income is 4,000 SR.

Researcher: Your age range?

Participant # 29: I am 33 years old.
Researcher: What is your education?
Participant # 29: I have a diploma degree in business management.

Theme Two: Computer Experience

Researcher: Do you have your own computer at work?
Participant # 29: Yes.

Researcher: Do you work on a computer?
Participant # 29: Yes.

Researcher: How much time do you spend on the computer at work?
Participant # 29: I spend around four hours.

Researcher: How do you use the computer at work?
Participant # 29: Yes, I do.

Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 29: Most of us have computers at work.

Theme Three: Internet Experience

Researcher: Have you ever used the Internet?
Participant # 29: Yes.

Researcher: How often do you use the Internet daily?
Participant # 29: I use it for long hours.

Researcher: Where do you use the Internet mostly?
Participant # 29: Mostly at home and a little at work.

Researcher: For what mostly do you use the Internet?
Participant # 29: I use for research purposes and look up aspects that are related to my work. Also, use it for knowledge and entertainment.

Researcher: To what extent do the computer and Internet influence the Saudi family?
Participant # 29: I think that every house has more than one computer. The family is consumed most of the time in using it for different purposes. For example, you can find the kids looking for new games to play, the mother looking for information about different subjects such as cooking, taking care of her babies, fashion, and entertainment, and the dad would be looking into reading newspapers, stock market, and sports. They are so busy in the house everyone in their own world searching for what interests them.
I think that we have come to a point where for much of the time we do not ask each other about information we need as we can just directly use the web to find what we are looking for and get various answers.

**Researcher:** In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 29: I do not think it influences the family’s relations strongly since the computer and Internet these days are a requirement. Nowadays, we do not find a seven year old child who does not know how to use a computer, however, in the past this was not the case. The children are benefiting from their time in learning new things instead of wasting time. Even though the use of the Internet keeps family members away from each other sometimes, I see that as a good thing since they are doing something that they could benefit from such as learning and gaining knowledge and not just doing nothing and wasting time. Nevertheless, if we want to compare this matter with the past this is totally different. In the past we used to spend time in the house with mom and dad but now it is different as kids do not spend as much time with the family as we did before. However, there could be some negatives for teenagers who are open to the Internet since they could get a lot of harmful information and foreign ideas that do not relate to our beliefs and culture which will as a result be reflected in their attitude.

**Researcher:** Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 29: Currently yes, all have computers and Internet. All use Internet and we can spend a lot of the time on the Internet even when we are on the go and logging on by using our mobiles. Now even people who do know how to use the Internet will learn and I see that some of the old people at work who do not know about its usage will ask friends or take courses to learn.

**Theme Four: E-Commerce Experience**

**Researcher:** Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 29: No, I do not.

**Researcher:** Why is that (if using, or not using)?

Participant # 29: I am afraid to shop online. I do not know how to do that and I am afraid of theft online. I just like to look for new things and fashion but I do not purchase anything. Some are still not aware of the proper way to use the credit cards online.
Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 29: Our department deals with technical problems and we can get employees to fix the problem.

Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 29: We ask each other and the more experienced employee would advise the new on the use of the system.

Researcher: How do the e-government system or the network system and technologies affect your work?

Participant # 29: The system helped us in retrieving data easily and organizing them as well. However, we still deal a lot on the use of paper in the sector.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 29: The system does not have a direct effect on my relations with others. However, the system helps in communication easily through the system and sending and receiving work with no need to be at their office.

Researcher: How is this system different from the previous system?

Participant # 29: I did not use another system.

Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 29: It is easy to retrieve data and circulate information easily among employees. However, the problem occurs when the system stop working for any reason. In this case our work has to stop until the problem gets fixed.

Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?

Participant # 29: Maybe, a little. In my section I am with my colleagues and if I need something they are close by but that is not the same for others who are not in the same section. With others we mostly depend on the system to contact each other.

Researcher: Do you think that language is an obstacle in applying the system?

Participant # 29: No, it is not. All are done in the Arabic language.
Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 29: People refuse to use the new system sometimes because they lack the knowledge.

Researcher: Do you think that e-government or any new technology is accepted easily in the organization?

Participant # 29: At first it will take time and some get bothered a little but later on it will be easier to employ since they are more used to the system.

Theme Six: Training Experience

Researcher: Did you receive any training on computer applications?

Participant # 29: Yes, I did.

Researcher: Did you receive any training on e-government application?

