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# Understanding the factors influencing the development of eGovernment in Saudi Arabia: the Use of Grounded Theory techniques

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## Abstract

This paper contributes to the knowledge in the field of Information Systems (IS) and especially in Saudi Arabia as a developing country that is still facing difficulties in the development of eGovernment. This paper aims to develop a deep understanding for the factors influencing the development of eGovernment and contribute to cause the delay of its initiatives in Saudi Arabia. Therefore, this study focuses on the delay to the implementation of the Yesser eGovernment program in Saudi Arabia (scheduled for completion in 2010). This study focuses on the perceptions and experiences of those involved in the development and implementation. Therefore, this research takes a different approach by focusing on stakeholders who are involved in the development of eGovernment program and other informed participants. Qualitative methodology has been adopted in this research. This paper is organized as follows. We start with a brief introduction, and then we illustrate the research methodology including methods used to collect data and research approach. We describe the used of research approach (Grounded Theory). We discuss the factors influencing the development of eGovernment in Saudi Arabia, and finally we draw some conclusions.

**Keywords:** eGovernment development, Grounded Theory Techniques, Saudi Arabia.

## 1. INTRODUCTION

The focus of this study is eGovernment in Saudi Arabia, as one of the countries still facing difficulties in its implementation. In actual fact, the Saudi Arabian government commenced the implementation of its eGovernment concept,

dubbed "Yesser", in 2005 (Yesser, 2010). Yesser is an umbrella for all eGovernment activities, procedures, legislation and other related issues and it acts as the government's controller. The name of the program is derived from Arabic and means to "simplify" or to make easy; this is an indicator from the government to all targeted

users –such as citizens, businesses and government agencies in Saudi Arabia – that the eGovernment program will facilitate communication and interaction between government agencies and citizens and even among the government agencies themselves. The program has been launched and regulated in cooperation with three entities: the Ministry of Communication and IT, the Ministry of Finance and Communication, and the IT Commission (Yesser, 2010). Therefore, some eGovernment facilities are already in place. However, the duration of the eGovernment program implementation, which has been set by the Saudi government, does not seem to be long enough to achieve the expected outcomes, according to what has been done so far and published in the literature. In particular, the Saudi government's clear statement regarding eGovernment, mentioned by several researchers such as (Al-Soma, 2008; Al-Shehry et al., 2006) as well as in several websites, such as the Yesser eGovernment website (the official Saudi eGovernment website launched for the purpose of eGovernment implementation), asserts 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". It is now 2013; the Yesser eGovernment program has changed its vision from offering electronic services to supporting infrastructure projects, especially within government organisations, due to the noticed weakness in infrastructure within the public sector (Yesser, 2010). The eGovernment field and especially the factors influencing the implementation and adoption of eGovernment in Saudi Arabia call for more research (Al-Shehry, 2008; Altameem, 2007; Al-Fakhri, 2008). Moreover, after reviewing the available literature regarding the empirical studies conducted to identify the factors influencing the implementation of eGovernment and contributing to the delay of its initiatives at government organisations in Saudi Arabia, the present researchers have found that no comprehensive study has been conducted. Hence, this study will focus on studying and understanding such factors and explaining the approach used.

## 2. RESEARCH METHODOLOGY

This section provides information about the methodological stance that will be adopted. This

study adopts the unstructured interview method within a qualitative approach. Moreover, the techniques of grounded theory based on the approach of Strauss and Corbin (1990) were employed to analyze the collected data.

### Interview method

Qualitative interviewing is often associated with qualitative research and the one used in this study. It is not just a normal interview method that stresses interviewing skills as it has generic characteristics that are considered as crucial to the method (King & Horrocks, 2009), which include maintaining flexibility in style of interview, focusing on people's actual experiences more than on general beliefs, and stressing the relationship between the interviewer and interviewee.

