

## **E-Government Implementation in the Kingdom of Saudi Arabia: An Exploratory Study on Current Practices, Obstacles & Challenges**

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### **Abstract**

*The concept of electronic government (e-government) is to utilize Information and Communication Technology (ICT) to deliver government services. Governments around the world are adopting and improving e-government to reduce costs, improve services, save time and increase effectiveness and efficiency in a public sector. Therefore, the Saudi government is considering e-government as a top priority. The Government of Saudi Arabia attaches high significance to the e-government concept and the transformation process that leads to its realization. This study will explore the adoption and implementation of e-government thoroughly to address the current practices, and to identify challenges and obstacles that affect the improvements in the e-services provided from a society perspective. An intensive literature study on the subject matter will help revealing the state of e-government services towards the future. At the end, numbers of recommendations to the successful adoption of e-government services in the Kingdom of Saudi Arabia are mentioned after addressing the problems.*

**Keywords:** Persuasive, Professional, Service, Service delivery, Technology.

### **1. Introduction**

E-government represents a paradigm shift in the way the public sector operates in terms of values, culture, structure, and how the government performs its duties and conduct business. It utilizes the massive potential of ICT as a major drive of change and public operations. The government of Saudi Arabia has already began the process of implementing its concept of E-government, which it refers to as “Yesser”-an umbrella and government controller of all the procedures, activities, legislation and all other issues and acts related to its implementation. Yesser is an Arabic derived name that means to “Make Easy” or to “Simplify”(Al Nagi, 2009). It is clear that the Kingdom of Saudi Arabia believes in the potential of ICT to simplify and make-work easier; the e-government will facilitate the interactions and communications between the Saudi citizen and government agencies, and between government agencies themselves, as well.

This paper aims at exploring the current status and activities of Yesser, the Kingdom of Saudi Arabia's e-government system, examining the challenges and obstacles that are facing the implementation of the e-government program, and outlining some of the advantages that the people of Saudi Arabia and government agencies will benefit from with the successful implementation of the e-government system (Beynon-Davies, 2005). With the current substantial advancements and growth in technology, most governments across the world and especially across the Middle East are taking advantage of the potential of such technology to improve and completely change how the public sector operates, so that they can offer their citizens more efficient, reliable and the best possible services. In this regard, the Kingdom of Saudi Arabia is not an exception, as has been mentioned.

This study explores and examines the current e-government implementation efforts in Saudi Arabia. The study will utilize SWOT analysis methodology and qualitative research techniques such as literature review in order to meet the objective set herein. The results and findings of research then reported, discussed and analyzed; then a conclusion with comprehensive recommendations outlined. The recommendations would detail a number of proposed strategies for addressing the identified challenges and obstacles and ensuring the successful implementation and adoption of e-government in the Kingdom of Saudi Arabia.

This paper extensively reviewing literature and previous studies focusing on the implementation and adoption of e-government; current best practices obstacles and challenges affecting e-government services. It would then briefly discuss e-government, its background and its capability. Special focus will be given to those governments in the Middle East that have attempted to adopt and implement e-government. This would go a long way to help reveal the state of e-government activities, services, challenges, potential, and advantages toward the future. The advantages revealed and identified in the literature review are then explored and discussed extensively and how they relate to the Kingdom of Saudi Arabia. The challenges that are facing the adoptions and implementation of e-government in Saudi Arabia then discussed with the focus being on deriving best possible solutions. Finally, this paper will propose number of strategies towards addressing the obstacles and challenges, and aim at improving the program.

In the last two decades, Information Communication Technology been viewed and considered by many scholars as the key to transforming and modernizing most operational practices, and organizational functions in both, private and public sector (Beynon-Davies, 2005). According to Zhang, Dawes, & Sarkis (2005) and Grimsley, Meehan, & Tan (2007) ICT has been used an intermediary in enabling interaction and communication between a myriad of stakeholders. It has in particular, played a pivotal role in the provision of electronic service delivery, both in the public and in the private sector (Beynon-Davies, 2005). Most of the studies and research done in this regard, however, are more concerned with technical issues and issues of functionality of ICT with regards service delivery. Little or no attention has been given to issues of accessibility, reliability, availability, and usability of electronic service in the public sector from the perspectives of citizens. The adoption and use of e-government programs has been largely influenced by the global need of offering better, transparent and more efficient services and means through which citizens can interact and communicate with government agencies through the internet (Fang, 2002).