Participant # 29: No.

Researcher: Did you take any courses in the English language?

Participant # 29: No, I did not.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant # 29: Yes, I did benefit from the courses.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?

Participant # 29: I try my best to solve the problem myself but if I did not know how to deal with it I will find someone who could help.

Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant # 29: The technology has influenced our work positively since we can do more in less time.

Researcher: What motivates you in the job, and do you feel motivated in your job?

Participant # 29: I do not feel motivated and nothing motivates me at work.

Researcher: Do you feel appreciated in your job?

Participant # 29: No, I do not feel appreciated.
Researcher: If you have uncertainties and surprises in your job, how do you deal with them?

Participant # 29: I do not show that I am surprised and try to handle the matter as best as I can.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant # 29: The loyalty of employees is to a person. Employees do that because they do not want to be left behind.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant # 29: Yes, I do, in the end the boss is responsible.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 29: Yes, it is fine but still a lot could be better. The organization could provide more elements as furniture in the workplace for a better environment.

Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 29: Time is valuable and now I see more and more employees are learning to be more responsible towards time. But still we are not like the private sector where every minute counts.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

 Participant # 29: I spend time mostly with the family. I also like to visit and communicate with my other relatives.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 29: Yes family is the foundation of all our lives.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 29: The government should give more consideration to the employment and its rules and regulations. The salary and monetary incentives should be better in the sector so the employee will have loyalty to the organization.
Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 29: In general it is cooperative but there is hostility from some employees.

Researcher: Is there any grouping in the organization?

Participant # 29: There is grouping in the sector even if no one talks about.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 29: Nepotism is the best way to get a good job. Other ways like applying for a job and having qualifications also help.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 29: There should be equal opportunities for all employees. For example, not all are offered courses to perform better in the job. Also, there should be periodical training to keep us updated about our jobs.

Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 29: Women face various obstacles in our culture. They do not have the same opportunities as the men do. I feel that still there are a lot that should be done in order to have a suitable environment for women to work. For example, the transportation is a big issue that faces the working woman every day. I had to struggle all the time to get to my workplace. My husband travels for his work a lot and I have to look for someone to take me to work and I cannot pay for a private driver, there is no liable transportation that I could use and as you know we are not allowed to drive. Therefore, for me this is really big problem that hinders me from going to work in an easy manner.

Researcher: How do male employees feel about having female employees working in the same organization?

Participant # 29: We still face many problems because of men in the job and how do they perceive women in the workplace. Not all men respect us and some do not take us seriously. We have to show that we are serious and have boundaries so we will not get used. I still feel that our negative traditions and customs play a significant role in
women staying behind and not advancing. Men in our society do not want women to be good or better than him and that he is superior.

**Researcher:** Do you believe that the e-government system would offer females more job opportunities?

Participant # 29: Yes, I would say that this system would offer the female more opportunities. The technology could provide her with the privacy of working from home or dealing with different clients from work without the need to be directly face-to-face. However, females should be trained in advance to have the skills and knowledge to work with the new system and benefit from this new opportunity. However, I do not know if we will be offered the same chance as men in this new field.

**Researcher:** From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 29: For sure there is significance for women in the advancing of the society. They will be side by side with the man for the developing of our country. If woman is raising generations and generations, I think they are capable of advancing in the society and contributing their success and knowledge. In life there are men and women but here we only see men and women hardly exist in the society.

**Researcher:** In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 29: Working give women the opportunity to be open minded, gain knowledge and awareness, expand understanding of life, and knowledge of rules and regulations in the workplace. Also, I do not think that there are negatives in women’s working, women are working everywhere and they were able to balance between home and work.

**Researcher:** Could the working female provide additional support for the family besides the working male in the family?

Participant # 29: Yes, she could be a support for the family. But also sometimes especially now she could be the only source of financial support for the family. Now the unemployment rate is high among men, therefore, a woman’s job is the only support some families have. However, she is not paid as men; women’s salary is less than men.