### Interview sampling

Twenty-one in-depth interviews were conducted with three IT experts, four Yesser eGovernment Program members, eleven IT managers in government departments, and three IS academics who had experience in eGovernment projects. The current study adopts purposive, or purposeful, sampling as it is considered the best for this study within a qualitative approach. Sampling in grounded theory is called 'theoretical' by most researchers rather than 'purposeful'; however, the two terms are, arguably, interchangeable (Cutcliffe, 2000).

### Grounded Theory techniques

As mentioned, this study adopted the grounded theory techniques derived from Strauss and Corbin (1990). Strauss and Corbin (1990) define grounded theory as a qualitative approach that uses systematic procedures in data analysis for developing an inductive and substantive theory that explains the phenomenon to be studied from the data obtained (as the theory is grounded in the data).

As identified in the literature, there are four main approaches/types of grounded theory used within IS research (as illustrated in the Table 1 in Appendix section) and analysis, of which the grounded theory technique is one.

Using grounded theory techniques here as an analytical method means using only the techniques and procedures of grounded theory to analyze the collected data and generate meaning for the area under study. The usage of grounded theory techniques for coding can be employed during any or all of the three phases

of coding (open, axial, and selective) and it does not require multiple rounds of interviews nor does it require the researcher to stick with any particular formulation of grounded theory (Matavire & Brown, 2008; Furniss et al., 2011). Analysts using this approach usually develop diagrams that explain the situations, events, people, and activities being researched through defining the relationships between categories and concepts formed by codes and then create understandable meaning from this. This approach is the one chosen for this study.

### 3. THE USE OF GROUNDED THEORY PROCEDURES TO ANALYZE THE DATA

The next sections will briefly explain the use of grounded theory techniques and procedures as employed in this study.

#### Open coding

The first phase/step in coding is called initial coding. It is defined by Strauss and Corbin (1990, p. 61) as "the process of breaking down, examining, comparing, conceptualizing, and categorizing data". In this study, open coding is considered as an initial step in the analysis process. A total of 320 codes were created based on 21 interviews. Two methods of coding were employed, which are (i) In Vivo and (ii) Simultaneous Coding.

#### Axial coding

This is the next procedure in grounded theory that comes immediately after the open coding stage. The process of putting data back together takes place in this step in order to make connections and links (relationships) between categories (Strauss & Corbin, 1990).

In this analysis phase, codes are refined to uncover core codes in order to compare these codes to others and find similarities and differences in terms of concepts that can be placed together within sub-categories. The total major categories are created in this phase of coding, and after refining the categories twelve major categories remain: cooperation and collaboration, organisations and needs at organisations, IT professionals and IT skills, eGovernment implementation and challenges, awareness and training, provision of electronic services, education about the concept of eGovernment, financial allocations and incentives for IT staff, regulations & procedures and plans, e-readiness, ICT infrastructure,

enablers. These main categories are presented in Figure 1.

#### Selective coding

Selective coding or focused coding is closely similar to axial coding but here it is on a more abstract level (Niekerk & Roode, 2009). The aim of this step of analysis is to find out the central category among the created categories which will become central to the research phenomenon, and other categories will be the causal conditions which are basically the factors that influence and cause the core phenomenon (Strauss & Corbin, 1990; Creswell, 2008; Creswell, 2012). Determining the core phenomenon is based on showing the stress of the concept in the data through finding out how frequently the concept appears in the data.

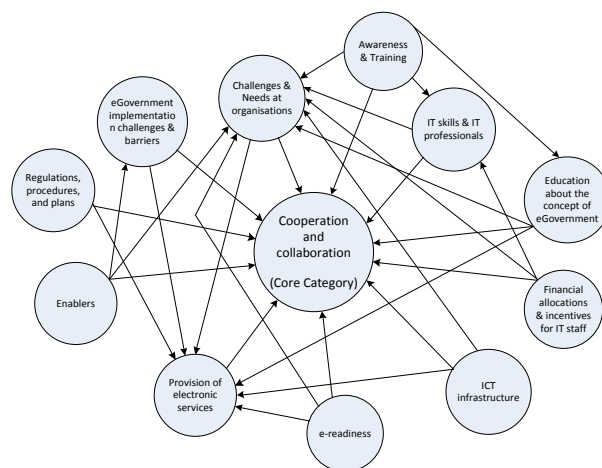


Figure 1: Core category and relationships

The concept of 'cooperation and collaboration' was mentioned and stressed by sixteen participants and determined in this study to be the core concept (core category), as indicated in Table 2 and illustrated in Figure 1.

