eGovernment initiatives and key factors causing the delay of their implementation in Saudi Arabia

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Abstract

Despite the current advanced experiences of eGovernment and Information & Communication Technologies (ICT) development, governments in developing countries are still facing some difficulties and barriers that impede the full implementation of eGovernment. Nevertheless, over the last ten years, the eGovernment concept has been accepted in many developing countries, notably in the Arab Gulf countries. Some Gulf countries have overcome the major barriers and achieved encouraging results in the context of eGovernment readiness in 2010, while others are still trying to overcome problems. The concentration of this study is on eGovernment in Saudi Arabia as it is still facing obstacles in implementing eGovernment. The aim of this research is (1) to show the current level of the Saudi eGovernment program, and (2) to examine some eGovernment activities and to interview experienced and expert people to identify factors causing the delay of eGovernment initiatives or even impede its implementation. This research relies on the qualitative research approach and interviews to collect data for an in-depth understanding of this issue.

Keywords

eGovernment, key factors causing the delay in eGovernment implementation, Saudi Arabia, Qualitative study.

INTRODUCTION

The Saudi Arabian government has already commenced implementation of its eGovernment concept named “Yesser”. Yesser, as the government’s controller, is an umbrella for all eGovernment activities, procedures, legislations and other related issues and acts. The name of program is derived from Arabic and means to “simplify” or make it easy; this is an indicator from the government to all citizens and residents in Saudi Arabia that the eGovernment program will facilitate the communications and interactions between government agencies and citizens and even between the government agencies themselves.

The program has been launched and regulated in cooperation with three entities, which are the Ministry of Communication and IT, the Ministry of Finance and Communication, and the IT Commission (Yesser Program Document 2006). Therefore, some eGovernment facilities are already in place while others are still not completed yet and need more time to exist and be developed, since the concept of eGovernment is quite complicated (Abdulrahman 2010). The Saudi Government has predetermined that “By the end of 2010, everyone in the kingdom will be able to enjoy from anywhere and at any time – world class government services offered in a seamless user friendly and secure way by utilizing a variety of electronic means” (Al Soma 2008; Al-Shehry et al. 2006; Yesser Program Website 2010). This statement was widely spread throughout different channels such as Saudi media, electronic websites (Saudi eGovernment Program Website 2010), academic researches (Al-Shehry 2008; Abu Nadi I., Sanzogni S., Sandhu K., and Woods 2008), and government documents (Yesser Program Document 2006). Dr. Mohammed Ibrahim Al Suwaiyel, governor of the Communication and Information Technology Committee in Saudi Arabia, in his interview with Alarabiya TV, stated that the network link which is currently associated with electronic transitions involving 14 government departments and more will be connected (Alarabiya 2007). He added that the 150 services which were categorized into three different priorities should be completed by 2010, and indeed “we are not going to wait till that time to complete them” (Alarabiya 2007, p.1). However, the chairman of the Committee on Transport, Communications and Information Technology, Engineer Abdul Aziz Al-Tuwaijri, claimed that the most important challenges facing e-Government are limited to the administrative and procedural challenges, especially as the organisational structures of some governmental agencies are not helping in the successful and appropriate use of the technology (Al-Mutairi 2009).

According to Al-Mutairi (2009), the report on the eGovernment services program has indicated the failure of 31 governmental entities in responding to the eGovernment project, which has received the attention of many observers requesting to speed up the eGovernment implementation. The table below illustrates some examples of eGovernment services and their readiness status.
Table 1: The status of some eGovernment services

<table>
<thead>
<tr>
<th>No.</th>
<th>Service Name</th>
<th>Type of service</th>
<th>Who is responsible</th>
<th>Estimated time to be completed</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Temporary Work Visa</td>
<td>O2C</td>
<td>Ministry of Foreign affairs</td>
<td>Completed 2010 (Yesser Program Strategy Document 2006)</td>
<td>It has been stopped for unknown reasons (Saudi.gov portal website 2010)</td>
</tr>
<tr>
<td>2</td>
<td>Issuance of national Identity card</td>
<td>O2C</td>
<td>Ministerial Agency of Civil Affairs</td>
<td>Should be completed before 2010 (Yesser Program Strategy Document 2006)</td>
<td>The service has not electronically launched yet but there is only forms and services requirements (Saudi.gov portal website 2010)</td>
</tr>
</tbody>
</table>

More specifically, this ongoing research is looking to answer the following questions:

- What are the inhibitor factors that impede the full implementation of eGovernment projects in the KSA?
- What are the motivational factors that can facilitate and speed up the implementation of eGovernment in the KSA?