**Researcher:** How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 29: Now the government is trying to support women’s role but that was not the case in the past. In the light of some of the changes in rules and regulations now women are able to work in some places that were not available before. For instance,
now they are business women and managing their work by themselves with the existence of some obstacles in the market that they are trying to overcome. I can say that we are still in the infant stages for woman and our participation in the workplace. Another important point is that even when there are rules and regulations that are in support of the female’s work in the real world it is not activated. I remember when the government had the new policy that allowed women to work at lingerie stores, many problems occurred. Women opened the stores and then the religious police came in and closed these shops.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 29: I can say that the negative traditions and customs our society does influence our advancement in the country because they are a big obstacle in the way of the Saudi female to develop and advance. In the past women used to stay home and take care of children but that is not the case now. Women are working in many fields and achieving the best results. A female’s education can change her perspective. Now when she gets her certificate she does not want to stay home and she wants to work and explore the world.

Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 29:
Personal communication: telephone.
Family communication: face-to-face, telephone, and SMS.
Communication with friends: telephone, and SMS.
Social communication: face-to-face.
Business communication: phone email.
Communication with employees: phone.

Researcher: Is there anything that you would like to add or ask?

Thank you
Interview number: 30

Theme One: Personal Information

Researcher: What is your current position?
Participant # 30: I am an assistant in the accounting department at the Ministry of Foreign Affairs.

Researcher: How many years of working experience do you have?
Participant # 30: I have five years of experience.

Researcher: What is your monthly income range?
Participant # 30: My monthly income is 4,500 SR.

Researcher: Your age range?
Participant # 30: I am 34 years old.

Researcher: What is your education?
Participant # 30: I have a diploma degree in business management.

Theme Two: Computer Experience

Researcher: Do you have your own computer at work?
Participant # 30: Yes.

Researcher: Do you work on a computer?
Participant # 30: Yes.

Researcher: How much time do you spend on the computer at work?
Participant # 30: I spend around five hours.

Researcher: How do you use the computer at work?
Participant # 30: Yes, I use it to conduct some tasks related to my job.

Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 30: Most of us have computers at work.

Theme Three: Internet Experience

Researcher: Have you ever used the Internet?
Participant # 30: Yes.

Researcher: How often do you use the Internet daily?
Participant # 30: I use it for around six hours daily.
Researcher: Where do you use the Internet mostly?

Participant # 30: Mostly at home and a little at work.

Researcher: For what mostly do you use the Internet?

Participant # 30: I use it to research areas related to accounting, research general information, reading newspapers, and entertainment. In addition, the Internet gives me the freedom to look into different subjects and aspects that interest me.

Researcher: To what extent do the computer and Internet influence the Saudi family?

Participant # 30: I personally think that the family is highly influenced, nowadays, by the existence of the computer and Internet in our homes. For me for example all of us at home use it, my husband, my two children who are seven and eleven years old, and I use it also. My kids like to play their games and I also got some programs for math and English that they use as well. I can see that they are learning in this way and enjoy gaining knowledge. Furthermore, for me personally I am able to know different people online either male or female in the Internet world where this is not possible in our real world because of the constraints that we women have in this society. I am linked to a business site that introduces me and others to each other. This site helps me to communicate with others in the business field of both sexes and exchange ideas and conversations that are useful and informative.

Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 30: I do not think that is completely true. I organize my kids in a way that gives them enough time for each different activity they need to do. We spend our lunch and dinner together and they know the times when they need to study and be consumed by their computers. As for the other relatives we do meet from time to time and I also send text messages to communicate as well.

Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 30: In general I can say that is true. Now all educated and uneducated adult and young are using the computer and Internet. I think that is because different activities in our lives require the use of them.
Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 30: Sometimes I do.

Researcher: Why is that (if using, or not using)?

Participant # 30: I prefer to pay all my bills online directly from my bank account. Also, I like to shop online from different places especially when I find good deals and when there are items that I do not find here in Saudi Arabia.

Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 30: If I face a problem I contact the IT services to be able to fix the problem.

Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 30: I usually ask my other colleagues in the sector to find out new things or ask about different aspects I do not know or understand.

Researcher: How do the e-government system or the network system and technologies affect your work?

Participant # 30: Technology systems help me in doing my job and now I use some software to apply in my work.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 30: The system allows me to exchange ideas and work easily through the system without the need to meet face-to-face. I actually do not like wasting my time and I enjoy working through the system.

Researcher: How is this system different from the previous system?

Participant # 30: I did not use another system.

Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 30: It is easy for me to go through the system and look for the different data that my work requires. I can organize a lot of my work and others could see it and...
use it. But it gets frustrating when the system is down for any reason which makes me stop what I am doing.

**Researcher: Do you think that there is a relationship between the use of e-government application or another electronic system and the amount of face-to-face communication?**

Participant #30: Yes, that is true but I think that is for the work’s interest.