#### Frequencies of the main codes/concepts in the data

One of the main aspects that determine the core category within grounded theory techniques as discussed in previous section is showing the stress of the concept in the data through finding out how frequently the concept appears in the data. Therefore, the frequency of the concept/theme in the data can help in identifying how commonly the ideas, events, concepts, and theme occurred (Saldaña, 2009). In this study, we employed the same technique of simple count in order to find out the most frequent concept (category) in the data among

twelve major categories. These twelve major categories are illustrated in Table 2. The results derived from applying this simple technique indicated that cooperation and collaboration category is the main concept that appeared in the data. Table 2 below shows the frequencies of the main concepts that appeared in the data according to the number of individuals who mentioned the concept rather than the number of times mentioned in the data. This technique was done using the data of open coding as it is rich in data.

No.	Main concepts / Core codes	Number of participants
1	Cooperation and collaboration	16 out of 21
2	Challenges and Needs at organisations	15 out of 21
3	IT skills and IT professionals	14 out of 21
4	eGovernment implementation challenges and barriers	14 out of 21
5	Awareness and Training	14 out of 21
6	Provision of electronic services	14 out of 21
7	Education about the concept of eGovernment	13 out of 21
8	Financial allocations and incentives for IT staff	10 out of 21
9	Regulations, procedures and plans	10 out of 21
10	E-readiness	9 out of 21
11	ICT infrastructure	8 out of 21
12	Enablers	7 out of 21

Table 2: Determining the most frequent concept

#### 4. UNDERSTANDING THE FACTORS INFLUENCING THE DEVELOPMENT OF GOVERNMENT

This section discusses the factors found in the empirical data to have an influence on the development of eGovernment in government organisations in Saudi Arabia. This is according to the findings illustrated in Figure 1.

##### Cooperation and collaboration

This category of cooperation and collaboration include the following:

##### Cooperation and collaboration between government organizations

Cooperation and collaboration between government sectors/agencies in terms of sharing data, services, experiences in eGovernment, and

developing eServices are vital; eGovernment projects cannot be performed without the cooperation and help of government sectors with each other. An IT expert working in the Al-Elm Company as a government-owned company explained that: "Cooperation between government sectors to develop the services is needed, because in most cases offering any service requires obtaining and collecting information from more than a government body". Then the extent of collaboration between the government sectors is very important because if one of the government sectors is not happy and does not desire to provide such information then the transaction and the service won't be complete.

##### Lack of cooperation with the Yesser program

This is one of the main factors among the cooperation and collaboration factors that influence the implementation of eGovernment and cause the delay in its initiatives, as indicated by the empirical data. One of the e-services project managers in the Yesser program discussed the very slow progress in connecting and linking the government sectors with Yesser to the lack of cooperation, by saying, "The linking process of government sectors with Yesser was very slow because of the lack of cooperation from some of the government sectors. So, I am neither optimistic nor pessimistic, but we have only achieved around 40% of what we had planned to reach".

##### Plans, strategies and changing procedures for cooperation

Setting up strategies and plans for cooperation between government agencies is important because such strategies and plans can draw the roadmap for government sectors in relation to cooperation in the implementing of eGovernment and what is needed for it. One of the IT experts from the Al-Elm Company expressed their cooperation with Yesser by saying, "Let's say that there is no direct relationship in a clear model with the Yesser program". It is worth clarifying that the Yesser program is acting as a controller and enabler for eGovernment in government sectors while Al-Elm is working as a developer for eServices for both government and the private sector. These two supports are the main ones needed for helping the government sectors implement eGovernment projects. Yesser, as the one with full responsibility for eGovernment implementation and authorised directly by the government, should have plans of cooperation

with Al-Elm in terms of setting up strategies for the implementation and development of eGovernment in government sectors.