**AIMS AND SIGNIFICANCE OF THE STUDY**

Despite the emphasis on the concept of eGovernment in the literature, there is still a lack of research, especially on the factors that may impede its application and the reasons for this, specifically in Saudi Arabia. According to AL-Shehry et al. (2006), there are many significant motivations for changing the system towards eGovernment adoption in Saudi Arabia. These include economic reasons, geographical reasons, social and cultural aspects, reforming the public sector, and meeting the citizens’ expectations and needs. These are some factors that influence the acceptance of eGovernment in Saudi Arabia; however, “there are still many factors that might impede this transformation to eGovernment and therefore must be considered in eGovernment adoption” AL-Shehry et al. (2006, p. 17). As of 2010 - the timeline for delivering electronic services by the Saudi government - there is inadequate implementation of eGovernment in Saudi Arabia. This has been identified in comparison with Bahrain, which is in the same region and is the closer neighbouring country to Saudi Arabia, and by reviewing the literature according to the United Nations reports (United Nations eGovernment Readiness website 2010; United Nations eGovernment Readiness survey 2008; United Nations Report for Saudi Arabia 2008). Thus, the factors that are impeding the full implementation of Saudi eGovernment initiatives need to be discovered.

Therefore, the aim of this study is to explore the factors that influence the running of eGovernment and the main reasons behind the delay of its implementation in Saudi Arabia. The findings of this study should:

- help the Saudi government to better understand the current obstacles impeding the progress of eGovernment.
- help the Saudi government to find possible solutions for the delay.
- help the designers and decisions makers of the eGovernment services in Saudi Arabia to be aware of the factors that influence the implementation of eGovernment in Saudi Arabia as some of them are special and unique.
- contribute to the literature in the same field, especially in Saudi Arabia as the focus country of this research.
THE SCOPE OF THE RESEARCH

In this research, the perspectives and needs of Saudi citizens for the eGovernment concept will be examined as well as the perspectives and needs of the Saudi government in order to highlight their expectations. Moreover, the current available eGovernment services and what has been achieved in respect to this regard will also be investigated. In addition to this, feedback from the Saudi government and citizens will be obtained in respect to eGovernment plans and their satisfaction with the current situation to demonstrate the reality. Therefore, with the support of the literature, this research will possibly determine the real obstacles facing the implementation of eGovernment in Saudi Arabia and establish the gap and any delays between the aspirations and such implementation.

EGOVERNMENT DEFINITION AND MODEL

There is in fact no common definition for electronic government among scholars; however, some researchers simply defined eGovernment as online service transactions for citizens (Lowry et al. 2003). Moreover, there are various definitions for eGovernment according to its purposes such as political, technological or institutional services. One among many is that it is “the automation of government-to-government and government-to-citizen interactions through using collaboration software and other tools that are expected to help make information-processing and decision-making with government agencies, such as voting or renewing a driver’s license online, faster and more efficient” Verton (2000, p. 1). According to the United Nations (2003), eGovernment is about “utilizing the Internet and the World-Wide Web for delivering government information and services to citizens” (cited in Al-Shehry et al. 2006). Moreover, the World Bank Group (2004) defined eGovernment as “the use of ICTs to improve the efficiency, effectiveness, transparency and accountability of government” (cited in Al-Shehry et al. 2006). Therefore, eGovernment involves two aspects: 1) ICTs as the instruments for transforming the data, and 2) the government as the environment for its implementation (Al-Shehry et al. 2006). Consequently, different terms can be used to describe the issues of electronic government such as ‘eGovernance’ and ‘eGovernment’ (Al-Shehry et al. 2006).

Currently, many governments have applied and implemented eGovernment for their citizens, while others are still seeking for an appropriate eGovernment concept model to be easily implemented. The eGovernment model basically draws on the needs and challenges of the eGovernment concept for both the government and its customers to establish effortless ways to deliver its online services to all levels of society.