**Researcher: Do you think that language is an obstacle in applying the system?**

Participant #30: No, it is not. All are done in the Arabic language.

**Researcher: Why in your opinion do employees refuse to use the new application (e-government)?**

Participant #30: I think that it is the nature of things that the people like to stay with what they know and prefer not to change. I think the fear of not knowing how to use the system and the lack of technology is a big reason for refusing to employ the new application.

**Researcher: Do you think that e-government or any new technology is accepted easily in the organization?**

Participant #30: If training and different workshops were introduced to employees in the sector then it would be easier to employ any system. There should be preparation in advance to allow the employees to have the knowledge to apply the system.

**Theme Six: Training Experience**

**Researcher: Did you receive any training on computer applications?**

Participant #30: Yes, I did.

**Researcher: Did you receive any training on e-government application?**

Participant #30: No.

**Researcher: Did you take any courses in the English language?**

Participant #30: Yes, I did some at school and other at some English institutions.

**Researcher: If you got any training in any of these courses, did you learn and benefit from them?**

Participant #30: Yes, I did benefit from the courses.

**Theme Seven: Work environment**

**Researcher: How do you deal with difficulties in your job?**

Participant #30: I try to allow myself time to absorb the issue and think about it and then deal with it based on my best knowledge.
Researcher: Has conducting your tasks at work changed (in other words did the means and the devices in conducting your work change)?

Participant # 30: The technology influenced my work in a positive manner and things are done faster.

Researcher: What motivates you in the job, and do you feel motivated in your job?

Participant # 30: Sometimes I feel motivated while sometimes I do not.

Researcher: Do you feel appreciated in your job?

Participant # 30: A little when I get praise from my boss.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant # 30: The loyalty of employees is toward a group or person. That is a fact I think that we have to deal with a lot of the times.

Researcher: How well do you accept higher authority? Do you accept that all aspects of the work should go through the higher authority?

Participant # 30: Yes, I do, in the end the boss is responsible.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 30: Yes, it is fine. I feel relaxed but sometimes I get frustrated when I have a lot of work to do.

Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 30: Time is valuable and important and no one could contradict that. The problem is that people are not used to managing and respecting time. I personally value time and do not like to be late. I think that when you feel that you are responsible then you respect time as well.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 30: I spend all my time with the family at home or go out. Sometimes I like to gather with my friends when I have time.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 30: Family is very important and every individual in our society values their relations with the small family and the big family as well.
Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 30: Cultural beliefs and traditions, narrow understanding of our religion, the society as a whole, and the government. All of these aspects play a significant role in shifting to positive change in our country. If we could manage these elements to promote advancement then many things could change as well.

**Theme Nine: Organizational Culture**

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 30: The general feel is cooperative but sometimes there are some unfriendly actions.

Researcher: Is there any grouping in the organization?

Participant # 30: Yes, there is grouping. People could relate to each other based on the background, interests, or based on tribe.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 30: There are different ways to apply for a job; however, the best way is if you know someone in power who could assist you in that.

Researcher: Are there any aspects that could be tackled to make the organization a better environment?

Participant # 30: Training workshops, emotional and monetary incentives, and having democracy.

**Theme Ten: Female issues**

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 30: There are many things that should be tackled in our society in order to help the Saudi female to advance in the workplace. The government should employ some real and genuine changes that support females in the job. Also, they should bring awareness to the society in all its levels and institutions to show the significance of the female role in the society.
Researcher: How do male employees feel about having female employees working in the same organization?

Participant # 30: I do not think that the male employees are used to the idea of having a female at the job. They will as a result, come up with weird things and problems that could occur in the workplace. Personally, I think that having a separate working area would be best for men and women. Also, women feel more free and relaxed without having men around them.

Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 30: Maybe, it could offer job opportunities but the females should be trained first.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 30: Women for sure play a significant role in our society. However, I feel that men are afraid that we could be more successful and better in our jobs. As a result, they will feel that they have less control over us especially if females do not need financial support from them.

Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 30: The working woman is aware of different aspects around her. Also, she will be more exposed to the world and learn more which will make her stronger. She will able to make her own decisions and depend on her own intuition. However, the only aspect I think is difficult is the balance between home and work and dividing time between them.

Researcher: Could the working female provide additional support for the family besides the working male in the family?