#### **Understanding the cooperation concept for eGovernment implementation**

Cooperation and its purpose for eGovernment have to be understood by all government sectors. An e-Services project manager at the Civil Affairs Agency discussed the importance of understanding the concept of cooperation with the following example: "In the case of death, if it is recorded directly then other related sectors can do their duties towards this deceased person and at the same time prevent any kind of misuse of his/her identity for undesirable purposes. So, cooperation of the Ministry of Health will benefit other sectors and the cooperation of other sectors will benefit the Ministry of Health. This concept of cooperation has to be understood by all sectors because it is a collaborative work more than an individual work".

#### **Cooperation of top management**

The support of top management is very important and especially the support of top management given to IT departments to complete eGovernment projects. An IT manager at The Ministry of Justice mentioned that "Direct support and confidence from the minister given to the manager of information and communication department at the sector is very important to help remove some of the obstacles that can face the development and implementation processes". The eGovernment projects would not be possible to implement without the support of the top management within the organisation.

#### **Cooperation of financial departments in government sectors**

Funding the eGovernment projects in government sectors is the responsibility of the financial departments within the organisations, and these departments in most cases do not give the IT projects proper care as indicated by participants. An IT manager at King Saud University mentioned that "Over the past few years, King Abdullah has commanded the allocation of huge budgets to government sectors in order to help them in E-transformation; however, some financial departments within government sectors are not helping IT projects to be implemented in a specified time regardless of the poor equipment that is provided for such projects when its gets

approved due to they looking for the lowest offers provided by IT businesses".

#### **Cooperation with researchers**

Cooperation of government sectors and the Yesser program with universities and academic centres is important. It can enhance the implementation process through uncovering the challenges that can affect the implementation as well as the efficient ways to introduce new concepts to the workplace, such as eGovernment. One of the IS academics at King Faisal University stated, "I can say that there is a lack of benefit from academic research regarding eGovernment implementation and making a partnership with universities".

#### **Challenges and needs at government organizations**

The category of challenges and needs at government sectors came as the second category appears in the data as shown in Table 2. This category includes the following:

#### **Understanding the concept of eGovernment by government sectors**

An IT expert from AL-Elm Company mentioned the issue of lacking for understanding to eGovernment at organisations by saying that "there is a misunderstanding by government sectors employees for the aim of eGovernment as in the most cases they thought that it means reduce the number of staff".

#### **Change management**

A resistance to the change to eGovernment at government sectors was indicated by some participants. One of the e-services project managers at the Yesser program stated, "There is a resistance noted from some government sectors regarding the implementation of eGovernment". Another e-services project manager at the Yesser program mentioned that "Some of the expected reasons that led to the delay of eGovernment include change resistance and the effectiveness of the efforts regarding eGovernment implementation".

#### **Technical departments in government sectors**

An IT manager at the Ministry of Education stated, "Technical departments in all different government agencies are supposed to be more developed than what they are now. This is due to the lack of qualified IT staff as well as poor training in the Information sector at different government departments". Another IT manager at The Ministry of Justice explained, "In the past

there was no IT department at the ministry that it can rely on for electronic transactions, but five months ago we established one". As can be seen, some government organisations did not have IT departments, and some of these sectors lack for appropriate IT equipment.

#### **Ownership & reputation**

Another issue that has been identified in the empirical data as having an influence on eGovernment implementation is the ownership of eServices and the gained reputation credits for developing them. Usually, the development of eServices is a shared task between more than one government body and cooperation between sectors in designing the service, obtaining the required data for building the service, and implementing the service are all important elements. During the implementation and development of an eService each government sector involved within the process aims to own the eService for itself and gain the credit in the eye of the public for having enacted the program. Fortunately, this has happened only with a few sectors, but it is still considered a hindrance for those sectors to cooperate further to develop other services. An IT expert at Al-Elm stated that "The implementation of eGovernment in Saudi Arabia is very slow and this is due to several problems, including the ownership of the service and who should get the credit for doing this, especially if several sectors and departments are involved in the development and designing of an electronic service".