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Figure 1: The scope of the study

Figure 2: eGovernment Model (United Nation eGovernment Survey 2008, p. 14)
According to AL-Shehry et al. (2006), the eGovernment model includes several stages that any government needs to go through in order to evaluate its effectiveness, which is called the eGovernment life-cycle. All models of eGovernment mentioned in the literature are different from each other, as each model has its own stages and levels which are suited to each specific country. Although no specific system model exists that is applicable and suitable to all governments (Alabood 2003), the majority of the models have three essential stages, which are (i) publishing, (ii) transaction and (iii) integration, as well as other stages which differentiate the models from each other. The table below shows these types of eGovernment models from different perspectives.

Table 2: Types of eGovernment models in the literature

<table>
<thead>
<tr>
<th>Type and author</th>
<th>Perspective</th>
<th>Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Howard (2001)</td>
<td>Capabilities of the web technology</td>
<td>(1) Publish (2) Interact and (3) Transaction</td>
</tr>
<tr>
<td>Lyne and Lee (2001)</td>
<td>The degree of organisational and technological complexity and the degree of integration in terms of data and service delivery</td>
<td>(1) Cataloging (2) Transactions (3) Vertical integration (4) Horizontal integration</td>
</tr>
<tr>
<td>Moon (2002)</td>
<td>Technological characteristics</td>
<td>(1) Simple information dissemination (one-way communication) (2) Request and response (Two-way communication) (3) Service and financial transaction (4) Integration (horizontal and vertical integration) (5) Political participation</td>
</tr>
<tr>
<td>Al-Dowary and King (2004)</td>
<td>The degree of organisational and technological complexity.</td>
<td>(1) Initial stage (2) Developing stage (3) Advanced stage (4) Optimal stage</td>
</tr>
<tr>
<td>Reddick (2004)</td>
<td>Technological characteristics</td>
<td>(1) Cataloging of information online (2) Transactions</td>
</tr>
<tr>
<td>UN (2004)</td>
<td>Technological characteristics</td>
<td>(1) Emerging (2) Enhanced (3) Interactive (4) Transactional (5) Seamless or fully integrated</td>
</tr>
</tbody>
</table>

Source: Adapted from AL-Shehry, et al. (2006, p. 4)

One of these well known eGovernment models included in the table above is the United Nations eGovernment stage model which basically has five stages, namely (I) Emerging presence, (II) Enhanced presence, (III) Interactive presence, (IV) Transactional presence, and (V) Seamless or connected (United Nations eGovernment Readiness Survey 2008, p. 15; Al-Khoury and Bal 2007). This model can be used to measure and evaluate the web portals in order to show which stage each government website of a specific country has reached. The evaluation of the online presence for government websites is one of the United Nations eGovernment readiness indexes (web measure index) which can assist alongside other indexes to determine the level of eGovernment readiness for the whole country. This model will be adopted in another study which has emerged from the same PhD work for the researcher; the model will be used to comprehensively measure and evaluate Saudi government websites in order to show the real situation regarding web readiness for Saudi government websites as well as Bahraini government websites as the country of comparison with Saudi Arabia.

Figure 3: Stages of eGovernment Model (Adopted from Sahraoui 2006)

To sum up, this section provided introductory information on the eGovernment definitions and the various models that can be employed within Information System (IS) research. This section also shows that nothing is perfect and there is no common eGovernment model which is applicable to all countries. Moreover, some countries can perfectly use their own model that meets their needs and expectations and leads to success of eGovernment implementation, as indicated by Heeks (2003) and Al-Shehry et al. (2006).
JUSTIFICATION OF THE RESEARCH PROBLEM

The internet was introduced in 1994 in Saudi Arabia and was firstly restricted to academic institutions and medical and research centres. Citizens at that time only had access to the internet through making international dial-up calls and using foreign servers which were located in such countries as Bahrain, the UAE, the United States and Europe and were very expensive (Al-Turki and Tang 1998). By the end of 1998 and early 1999, the internet became available to everyone in Saudi Arabia, and the King Abdulaziz City for Science and Technology (KACST) in Riyadh was in charge of providing internet services for the entire country. Initially, 30,000 Saudis were able to access the internet. However, by September 2009, this number has gradually increased to 7,700,000 users of the total population (28,686,633) (Internet World Stats 2009).