Participant # 30: These days that is completely true. Everyday life is getting more and more costly and the man by himself is not able to provide all household necessities. That is why her support now is essential.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 30: This is the most important aspect. The rules and policies enforced by the government are the best way to promote change. However, in the real word that does not happen. There are some rules that are in support for women but they are not
apparent in the workplace. The only way forward for people in our society to encourage change when it comes from the government is to support it wholeheartedly.

**Researcher:** What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 30: I can say as I mentioned before that the cultural beliefs and traditions are responsible for that. The narrow perspective that some people have also plays a role in not letting us move and advance fast.

**Theme Eleven: Communication**

**Researcher:** What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 30:
Personal communication: Face-to-face and telephone.
Family communication: Face-to-face, telephone, and SMS.
Communication with friends: Face-to-face, telephone, and SMS.
Social communication: Face-to-face.
Business communication: Telephone, emails.
Communication with employees: Face-to-face, telephone, emails.

**Researcher:** Is there anything that you would like to add or ask?

I hope that more support for women in Saudi Arabia is done so we could be on a par with the other Arab countries.

Thank you

**Interview number: 31**

**Theme One: Personal Information**

**Researcher:** What is your current position?

Participant # 31: I’m a self-employed business woman.

**Researcher:** How many years of working experience do you have?

Participant # 31: I have nine years of experience.

**Researcher:** What is your monthly income range?

Participant # 31: I can say around 7,000 SR.
Researcher: Your age range?
Participant # 31: I am thirty nine years old.
Researcher: What is your education?
Participant # 31: I have a Bachelor’s in business management.

Theme Two: Computer Experience
Researcher: Do you have your own computer at work?
Participant # 31: Yes.
Researcher: Do you work on a computer?
Participant # 31: Yes.
Researcher: How much time do you spend on the computer at work?
Participant # 31: I spend around five to six hours.
Researcher: How do you use the computer at work?
Participant # 31: I use it to type different paperwork and organizing my data.
Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 31: We are around ten women working at the office and only six have their own computers and the rest share one computer.

Theme Three: Internet Experience
Researcher: Have you ever used the Internet?
Participant # 31: Yes.
Researcher: How often do you use the Internet daily?
Participant # 31: I use it for around six hours daily.
Researcher: Where do you use the Internet mostly?
Participant # 31: At work and at home.
Researcher: For what mostly do you use the Internet?
Participant # 31: I use it to look for different business opportunities and research.
Researcher: To what extent do the computer and Internet influence the Saudi family?
Participant # 31: I can say that technology influences the family for sure. Now many of the kids have their own computers and use them for studying and playing games. Also, Internet is a new way for people to communicate and learn.
Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?

Participant # 31: It could be a reason for less family communication but the family members and parents should be aware of this and organize their time.

Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?

Participant # 31: Yes, I do think that all are using the Internet now and all benefit from it a lot.

Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 31: Yes, a lot.

Researcher: Why is that (if using, or not using)?

Participant # 31: I conduct a lot of my work through the online system. I can communicate with other people in the business field and perform various arrangements. It is a fast and easy way to do business and communicate with others.

Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 31: I have a person in the office who can deal with such matters.

Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 31: We have different workshops from time to time.

Researcher: How do the e-government system or the network system and technologies affect your work?

Participant # 31: Technologies help my work and give me a heads up for everything new.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 31: Internet helped me when dealing with my colleagues.

Researcher: How is this system different from the previous system?

Participant # 31: No old one was used.
Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 31: The electronic system or Internet as I mentioned helped strongly in doing my work. The e-government system is helping me in some areas in my work. I could access the web-site and conduct some different aspects that I need, however, the services provided are very limited and we still rely a lot on the traditional ways to do our work.

Researcher: Do you think that language is an obstacle in applying the system?

Participant # 31: I think that the English language for example is an important thing for me since I deal with other people who do not speak Arabic.

Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 31: The fear of not understanding could be a very significant reason to refuse the new system. However, I think with the correct training the fear obstacle could be prevented.

Theme Six: Training Experience

Researcher: Did you receive any training on computer applications?

Participant # 31: Yes, I did.

Researcher: Did you receive any training on e-government application?

Participant # 31: No.

Researcher: Did you take any courses in the English language?

Participant # 31: Yes.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant # 31: Yes, I did benefit.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?

Participant # 31: I try to take things step by step and not do it in a hasty manner.

Researcher: What motivates you in the job, and do you feel motivated in your job?