#### **IT professionals and IT skills**

This category of IT professionals and IT skills comes in third place according to Table 2. It includes the following:

##### **IT skills**

Having IT skills and knowledge about IT among employees and top managers within government sectors is important in order to help them contribute to the implementation and development of eGovernment projects through using and utilizing the new technologies that have been introduced to the work environment. An IT manager at the electronic services unit at The General Directorate of Education in Riyadh stated that "In our sector we have a lack of IT skills for some employees who need comprehensive training sessions". Moreover, another IT manager at the Ministry of Commerce stressed the issue of training employees and top managers in IT skills, saying, "We have a big

number of employees who do not know how to deal with technologies, even computers, and unfortunately the majority of them are managers".

#### **IT professionals and human resources**

The lack of IT qualified staff at government sectors was indicated by some participants as an influence on the implementation of eGovernment. One participant from The Yesser Consulting Group stated, "There is a significant lack of human resources and expertise necessary for the transition to electronic transactions in government sectors besides the lack of readiness of these sectors". An IT manager and e-services manager at Civil Affairs Agency stated that "There is no doubt we have a lack of human resources as they are very few". An e-services project manager at Yesser mentioned the same issue by saying that "IT departments in government sectors lack IT people as we saw some departments have only two people, and that is not enough".

#### **eGovernment implementation challenges and barriers**

The category of eGovernment implementation challenges and barriers comes as fourth most frequent category appears in the data as shown in Table 2. It includes the following:

##### **Following up on IT projects**

Correct follow-up on eGovernment projects in government sectors is essential because it can help in maintaining the cooperation of government sectors with Yesser as well as with determining easily the level of readiness within these government sectors. An e-services project manager at Yesser stated, "Monitoring the process and progress of projects in government sectors is important". In order to monitor the status of eGovernment projects in government sectors, an eGovernment project manager should be appointed in each sector, whether by the government sector itself or by the Yesser program. This action would help Yesser to communicate easily with these sectors through the representatives (project managers) regarding eGovernment projects. An e-business analyst working in the Yesser program suggested, "If there were a project manager from Yesser or from any government sector that could observe the integration of such projects, especially IT projects, it would be better".

### **Lack of Belief in change**

Affirming the value of electronic services by government sectors was pointed out by some participants as a key challenge. One of the IT experts at Al-Elm stated that "In my view, one of the current obstacles facing the implementation of electronic government is the belief in electronic services and its importance by government agencies". He added, "The second problem that facing the implementation of eGovernment is the extent of government agencies' willingness to change because some sectors in the country initially accept the change, but when you tell them that implementation requires a set of procedural changes they reject it because they fear change".

### **The 150 selected government services**

The issue here is narrowing the electronic services to 150 services, which Yesser wants to implement without the engagement of the government sectors. One participant from Yesser mentioned that one of the main problems that delay our projects with government sectors regarding eGovernment is related to the original plan for developing 150 services within the public sector. An eServices project manager at Yesser mentioned that "The program of Yesser started with a plan that consisted of 150 services, which was a mistake from my point of view. Because how can you limit and specify the services with 150 services without consulting and engaging the government sectors to see whether these services are the essential ones to them and are important to start with or if there is something else more important".

### **Documentation of procedures and processes**

It is important to point out that most government sectors shifting to eGovernment do not document the processes and procedures that have been done for future development. An e-business analyst at Yesser mentioned that "some government sectors or almost all of them they do not document their processes and nothing regarding procedures".

### **Awareness and training**

The category of awareness and training comes a number five as shown in Table 2. It includes the following:

#### **Awareness for employees**

Providing training and awareness through workshops and educational sessions are essential for both Yesser and the government

sectors. An IT manager at The Planning and Information Affairs division at the Ministry of Higher Education stressed the issue of awareness for employees by saying, "Lack of employees' awareness of the expected benefits for eGovernment is also one of the difficult issues that is facing eGovernment implementation". An IT manager at the Ministry of Islamic Affairs added that "Government sectors should focus on aspects of IT awareness and training". Providing awareness and training helps employees understand the electronic systems they use and the purpose for their use.