The world today is so dynamic such that there are a myriad of opportunities and challenges that face the society today. The pace at which change occurs today is overwhelmingly fast; governments and people/citizens alike are faced with pressure a lot of pressure to work smarter, efficiently, and smarter so that they can cope with the ever changing, the dynamic world and increasing needs and demands. In fact, communication and information technology have fundamentally changed within the last eight years so much so that it has become expensive and difficult to keep up (Al Nagi & Hamdan, 2009). Governments, especially those in the developing world, have made a lot of effort to take advantage of and benefit from the potential and capability of information communication technology.

E-government refers, simply to the use of electronic service delivery in the government, the public sector (Al Nagi & Hamdan, 2009). A number of stakeholders including political players, business, non-profit organizations, the civil society, the citizenry, and a number of government agencies characterize the structure of the government and how the government does business. This therefore, implies that the process of decision-making and the process of service delivery is one very complex process. E-government or electronic government services delivery targets all these aspects, including communication and interaction of the government with its citizens, business, other governments, and other government agencies.

As Bertot, Jaeger, & Grimes (2010) puts it, e-government is a technology that enables the government to facilitate, make and improve their service delivery to the public, and their interaction and communication with businesses, citizens, and with other government agencies.

## **2. E-Government in the Kingdom of Saudi Arabia**

The government of the Kingdom of Saudi Arabia began implementing a national e-government program in 1998 (Al-Sobhi & Weerakkody, 2010). Since then, it has significantly transformed its e-government program, especially, in the period between 2005 and 2008. Initial efforts of the Saudi Arabian e-government program, Yesser, concentrated more on large cities such as Medina, Riyadh, and Mecca (Wang, Cao, Leckie, & Zhang, 2004). Despite the vision of the Yesser program boldly aiming at ensuring that everyone in the Saudi Arabian Kingdom would enjoy the benefits of the e-government program by 2010, an in-depth analysis of the rate of adoption and the progress of implementation of the program suggest that only basic e-government services have been implemented so far (Alshehri, Drew, & Alfarraj, 2012). Various studies such as the study by Alshehri et al. (2012) and that by Alshehri & Drew (2010), suggest that the slow rate of adoption and implementation of the e-government is because of various challenges and obstacles, most of which linked to the user aspects (the citizens), and the government who are service providers.

## **3. Advantages of E-government to the Kingdom of Saudi Arabia**

Implementation and adoption of e-government also results in a number of beneficial services to the government, citizens, and business, just as e-Learning, e-business, and e-commerce does to their respective stakeholders. As had already been mentioned, the use of ICT would represent a fundamental paradigm shift in the way the government is structured, how it operates and how it delivers its services and the quality of the services it delivers. According to the definition of e-government provided by Carter & Belanger (2005), the basic purpose and benefit derived from the implementation of e-government is its capability to allow and enable businesses, other governments, various government agencies, and the citizenry to have around-the-clock access to government services. There are several advantages associated with the adoption and implementation of e-government.

### **3.1. Economic Benefits to Individuals**

Today, most individuals are more concerned with how long it takes them to receive or access government services, and are much less concerned with how good the service is. In this regard, the successful adoption and implementation of e-government ensures that time factor is not an issue as far as access and delivery of government services is concerned. Given the extent and size of the population and the Kingdom of Saudi Arabia, it is bound to greatly benefit from a successful implementation of e-government (Zhang, Dawes, & Sarkis, 2005). E-government, as noted by Carter & Belanger (2005) enables a round-the-clock, 24/7 access to government services from all government agencies. Further, individuals can access government services efficiently. Through search engines, search of information has been made effortless. E-government also brings government services close to the people irrespective of location, because it facilitates the reduction of the physical distance between government agencies and citizens (Huang & Bwoma, 2003).

### **3.2. Benefits to Government Agencies**

The amount of interaction and communication that goes on between various government agencies is enormous, and the costs incurred in the process are huge. The adoption and implementation of e-government alleviates and substantially reduces these costs. The use of communication technologies such as intranets, emails, and video conferencing reduces the amount of communications required and in the end reduces the associated costs (Al-Khouri & Bal, 2007). Additionally, government expenditure incurred through the direct communication channel between the private sector, government agencies, and the public sector are reduced through the integration of various agencies in the government into one single portal, which facilitates the retrieval of information by businesses, individuals and other government agencies independent of the departments that are responsible for offering the services. The services provided by the government to businesses, citizens, government agencies, and other governments are improved.

### **3.3. Democratic Reforms**

As argued by Bertot et al. (2010), the implementation of e-government creates and nurtures a culture of transparency in the public sector; it opens up and makes available to the public, a large amount of information; Something that was not possible or feasible in the past. In fact, public expectation increased when government services are improved and they become accessible and transparent. In the end, public-private sector collaboration is borne (Bertot et al., 2010).