Participant # 31: I like to try new things.
Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant # 31: I think that is something that is evident in many organizations.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 31: Yes, I do.

Theme Eight: Culture

Researcher: Do you think that the value of time is considered the same in the public and private sector?

Participant # 31: Time is a real matter that we have to reconsider. Time is an important aspect to respect especially in the business world and dealing with other cultures. I learned the importance of time especially now I am dealing with different people around the world and most of them respect time.

Researcher: When you have time or at the weekend where do you prefer to spend your time?

Participant # 31: I like to spend my weekends with my family, since I am very busy on other days.

Researcher: In your opinion, is family a significant aspect in Saudi culture?

Participant # 31: Very important and the backbone for all of us.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?

Participant # 31: I can say that the traditions and customs are strongly responsible for not advancing. This matter is strongly evident in my area of work. As a businesswoman, people in the society are still not used to the idea.

Theme Nine: Organizational Culture

Researcher: How would you describe the organizational culture’s atmosphere in the workplace?

Participant # 31: It is cooperative.

Researcher: Is there any grouping in the organization?

Participant # 31: No.
Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?

Participant # 31: I think by applying and knowing people who could help.

Theme Ten: Female issues

Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?

Participant # 31: No, even though King Abdullah has given a lot of support to females, there is still a lot that should be done. First of all, the society as a whole should understand the significance of women’s role in the society. For me as a businesswoman the environment is not encouraging and not appropriate for a female to be able to work and be successful. The cultural obstacles should be smoothed away in the society before she starts to work.

Researcher: How do male employees feel about having female employees working in the same organization?

Participant # 31: I do not work in the public sector but I can assume that not all will accept females and they could face problems with the male employees.

Researcher: Do you believe that the e-government system would offer females more job opportunities?

Participant # 31: The problem is not in having a system to offer females more jobs, the problem is getting society to accept their work and respect what they are doing. I face as a business woman many obstacles because of the lack of awareness and people not respecting what I am doing.

Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?

Participant # 31: Of course, any developed society is based on how well females are participating in the country and how well they are developed. So, yes, I do believe in the role of females in the development and advancement of the country.

Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?

Participant # 31: Women should try to strike a balance between their work and house. However, I think that women having jobs is totally advantageous. Also, the country now should be aware of their role and be open to their participation in the workplace.
Researcher: Could the working female provide additional support for the family besides the working male in the family?

Participant # 31: Yes, she supports the family and sometimes she is the only financial resource that the family has.

Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.

Participant # 31: This is a very important aspect; however, still there are no rules and regulations that aid females in the workplace. If there are some they are only in theory and not enforced or activated. I find it difficult just to go to any public sector. I cannot do my work and finish my paperwork. I am not allowed to enter and they ask for a male relative who could finish my work. As a business woman I have to visit several government sectors and a lot of obstacles exist. I wonder if I do not have a male relative to help me what I will do. All my work will pause and I cannot do anything myself. I can hire a man and pay him for that and I did but the problem is that I have to pay a lot and I do not get what I want and I have found problems with lack of honesty. Now, the government is trying to help in this matter and facilitate different arrangements for females to do their work but still nothing is done in the real world. However, if we businesswomen in Saudi Arabia compared ourselves with the GCC businesswomen we still lag behind. They have various regulations and rules that facilitate their work; however, here in Saudi Arabia we have to depend on ourselves.

In addition, I have another problem, as a businesswoman I have to travel from one place to another and I cannot do that without written consent from my male guardian. I am divorced and my father is deceased. I have a 22 year old son who studies at the eastern province and every time I have to travel he has to be present to give his approval for his mother travelling. This matter should be considered because it is difficult to continue to work in such an environment.

Researcher: What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 31: There should be female offices in public sectors that could provide services for different Saudi women. Not all women have a male who will take care of her needs. Having females in these offices will facilitate many problems that we females face in conducting our work. Also, I hope that the negative beliefs and customs towards female’s work can be turned round to help in the advancement of females in every aspect.
Theme Eleven: Communication

Researcher: What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 31:
Personal communication: Face-to-face and telephone.
Family communication: Face-to-face, telephone, and SMS.
Communication with friends: Face-to-face, telephone, and SMS.
Social communication: Face-to-face and SMS.
Business communication: Telephone, emails.
Communication with employees: Face-to-face, telephone, emails.

Researcher: Is there anything that you would like to add or ask?