#### **Awareness for managers and decision-makers**

One of the academics in the IS field at the King Faisal University indicated the need for providing awareness and training especially to managers because they play a great role on affecting the entire sector. He stated, "There must be awareness and education programs about what is the eGovernment for staff and managers because some managers do not want the change, which can reflect on staff".

#### **Provision of electronic services**

This category comes in sixth place in terms of its frequency in the data as shown in Table 2. It includes the following:

#### **Designing of eServices and electronic systems**

The design of electronic systems or electronic services needs to be easy to use and understand for government employees, especially with the current lack in IT skills for employees in government. One of the IT managers at The Ministry of Education discussed the design challenges: "The complexity in the design and delivery of electronic services is a real reason to delay its implementation".

#### **Privacy and security**

Privacy and security are important issues always associated with developing electronic services. As indicated by a participant in this study, there is a need to have a privacy officer in each government sector. An IT expert at Al-Elm explained the reason for the presence of a privacy officer in government sectors: "The importance of having a privacy officer in all government sectors is to ensure reviewing and studying the eServices before offering them".

#### **Education about the concept of eGovernment**

The category is one of the major categories created at the axial coding phase during the

analysis and comes in seventh place as shown in Table 2. It has only one aspect which is:

#### **Lack of education about eGovernment**

Education about eGovernment is greatly needed at both the organizational and national levels because there is a lack of knowledge about the eGovernment program. Some participants indicated that there is a misunderstanding about eGovernment and what is really about. An IT manager at The Ministry of Education explained this misunderstanding in terms of implementation of eGovernment by saying that "some government agencies have misunderstood the meaning of eGovernment and they think that their duty is only to upload application forms online and let citizens download them". An IT expert at Al-Elm explained another misunderstanding for eGovernment in terms of impact by government employees: "There is a misunderstanding by government sector employees about the aim of eGovernment, as in most cases they think that it means a reduction in the number of staff". Clearly, a full explanation of eGovernment should be disseminated across government sectors.

#### **Financial allocations and incentives for IT staff**

This category comes as in eight place as shown Table 2 and it includes the following:

##### **Provision of financial incentives**

The existence of IT staff at IT departments within government sectors is important because they are the key elements to help in the implementation of eGovernment projects. Therefore, IT staff needs to be motivated not only morally but financially as well. One of the IT managers at King Saud University explained, "Actually, these incentives, whether financial or some other form of appreciation, motivate government officials to work effectively and learn new things". An IT manager at The Ministry of Islamic affairs mentioned that "Normally, employees in the public sector lack for incentives which can motivate them to learn new things and make an effort to work".

##### **The need for increasing the salary scale for IT staff**

As an extension to the previous point, the existence of IT staff working at IT departments within government organisations is influenced by another factor: the lack of salary scale specified to such qualified staff compared to the private

sector. An IT consultant at The Ministry of Higher Education explained the reason behind the lack of qualified IT staff at government sectors: "We have a lack of qualified IT people in the government sectors and the reason is the lack of the salary scale for such people".

#### **Regulations, procedures and plans**

As shown in Table 2, this category comes in ninth place in terms of the frequency of the concept in the data. It includes the following:

##### **The complexity in procedures and the need for change**

A participant indicated the complexity in procedures for working with government sectors as an important issue affecting the implementation of eGovernment. An IT manager at the Ministry of Higher Education described the procedures for doing transactions with government sectors: "The problem is the current administrative procedures for existing transactions with government sectors which seem to be very complicated. So, the complexity of these procedures makes it difficult to join eGovernment in a quick way".

##### **The need for unification of procedures**

Unifying procedures for doing the same service/transaction at different places is one of the problems facing Yesser. One of the eServices project managers at the Yesser program mentioned this issue by saying that "We are trying with The Ministry of Municipal and Rural Affairs to unify the procedures at Amanahs and municipalities because some procedures are different from one municipality to another".