The situation in other Gulf countries regarding internet usage is different to Saudi Arabia. For example, there were 436,000 internet users in Qatar as of June 2009, which is about 52.3% of the total population (Internet World Stats 2009). In Kuwait, there were 1,000,000 users as of September 2008, which is around 37.1% of the total population, and in Oman there were 465,000 users as of September 2009, which is around 13.6% of the total population. In Bahrain, the number of internet users is almost the same as that in Qatar at 402,900 as of September 2009, which is about 55.3% of the total population. However, the number of internet users in the UAE is the biggest compared with Qatar and Bahrain with 2,922,000 users as of September 2009, which is 60.9% of the total population. Moreover, this percentage of internet users in the UAE is around three times higher than the percentage of internet users in Saudi Arabia as the percentage for the entire country, regardless of the population numbers, which is considered to be reason for the delay in eGovernment implementation.

The eGovernment program in Saudi Arabia was established in 2005 so as to be accomplished in 2010 according to the program statement that “By the end of 2010, everyone in the kingdom will be able to enjoy from anywhere and at anytime – world class government services offered in a seamless user friendly and secure way by utilizing a variety of electronic means”.

As Figure 5 shows, the timeline for accomplishing the eGovernment program in Saudi Arabia does not seem to be long enough to achieve the final goal in the estimated time. According to the United Nation e-Government Readiness Report in 2008 regarding eGovernment readiness, Saudi Arabia has been ranked 70 out of 184 countries worldwide. In addition, Saudi Arabia was in fifth place among the Gulf countries in 2008, which is far from the government’s expectations. However, in 2010 Saudi Arabia was ranked 58 out of 184 worldwide, placing it in fourth place among the Gulf countries. However, this move from fifth to fourth is of no great significance compared to the other Gulf countries such as Bahrain which jumped from 42 in 2008 to being in the
top 13 countries worldwide in 2010 (United Nations eGovernment Readiness website 2010). This is another indicator that Saudi Arabia has not adequately achieved encouraging results in this regard.

Basically, the United Nations E-government Readiness Index is “a composite index comprising the Web measure index, the Telecommunication Infrastructure index, and the Human Capital Index” (United Nations eGovernment Readiness survey 2008, p. 5). Mainly, these four indices are the main indicators which have been set by United Nations in order to examine the level of ICT and eGovernment readiness in each country that is involved with the United Nations. Consequently, the same measurements, policies and guidelines are used with all countries assessed. Thus, the E-Government Readiness Index can be defined as “a composite measurement of the capacity and willingness of countries to use e-government for ICT-led development” (United Nations eGovernment survey 2008, p. 5).

As mentioned, the United Nations indices are determined to examine the eGovernment readiness in respect to the level of ICT development of the country as its capacity and willingness to use eGovernment compared to the world (Potnis and Pardo 2009). Each index has a high and low value or score which is from a scale of 0.0 to 1.0, with 1 being the highest score which means that the country is completely ready regarding the index examined. In contrast, 0 is the lowest score and indicates that the country is not ready (Potnis and Pardo 2009). The specific indices used are as follows:

i. E-Readiness Index

The e-government survey is “a composite index comprising the Web measure index, the Telecommunication Infrastructure index and the Human Capital Index” (United Nations eGovernment Readiness Survey 2008, p. 5).

Web Measure Index

The Web Measure Index 2008 is based on a five-stage model. The web measure survey assessments “were based on a questionnaire, which allocated a binary value to the indicator based on the presence/absence of specific electronic facilities/services available” (United Nations eGovernment Survey 2008, p. 15).

Infrastructure Index

The Infrastructure Index 2008 is based on five basic infrastructure indicators that can determine and define the country’s ICT capacity which are PCs/100 persons; internet users/100 persons; telephone lines/100 persons; mobile phones/100 persons; and broadband/100 persons (United Nations Report in Saudi Arabia 2008, p. 6).

Human Capital Index

The Human Capital Index reports on the adult literacy rate and the combined primary, secondary and tertiary gross enrolment ratio, giving emphasis to the adult literacy rate (United Nations eGovernment Survey 2008, p. 17).

ii. E-Participation Index

The e-Participation Index aims to improve the transparency between the government and its citizens and lets the citizens participate in public decisions as follows:

1. Increasing e-information to citizens for decision making.
2. Enhancing e-consultation for deliberative and participatory processes.