Thank you

Interview number: 32

Theme One: Personal Information

Researcher: What is your current position?

Participant # 32: I am an instructor at a female college.

Researcher: How many years of working experience do you have?

Participant # 32: I have five years of experience.

Researcher: What is your monthly income range?

Participant # 32: I earn around 5,000 SR.

Researcher: Your age range?

Participant # 32: I am twenty seven years old.

Researcher: What is your education?

Participant # 32: I have a Bachelor's in science.

Theme Two: Computer Experience

Researcher: Do you have your own computer at work?

Participant # 32: Yes.

Researcher: Do you work on a computer?

Participant # 32: Yes.
Researcher: How much time do you spend on the computer at work?
Participant # 32: I spend around three hours.

Researcher: How do you use the computer at work?
Participant # 32: I use it to prepare for my lectures and organize and print different subjects.

Researcher: Do all employees have their own computers and use them to perform tasks?
Participant # 32: Not all.

Theme Three: Internet Experience

Researcher: Have you ever used the Internet?
Participant # 32: Yes.

Researcher: How often do you use the Internet daily?
Participant # 32: I use it around four hours.

Researcher: Where do you use the Internet mostly?
Participant # 32: At home.

Researcher: For what mostly do you use the Internet?
Participant # 32: I use it mostly for researching and looking for new information about my teaching subject.

Researcher: To what extent do the computer and Internet influence the Saudi family?
Participant # 32: It is very important now and I personally depend on them a lot for my work. I think that now most homes have at least one computer at the house to do different things.

Researcher: In your opinion, do you think that the computer and Internet are responsible for having less family communication in Saudi society?
Participant # 32: Not really if the family knows how to use it.

Researcher: Are the computer and Internet used by all levels of society in Saudi Arabia?
Participant # 32: I can say that most of the levels in the society use them.
Theme Four: E-Commerce Experience

Researcher: Have you ever shopped, searched for information, paid for products or services, paid utility bills using the Internet?

Participant # 32: Yes, a lot.

Researcher: Why is that (if using, or not using)?

Participant # 32: I use it for shopping for different teaching materials online.

Theme Five: E-government System

Researcher: If faced with a problem in the system the employee should go to whom to solve it?

Participant # 32: At the college there are specific employees who are responsible for such matters.

Researcher: How do employees exchange and share information in order to understand the e-government system?

Participant # 32: We conduct several workshops for that reason.

Researcher: How do the e-government system or the network system and technologies affect your work?

Participant # 32: At our college we use the internal network system that helps a lot in our communication together and the exchange of important data.

Researcher: How does the e-government system or electronic system affect your relations with colleagues?

Participant # 32: Internet it helps in delivering work in a fast manner.

Researcher: How is this system different from the previous system?

Participant # 32: This is the only one I used.

Researcher: What are the advantage and disadvantages of using the e-government system or any electronic system?

Participant # 32: The Internet is a great tool if used properly. People could learn and find a lot through the Internet. However, the slow Internet services are a very negative matter that we all get bothered by. I do not know why it is like that even if you paid a premium which is very expensive you still sometimes get bad service.

Researcher: Do you think that language is an obstacle in applying the system?

Participant # 32: Language is an important aspect in today’s world especially English. However, the systems are mostly done in Arabic for all employees to use.
Researcher: Why in your opinion do employees refuse to use the new application (e-government)?

Participant # 32: Mostly, I think that is because they do not have the knowledge to apply in using the system.

Theme Six: Training Experience

Researcher: Did you receive any training on computer applications?

Participant # 32: Yes, I did.

Researcher: Did you receive any training on e-government application?

Participant # 32: No.

Researcher: Did you take any courses in the English language?

Participant # 32: Yes.

Researcher: If you got any training in any of these courses, did you learn and benefit from them?

Participant # 32: Yes, I did benefit.

Theme Seven: Work environment

Researcher: How do you deal with difficulties in your job?

Participant # 32: I like to be patient and think carefully before I do something.

Researcher: What motivates you in the job, and do you feel motivated in your job?

Participant # 32: I get motivated when my students get good grades, which means that I conveyed the information properly.

Researcher: In your opinion, does the loyalty of employees go towards a person, or a group, or to the organization?

Participant # 32: I personally have loyalty only to my work.

Researcher: In your opinion, do you have a comfortable work environment and physical working conditions that are appropriate?

