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# E-GOVERNMENT SERVICE IN SAUDI ARABIA

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#### ABSTRACT

With the world's rapid development, governments are introducing e-government to keep up with the progress. Public sectors therefore deal with a large number of people, the purpose of using this technology is to reduce costs, improve services, increase efficiency and save time. The government of Saudi Arabia has experienced several challenges in serving the citizen. This is because the Saudi Arabia government has served a very large population manually. This manual service delivery resulted in high government running costs and poor service delivery. The government has therefore introduced the E-government that is faster in terms of service delivery. Thus, this study discussed Saudi Arabia's efforts to implement the e-government and the challenges it faces, and its future plans for improving the 2030 vision. This study has discussed how Saudi Arabia's E-government framework has been employed and embraced. This report begins with an introduction and a brief background on E-government. The report then discusses the implementation of E-government in Saudi Arabia, the challenges faced and from then states the 2030 Saudi vision to improve e-government service. In addition, a comparison of Saudi Arabia's E-Government Development Index (EGDI) rating with the other Gulf countries was also presented.

Keywords: E-government; system; public sector; management ; Saudi Arabia

# INTRODUCTION

The major advances currently taking place in telecommunications and computer networks, especially the Internet, are constantly changing the way people live and interact with others, the business community, and even more recently, the government [1]. Many countries are positioning themselves to take advantage of these unprecedented opportunities that enable them to radically transform their intricate bureaucracies to become faster, more innovative and more citizen-centric. The E-government model emphasizes internal networking and external collaboration by making available online the full range of services that government agencies offer, so that such services can be easily accessible to the general public [2].

However, adoption and implementation of E-government goes beyond technology alone, as it is also influenced by various organizational, human, cultural and social issues, which are key forces, and relate to the nature of government itself and its duty in society [3]. Additionally, the adoption of E-government systems involves time and a framework approach to implementing such a system. This is because the e-government model includes changing the way government agencies work and therefore public sector organizations will face challenges in implementing this technology, such as security and likely lack of top management support and security [4].

In the light of the above, this paper aims to highlight E-government as a crucial transformation in the way government agencies perform their duties using Saudi Arabia as a case study.

#### **DEFINITION OF E-GOVERNMENT**

There is no universally acceptable meaning of the concept of e-government. Some people simply define it as a way for a government to engage in digital customer transactions [5]. For others, e-government involves creating online sites where information about government and political issues is presented. Furthermore, E-government is the use of web-based application-specific technology to provide efficient access to and delivery of government information and services [5].

#### **E-GOVERNMENT IN SAUDI ARABIA**

Saudi Arabia is located in the southeastern part of Asia, occupying 2,240,000 square kilometers; this is about 865,000 square miles [6]. Due to the fact that Saudi government supports modernization in all the aspects of life in the kingdom, it has imported skilled people from all over the world to support the transformation of this kingdom into a modern country [6]. Although in a new form, Saudi Arabia has retained many values of Arab and Islamic traditions, including power and government systems. While at the same time, it has adopted Western technology and has embraced E-government to facilitate its services to the public [7].

# E-GOVERNMENT CLASSIFICATIONS OF INTERRELATIONSHIPS IN SAUDI ARABIA

E-government consists of four main groups, which are government, citizens, businesses and employees [8]. In order for an E-government program to be customer-centered and oriented, it must consider the needs of these groups. The four key blocks can be characterized as follows. First, is government to citizen. It focuses on relationships between government and citizens. This enhances accountability, democracy and improvement of public services. Second is government to business, which encompasses electronic interactions between government agencies and private corporations. It allows for electronic transaction programs such as procurement and the creation of an electronic government marketplace [9]. The opportunity to conduct online transactions with government simplifies regulatory processes and reduces bureaucracy. The third classification is government-to-government; it involves relationships between governmental organizations, regional and local governments or with other foreign government organizations [8-9]. Communicating through online platforms and cooperation enables government agencies and departments to share resources, thereby enhancing process efficiency and effectiveness.

#### **E-GOVERNMENT INITIATIVE IN SAUDI ARABIA**

When Saudi Arabia introduced the e-government system, they had to set out multiple initiatives to be the guiding procedure for gradually realizing the system's success. The e-government has been able to achieve a number of initiatives that they set up since the year of implementation. The initiatives include the Absher e-services gateway, increasing the employment of women in the e-government workforce, implementing the e-government program to communicate change, implementing comprehensive YESSER program of communications with agencies, and expanding learning and capacity building for e-government [10].