According to the United Nations Readiness website (2010), Saudi Arabia was ranked as number 70 in 2008 with a readiness index score of 0.4935 out of 1, and was ranked as number 58 worldwide in 2010 with an eGovernment readiness index score of 0.5142 out of 1. It is currently in fourth place among the Gulf countries in 2010, compared with other Gulf neighbouring countries such as Bahrain which was ranked 42 in 2008 with a readiness index score of 0.5723 out of 1 and which has notably jumped to number 13 worldwide in 2010 with an eGovernment readiness index score of 0.7363 out of 1.
Obviously, Bahrain has achieved excellent results compared to Saudi Arabia which achieved very light results. According to Al-Shehry et al. (2008, p. 17), one of the IT managers in a Saudi ministry commented that “the citizens look to the neighboring Gulf States and see how they have made advances in terms of electronic services - Take Dubai as an example... we are the biggest country in the export of oil it is a shame to be late in this issue”.

The above figure shows the comparison between Saudi Arabia and other Gulf Countries in respect to eGovernment readiness ranking. In 2010, Saudi Arabia was fifth place among the other Gulf countries and ranked 58 worldwide.

According to Al-Mutairi (2009), the report on the eGovernment services program has indicated the failure of 31 governmental entities in responding to the eGovernment project, which has received the attention of many observers who ask to speed up the eGovernment implementation. The chairman of the Committee on Transport, Communications and Information Technology, Engineer Abdul Aziz Al-Tuwaijri, claimed that the major challenges facing e-Government are limited to the administrative and procedural challenges, especially the organizational structures of some governmental agencies which are not helping in the success of the use of the technology in appropriate ways (Al-Mutairi 2009).

Moreover, the United Nations examined five different indices which are (i) the eGovernment index, (ii) online services index, (iii) infrastructure, (iv) human capital index, and (v) the recently added e-participation index. By 2010, Saudi Arabia attained moderate scores for each index compared to the world average and they are slightly above the world average in all indices examined, except for the e-participation index, the score for which was under the world average at 0.100 out of 1, while the world average was 0.205 out of 1. This means that Saudi Arabia has achieved a very low result with respect to e-participation. According to the United Nations E-Government Readiness Index (2008, p. 17), “E-Participation has the potential to establish more transparency in government by allowing citizens to use new channels of influence which reduce barriers to public participation in policymaking”. Thus, the goal of e-participation is to “improve the citizen’s access to information and public services; and participation in public decision-making” (United Nations Report for Saudi Arabia 2008, p. 21). In other words, “the E-Participation Index assesses the quality and usefulness of information and services provided by the country” (United Nations E-Government Readiness Website 2010).
The three parts of e-participation are e-information, e-consultation and e-decision making, which need to be examined to determine the level of e-participation. Moreover, according to Wangpipatwong et al. (2005, p. 2), “the information quality for any system is concerned with the measure of the output of the system”. As a result, it can be predicted that, as the e-participation index of Saudi Arabia is ranked as the lowest amongst the other indices by the United Nations, there is a real problem in the output which delivers government services to citizens, shares information with citizens and allows public participation in decision-making. Consequently, there is a delay in adequately applying the concept of eGovernment in Saudi Arabia.

Figure 8: E-Government Readiness index scores for Saudi Arabia compared with the world average scores (UN E-Government Readiness Website 2010)

The above figure shows the United Nations eGovernment indices examined for Saudi Arabia and compared to the world average, including the E-Participation Index which is lower than the world average and considered to be very low.

Thus, this research will focus in more detail on the reasons for the delay in applying eGovernment across government organizations in Saudi Arabia as well as finding the possible solutions for using the technologies and applications that may speed up the process of eGovernment implementation. Essentially, this research will concentrate on the government-to-citizens (G2C) relationship in order to examine some of its activities to outline its process and the citizens’ satisfaction with these activities. The context of this research also includes the government agencies which are part of the G2G relations.

**RESEARCH METHODOLOGY**

The aim of this study is to explore the key factors that influence the progress of eGovernment in Saudi Arabia and mainly to investigate the reasons that have caused the delay of its eGovernment implementation. This will primarily be done through reviewing the relevant published literature and supporting the findings by using the interview method as the key approach to obtain feedback from the Saudi government and its representatives.