Participant # 32: Yes, I do.
Theme Eight: Culture
Researcher: Do you think that the value of time is considered the same in the public and private sector?
Participant # 32: Time is very important and all should respect time. Time is especially important in my field of work at the college and everything should be scheduled and timed.

Researcher: When you have time or at the weekend where do you prefer to spend your time?
Participant # 32: I spend my time with my family and friends.

Researcher: In your opinion, is family a significant aspect in Saudi culture?
Participant # 32: Family is the most important value that we still carry in all of the new aspects that come along.

Researcher: In a society like Saudi Arabia, who is responsible for not advancing and accepting positive change?
Participant # 32: The society could be responsible sometimes. People in the society would either accept or reject something based on cultural norms and traditions.

Theme Nine: Organizational Culture
Researcher: How would you describe the organizational culture’s atmosphere in the workplace?
Participant # 32: The college atmosphere is friendly in general.

Researcher: Is there any grouping in the organization?
Participant # 32: Maybe, but I do not belong to any.

Researcher: How do employees get a good position in the public sector? (Do you think that the concept ‘who you know’ is important for a good position in the organization)?
Participant # 32: I applied for a job but waited a long time before I could find a job and get accepted.

Theme Ten: Female issues
Researcher: Do you feel that the socio-cultural environment has laid the groundwork for Saudi women to establish and sustain their jobs?
Participant # 32: I think that now people do accept a female in the workplace especially in the education field, however, there are other fields that she still needs support. The society should now be more open to females working especially in this hard economy.
Our life today is getting harder and harder and the society should trust the women because now they are an essential part in our development. They must be more involved in all aspects of life and not restricted to work only in particular fields.

**Researcher: How do male employees feel about having female employees working in the same organization?**

Participant # 32: I do not have that problem since I work in an all-female environment. But I could say it would be a little difficult and not all would encourage this.

**Researcher: Do you believe that the e-government system would offer females more job opportunities?**

Participant # 32: It could provide some jobs but training is significant for understanding the system.

**Researcher: From your own point of view, do you think that women can play a significant role in society and in the development of the country?**

Participant # 32: Of course, as I mentioned before our era now needs the female to be side by side with the male to advance and be able to cope with our tough financial times.

**Researcher: In your opinion what are the advantages and disadvantages of women’s jobs?**

Participant # 32: A woman could provide for the family financially and take care of them when she has a job. Also, she could become confident and learn more than staying at home.

**Researcher: Could the working female provide additional support for the family besides the working male in the family?**

Participant # 32: Yes, for example, my father is an old man and he is not able to work and I am the oldest and I am responsible for all household needs.

**Researcher: How do you think that rules and policies enforced by the government would aid females’ role in the workforce? Please elaborate.**

Participant # 32: The government is trying to support women’s job by passing different rules and regulations. However, many of these rules and regulations are not evident in the workplace. Transport is troubling for most of us in the education field. For example, I cannot afford to pay for a driver, yet I have to put down half of my salary for a driver to take me to work. My father is an old man and he cannot drive a car now. Also, I cannot understand how we are not allowed to mix with men who are not related to us, but it is fine for a female to be with a driver alone in the car. I think if we are allowed to
drive we could save our money. I personally feel handicapped. If there is no driver to take me I cannot go anywhere.

**Researcher:** What are the aspects in the society that are responsible for delaying the Saudi female advancement in various aspects of life?

Participant # 32: There should be more consideration given to the role of females in the society. Females make up more than half of the country’s population and they should be more supported for the advancement of our society. Also, the mahram issue is a big problem that many of us face. I wanted to have a phone line installed in our house and I could not do that without a mahram. I am not married and as I said my father is an old man and it is difficult for him to go from one place to another. I have one brother but he is not living here in Jeddah. So problems like these we want to have solutions for.

**Theme Eleven: Communication**

**Researcher:** What different methods of communications do you use with different people: Face-to-face, telephone, email, SMS, or fax?

Participant # 32:

Personal communication: Face-to-face and telephone.

Family communication: Face-to-face, telephone, and SMS.

Communication with friends: Face-to-face, telephone, and SMS.

Social communication: Face-to-face and SMS.

Business communication: Telephone, emails.

Communication with employees: Face-to-face, telephone, emails.

**Researcher:** Is there anything that you would like to add or ask?

I really hope that the matter of involving women in the different fields in our society is not taken lightly since it is an essential thing in our society now.

Thank you