### **4. Challenges and Obstacles**

There are some challenges and obstacles facing the adoption and implementation of E-Government (Yesser) in the Kingdom of Saudi Arabia. According to critics such as Al-Fakhri, Cropf, Higgs, & Kelly (2008), the idea of implementing e-government, is one that is not feasible since most online transactional systems, including those used by the private sector, are not well utilized. There are a number of challenges external and internal challenges associated with the implementation of e-government in addition to the high costs associated with implementation. Some of the significant factors highlighted by most researchers as affecting the implementation of e-government are security and privacy issues (Al-Khoury & Bal, 2007; Alshehri et al., 2012; Al-Sobhi & Weerakkody, 2010; Huang & Bwoma, 2003). This, as Wang, Cao, Leckie, & Zhang (2004) and Alshehri & Drew, (2010) suggests, are not problems, obstacles or challenges that are unique to any one government, but are challenges that cut across governments all over the world. One major challenge that faces the implementation of an e-government system is the establishment of the infrastructure for the e-government system, especially for a developing country such as Saudi Arabia. Other challenges and obstacles facing the adoption of the e-government system include availability, computer literacy, trust, accessibility, authentication, usability, and the issue of accountability.

In the Kingdom of Saudi Arabia, the most prevalent challenges of adoption of e-government are accessibility, availability, and computer literacy, which are as a result of a large population of citizens that do not use technology, do not know how to use or have the skills require to us technology, and do not have access to technology. This according to Huang & Bwoma (2003) is as a result of the large divide between the haves and has not in Saudi Arabia. Further, the challenge is compounded by obstacles to accessing the internet, citizen's income, age, and level of education. The situation has however, improved over the last decade, but accessibility, availability, and computer literacy still continue to be a significant obstacle that prevents a large number of Saudis from adopting e-government services.

According to Al-Sobh i& Weerakkody (2010) and Huang & Bwoma (2003) offering different methods or platforms such as the Internet, mobile services, computers, TV or wireless devices, from which citizens can access e-government services is a major challenge for most countries, including Saudi Arabia. Further, the issue of the digital divide in Saudi Arabia is not just unique to the citizens only, but also to government employees. Despite the improvement in online presence in Saudi Arabia for the past five years, many citizens are still not able to access e-government services, and that the quality of e-government services are not as per expectations of citizens since most of the information the Saudis expect to be available, are not available.

### **5. Conclusion**

The implementation and subsequent adoption of e-government requires substantial and sustained commitment of resources, collaboration among the public and the private sectors, and the government. The role of e-government practitioners of taking care of technical requirements cannot be ignored. With proper care, they can develop a system that would ensure government practices and services are efficient, and that the relationship between the government, the private and the public sector is transformed and improved.

This study has identified infrastructure costs, computer literacy, privacy issues, accessibility, availability, and trust issues as some of the major challenges and obstacles that impede the implementation and adoption of e-government in the Kingdom of Saudi Arabia. Costs associated with the implementation of e-government negatively affect the e-readiness of various government departments for e-government. Overall, this study has clearly found out that the challenges affecting the implementation and adoption of e-government is not only related to the various government agencies, but they are also related to those using the e-government services such as citizens and government employees.

E-government promises a myriad of benefits such as the need to manage and meet the expectations of the citizens. Culture, as has been seen, positively influences the adoption of e-government in Saudi Arabia, despite the fact that, it is overall considered a challenge and an impediment for the implementation and adoption of e-government. Just as with any government, the cost of acquiring e-government infrastructure, software and the necessary human resources is quite enormous for the Kingdom of Saudi Arabia; this poses a major challenge and obstacle to the implementation and adoption of e-government.

The digital and financial disparity in Saudi Arabia is a major determinant of the implementation and adoption of e-government; it affects the ability of most of its citizens to adopt, access, and use e-government services, in addition to affecting the ability of government employees to make expected government services available.

Clearly, the implementation and adoption of e-government in the Kingdom of Saudi Arabia is at its formative stages. This implies, that there is a need for the government to put more effort into providing better e-services, and in bridging the digital divide, both technologically and financially. The government also should try and ensure that the e-government system is user-friendlier, so that future citizens' expectations are met. Further, there is a need to consider providing computer literacy education to both the elderly and young citizens, do not yet have the necessary skills to access and use technology. Cooperation between various government agencies, the private and the public sectors are very essential for the government to successfully implement the e-government program.

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