The data collection strategy adopted for this research relies on (1) mainly reviewing the relevant academic literature available, the Saudi government media, and publications of the World Bank Group and the United Nations; and (2) using the interview method as a valuable source for collecting data that may not have been raised in the literature to support the findings of literature and to gain feedback from inside the country. Therefore, interviews will be conducted with a number of (i) Yesser program team managers, (ii) government officers (iii) and IT department managers in government agencies, and (iv) academic staff who are involved in the same field. In order to undertake the research project, an ethical clearance certificate was obtained from the Office for Research, Human Research Ethics in Griffith University to formally start collecting the required data.
Theoretical Basis

In the field of IS, there are a set of IS models and theories that have widely gained acceptance, such as the Theory of Reasoned Action (TRA), the Technology Acceptance Model (TAM), the Unified Theory of Acceptance and Use of Technology (UTAUT), Delone and Mclean’s IS successful model and the Diffusion of Innovation Theory (DOT). Recently, many studies have applied these models and theories in order to investigate the factors that influence the adoption and use of new technology or innovation. In particular, they have been widely used in eGovernment research as this is a new phenomenon (Vaidya 2007; Carter & Belanger 2004; Al-adawi, Yousafzai and Pallister 2005; Alawadhi and Morris 2009; AL-Busaidy and Weerakkody 2008; ALFawaz, May and Mohanak 2008; Alharbi 2006; AL-Shehry 2008; Kanaan 2009 et al.).

However, other scholars in the field of IS also prefer to apply grounded theory in order to generate and build on new theories that can explain the reality of phenomena, which is still assumed to be new area of study and needs to be further investigated. The eGovernment concept is one of these new areas of study that needs to be explored in depth (AL-Shehry et al. 2008; Kanaan 2009). Moreover, grounded theory is used within the qualitative research method with no prior preconceptions about the research issues in order to allow the framework to be built up from the data (Cunningham 1997, cited in Nielsen 2002).

Research Philosophy

In the field of IS, there are three main paradigms for conducting empirical studies, which are:

1. The positivist school of thought, which is defined as the approach of the natural sciences (Neuman 2006, p. 80). In this sort of study, the researcher needs to “achieve objectivity and to discover realities that can be replicated by other researchers” (Myers 1997; Walsham 1995, cited in AL-Shehry et al. 2008, p. 79). The assumption of positivist thought is that objective truth exists in the world which can be discovered by using scientific methods that can measure the relationships between variables, whether independent and dependent.

2. The interpretivist school of thought, which is “one of the three major approaches to social research action, socially constructed meaning, and value relativism” (Neuman 2006, p. 87). It is a constructive approach for reality and social phenomena that need to be studied subjectively in order to get more detail that sometimes cannot be investigated objectively.

3. The critical school of thought believes that “reality is historically constituted and that it is defined through a discourse” (Orlikowski and Baroudi 1991, cited in AL-Shehry 2008, p. 80).

<table>
<thead>
<tr>
<th>School of Philosophy</th>
<th>Characteristics</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positivist</td>
<td>Assumes reality is objectively given and can be described by measurable properties.</td>
<td>Walsham (1995); Yin (2003a); Reneney (1998); Denzin and Lincoln (1998); Hussey and Hussey (1997); Lee and Bickelville (2003); Myers (1997); Orlikowski and Baroudi (1991); Oates (2006).</td>
</tr>
<tr>
<td></td>
<td>Independent of researchers and their instruments.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tends to produce quantitative data.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Constructure hypothesis testing.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seeks to test theory.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Knowledge consists of facts that are independent.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data are highly specific and precise.</td>
<td></td>
</tr>
<tr>
<td>Interpretivist</td>
<td>Seeks to describe, understand and translate phenomena through meanings that people assign to them.</td>
<td>Yin (2003a); Reneney (1998); Denzin and Lincoln (1998); Hussey and Hussey (1997); Lee and Bickelville (2003); Myers (1997).</td>
</tr>
<tr>
<td></td>
<td>Aims to understand the context of IS and how it is influenced by context.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aims to understand the deeper structure of phenomena within cultural and contextual situations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data rich and subjective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tends to produce qualitative data.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Often concerned with generating theories.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The epistemological position is that the researcher and the investigated object are interactively linked.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Knowledge of the social world is value loaded.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>It exposes and critiques unjust and inequitable conditions in society from which people require liberation; it does not only seek to understand social phenomena.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from AL-Shehry (2008, p. 81)
The qualitative approach