##### **E-readiness**

As shown in Table 2, this category of e-readiness comes as tenth in its frequency and it includes the following:

##### **Provision of electronic communication channels**

Some participants indicated that some government sectors lack simple communication tools such as email that can assist employees to communicate easily with each other. One of the IT managers in the electronic services unit at The General Directorate of Education in Riyadh mentioned that "There is a weakness in the internal communication between the staff of the sector through email as there are no official email accounts created by the sector for its employees".



### **The lack of e-readiness at government sectors**

One of the IT experts at the Yesser Consulting Group mentioned the variation in the e-readiness between government agencies and the reflected impact of that in the cooperation of government sectors with Yesser by saying that "There is a variation between government sectors regarding e-readiness, which definitely reflects on the performance of these sectors and the extent of cooperation with Yesser". An IT manager at The Ministry of Education asserted on the variation in e-readiness between government agencies, "Also the disparity of e-readiness between government sectors has another impact on eGovernment implementation in the whole country".

### **ICT infrastructure**

The category of ICT infrastructure comes in eleventh place according to its frequency in the data as shown in Table 2. It includes the following:

#### **Provision of ICT infrastructure**

Having high-standard ICT equipment helps any government organization successfully offer quality e-services. According to one IT expert at Al-Elm, "There is a problem with providing electronic services in that when the system is down you can do nothing ... and this makes it essential to supply the appropriate equipment such as servers and other equipment in order to offer electronic services with less or even no problems".

#### **The weakness in the infrastructure**

The weak infrastructure was indicated by some participants. An IT manager at King Saud University said, "Yesser is facing the problem of lacking in the infrastructure for many government sectors which impede it to link these sectors with each other as I know this from colleagues working in Yesser". An IT expert at Yesser Consulting Group stressed the same problem by saying, "There are problems in the infrastructure and they are deep, but these things are much easier than things that required the human side".

#### **Enablers**

They refer to the enabling factors, which enable achievement of eGovernment implementation and development at government organisations in Saudi Arabia. These issues include 1. Having the intention to work towards eGovernment implementation by government organisations, 2. The employment of advanced electronic systems

and applications, 3. Engaging beneficiaries within decisions-making while offering electronic services, 4. Providing electronic services, 5. The continuous support of Yesser, and finally 6. Utilizing the experiences of eGovernment. One of the examples to show the impact of some factors mentioned above is that benefiting from the advanced experiences of others in eGovernment whether internal or external experiences. Some participants stressed on getting the benefit from the local experience in eGovernment development and activate it in other sectors where needed to, such as the experience of the Ministry of Higher Education as a good example in the country. Moreover, some participants indicated that Yesser has to play role in exchanging the successful experiences in relation to eGovernment development across the government organisations in the country.

## **5. CONCLUSION**

This study explored the factors that influence the development of eGovernment and contribute to the delay of its initiatives in Saudi Arabia. The results indicate that cooperation and collaboration factors are the main and important factors influencing the development of eGovernment in Saudi Arabia, among other factors such as lack of e-readiness, lack of IT staff, lack of financial allocations and incentives specified to IT staff, lack of strategic plans, lack of awareness and education about electronic services and the real benefits, and lack of understanding the concept of eGovernment.

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## Appendices and Annexures

Approach	Principles	Coding	A priori Theory	Paradigm model	Typical Refs
Glaserian	Required	Open, Selective	No	Viewed as family of codes	Glaser & Strauss (1967); Glaser (1992)
Straussian	Required (Glaser disputed adherence)	Open, Axial, Selective	No	Greater emphasis	Strauss & Corbin (1990, 1998)
Analytical	Not necessarily	Any or all used	Maybe used	Sometimes used	Variety
Mixed	Not necessarily	Any or all used	Maybe used	Sometimes used	Mingers (2001)

Table 1: Four grounded theory approaches used in IS research (Matavire and Brown, 2008, p. 142)