According to Neuman (2006, p. 181), the qualitative approach is often concerned with data that contain words rather than numbers to describe the phenomena, which is one of the reasons for adopting this approach in this research. Therefore, it is an inductive rather than a deductive approach which depends on understanding and describing perceptions of people, which is another reason for adopting this approach in this study as there is a lack of clarity in the KSA e-Government area and needs to be understood from the people who are assigned to its implementation, that is, how they can make sense of their assumptions regarding aspects of their lives such as experiences and beliefs (Kanaan 2009). Therefore, the qualitative approach is most likely to be applicable for this research as its design, tools, methods and development rely on the qualitative style.

In the context of the IS field, qualitative research “attempts to understand the complexities of the unstructured nature of information systems implementations. This lack of structure is primarily due to the complex interactions between social and technological factors within business” (von Hellens, Beekhuyzen, and Kerr 2006, p. 17). Therefore, eGovernment phenomena are considered to be complex and complicated and need further investigation (AL–Shehry 2008; Kanaan 2009).

The interview method

The interview is a short-term, “secondary social interaction between two strangers with explicit purpose of one person’s obtaining specific information from the other” (Neuman 2006, p. 305). Therefore, the interview is a kind of a conversation with a goal where the researcher “asks a lot of questions and the interview subject – the respondent – answers” (Lune, Pumar and Koppel 2010, p. 240). The two types of interview are the unstructured interview, which is an ordinary conversation, and the survey interview, called a semi-structured interview (Neuman 2006).

The interview is one of the qualitative methods that are valuable for collecting complicated and complex data, and the semi-structured or unstructured interview would be best to use in this research, because it is neither a free discussion nor a very structured questionnaire, which suits the situation under investigation. Moreover, in this type of interview, “the researcher begins with a set of topics or issues that must be covered, but allows the interview subjects to lead the conversation in whatever direction makes the most sense to them” (Lune, Pumar and Koppel 2010, p. 241). Consequently, it is quite good to use, especially in the context of Saudi Arabia. In the qualitative research sample, the researcher needs to “find cases that will enhance what the researchers learn about the processes of social life in a specific context” (Neuman 2006, p. 219). Thus, the purpose for the sampling is to collect particular events, cases, and actions that can clarify situations and deepen understanding. With regard to the interview analysis, Nvivo Software (a qualitative tool) will be used in this research as “it has been employed across an IS study as a comprehensive tool in support of the overall research effort” (Bandara 2006).

Grounded theory as a methodological approach for this study

Grounded theory was developed by Barney G. Glaser and Anselm L. Strauss (Järvinen 2004, p. 70) and is concerned with “the discovery of theory from the data systematically obtained and analysed in social research”, according to Glaser and Strauss (1967, p. 1). Järvinen (2004, p. 70) informed that ground theory is “discovered, developed and previously verified through systematic data collection, analysis of data pertaining to the phenomenon”. To see the applicability of the theory to a phenomenon, Strauss and Corbin (1990, p. 23) added that well-constructed grounded theory has to meet the following four criteria: (i) fit, (ii) understanding, (iii) generality and (iv) control (cited in Järvinen 2004, p. 70), which are explained below.

(i) Fit: if “the theory is faithful to the everyday reality of the substantive area and induced from diverse data” (Järvinen 2004, p. 70).

(ii) Understanding: if the theory makes sense and is comprehensible for all, including the researcher and those who practise it in that area.

(iii) Generality: “if theory is abstract enough and includes sufficient variation though the data upon which it is based are comprehensive and the interpretation conceptual and broad in order to make it applicable to a variety of contexts related to that phenomenon” (Järvinen 2004, p. 70).

(iv) Control: “if the theory provides control to action toward the phenomenon” (Järvinen 2004, p. 70). According to Järvinen (2004, p. 71), the research question in grounded theory is the statement that identifies the
phenomenon which needs to be studied. Therefore, this research aims to (1) explore the main reasons that caused the delay in the implementation of eGovernment, and (2) investigate eGovernment activities in order to identify factors that influence the acceptance of eGovernment and impede its implementation in the context of Saudi eGovernment. Grounded theory has been chosen for this study due to the lack of clarity in the KSA eGovernment area which needs to be discovered as an existing reality and from the people who are assigned to its implementation in order to generate a theory that is applicable to the environment of research within a qualitative umbrella.

The analysis of data using grounded theory consists of three sorts of coding, which are (i) open coding, (ii) axial coding, and (iii) selective coding (Järvinen 2004, pp. 71-72), which are explained below.

(i) Open coding: is a process of analysing the data and it is the first step in that process. It basically contains the procedure of asking questions and examining, comparing and categorizing data (Järvinen 2004, p. 71). Furthermore, it involves several ways to approach the process that includes reading small segments of the participants’ interviews, or a sentence, or a short paragraph or even an entire document in order to capture meanings that are similar to other responses under the same coding which can be reflected in the same meaning. Theoretical sampling for this sort of coding is related to open sampling, which means that “openness rather than specificity guides the sampling choices” (Järvinen 2004, p. 72).

(ii) Axial coding: is the second step in the coding process that comes shortly after the start of open coding. Moreover, in the whole coding process, “we are constantly moving between inductive and deductive thinking” as inductive thinking is based on a series of recurring events, while deductive thinking is based on a series of true facts (Järvinen 2004, p. 72). This involves the procedure of putting the data back together and making connections between categories for the purpose of generating meaning before starting to develop the theory. Regarding theoretical sampling, this sort of coding is rational and variational sampling which “aims to maximize the finding of differences” (Järvinen 2004, p. 72).

(iii) Selective coding: is the stage of determining the core variable through integrating and refining the theory. The core variable is a fundamental core that can bring all other variables and categories together. In other words, it is the stage of coming up with the whole story that can represent the study under investigation (Järvinen 2004, p. 72). This sort of coding is discriminate sampling which “aims to maximize opportunities for verifying the story and relationships between categories” (Järvinen 2004, p. 72).

**Justification of the research methodology**

This study has adopted the interpretivist school of thought and grounded theory under the qualitative approach for the following reasons:

- The eGovernment concept in Saudi Arabia is considered to be a complex phenomenon that is influenced by several concerns such as organizational, cultural and privacy issues. Thus, the interpretivist approach is most appropriate for dealing with the many issues that may greatly affect the phenomena of this study.

- The researcher will be interviewing several government officers and IT managers, including Yesser eGovernment officers who work together to complete the initiatives of eGovernment in Saudi Arabia. This makes the study difficult and complex, as the participants are managed by different people; therefore, the interpretivist approach is most useful and will be adopted.

- It is essential to get an in-depth understanding of the phenomena of study from the people who work in eGovernment in Saudi Arabia to clarify the reasons behind the delay of its implementation. Therefore, it is very useful to adopt a qualitative interview, because it allows understanding the phenomena through the meaning that people assign to them.

- Using the interview method, especially the semi-structured type to obtain different perspectives from different people, may assist the researcher in gaining rich data that can reflect reasonable meanings of the reality of the phenomena for the participants. This will enable theory to be generalised and make it more applicable to the context of study. Furthermore, as the research problem has no prior stance, especially in Saudi Arabia and other Gulf Countries in the same region, grounded theory is the most applicable methodology to use in this research in order to build a theory that can explains the reasons that caused the delay in eGovernment projects in Saudi Arabia.
INITIAL FINDINGS AND CONCLUSION

Literature in the field of factors influencing eGovernment implementation is still lacking further study, which motivates researchers to explore this more in order to bring about the expected benefits for implementing eGovernment appropriately through pointing out the main barriers to eGovernment. The literature in the field of eGovernment adoption and acceptance has predicted that the following factors are some of the obstacles facing eGovernment implementation in Saudi Arabia: (i) insufficient top management support, (ii) insufficient training, (iii) the need for an adequate and appropriate assessment readiness tool to assess the level of Information and Communication Technologies (ICT) in the country, (iv) the lack of awareness of the importance of ICT in both the public and private sectors, (v) the lack of web accessibility, and (vi) the lack of integration of various government agencies (Hammer and Al-Qahtani 2009; Al-Solbi and Al-Harbi 2008; Al-Solbi and Mayhew 2006; Al-Shehry et al. 2006; Abanumy, Al-Badi, and Mayhew 2005). However, the research at this stage cannot assume that these are some of the reasons for the delay until the researcher undertakes the interviews with the targeted sample to examine the research problem and then determine the reasons behind the delay. This important step will be the next stage of this research and is the future work of the study.

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