# **E-GOVERNANCE IN SAUDI ARABIA**

Saudi Arabia has always adopted an international up-to - the-minute system that has no negative impact on its system as it is slowly and gradually modernizing. Saudi Arabia's modernizing history clearly shows that they are always carefully moving forward, bearing in mind all social, religious, cultural and economic aspects. Thus, Saudi Arabia has adopted towards e-government. The Saudi government has a project known as YESSER to spread the technology [11]. YESSER is a national e-government project initiated in Saudi Arabia to implement a countrywide e-government system to help speed up the operation of the public sector. The key objectives of this project are, firstly, increasing the productivity and efficiency of the public sector. Secondly, is for better and easier-to-use services for individual and business customers. Thirdly, increasing returns on investment. Lastly, providing the required information in a timely and highly accurate fashion [11].

# ADVANTAGES OF E-GOVERNMENT IN SAUDI ARABIA

With the change to an E-government, there are different benefits that have been realized. The main advantage is that government agencies have benefited from being able to communicate easily through technologies [12]. It was also easy for many government agencies to cut costs more so for those incurred linking their operations. Annual savings due to these technological tools were estimated at \$100 million [13]. Furthermore, due to technology advancement, government agencies are able to offer better services to citizens and businesses. The E-government technology will attract good investment, which in-turn provides jobs for its people and helps the economy grow. Likewise, the other benefits that have been realized through the e-government programs in Saudi Arabia are individual economic benefits. People are able to access many government services easily [14]. Besides, many of the services are available 24 hours a day since they are in government websites [14]. Through the E-government programs, citizens are also able to access wide information, which helps them participate well in governance. Transparency has also increased as citizens can use information availed by the government to understand how the taxes they raise are being used [14]. Moreover, the E-government will help women in Saudi Arabia to be productive in terms of the work they do. The E-government will enable such women to access government services and providing their interactions through the internet [15].

# CHALLENGES OF E-GOVERNMENT IN SAUDI ARABIA

Despite the broad support of Saudi Arabia's E-government system, there are several challenges associated with the 'YESSER system' [11] One of them is accountability, which has been considered a major problem. As much as the systems are in place, there

are no monitoring agencies to monitor what is being done. Even when there are monitoring agencies, there are no professionals among the people employed [13]. Thus, King Abdullah bin Abdul-Aziz recommended setting up a Control and Investigation Board to address such issues [13]. Another challenge is the government agencies rules and regulations [16]. Some of these rules just complicate things rather than make them easy. One reason why the rules and regulations are unfavorable is that E-government programs lack skilled staff to run them [16]. The digital divide or lack of internet accessibility poses a major challenge in the E-government initiative. Another major challenge remains Internet sausages in Saudi Arabia. In the year of 2011, only 13-15 % of the population had access to the Internet [17]. A good number of citizens are still forced to physically present themselves in government offices in order to obtain services they could have obtained through the internet. There is also a population that has access to the internet but is not aware of how they can access government services [18]. This is mainly due to high levels of analphabetism in developing economies. Furthermore, lack of trained staff and required computer knowledge is a major challenge for government adoption and dissemination [16]. First of all, it is worthwhile for the government to offer intensive training to staff and citizens on how to use technology and how to integrate Egovernment services. Another challenge that is directly related to information and communication technology (ICT) infrastructure is the issues of privacy, security and trust in e-government services [18]. Internet use is not a guarantee that the data submitted through this online service is secure and private. Sharing information such as ID numbers, credit card numbers and social security numbers via electronic means is not considered safe and users are afraid that their information may be misused or distorted [18]. This fear of safety and privacy has developed unwillingness on the part of Saudi Arabia's people to embrace and use the E-government services [18]. Finally, the lack of strategic planning is a barrier to the adoption and implementation of E-government [18].

#### SECURITY CONCERNS IN SAUDI ARABIA E-GOVERNANCE

Notwithstanding the significant growth in the implementation of E-government facilities on the web platform, the E-government stumbles over threats to privacy and security [19]. Internet consumers usually have increasing worries about cyberspace identification thefts and privacy offenses. Citizens may be cautious and resentful of Egovernment facilities, interpreting them as an infringement of the safety and privacy of people [19]. The E-government sites become potential targets for cyber-attackers and terrorists. Cyber intrusion into E-government network systems could harm E-government services at any time if E-government sites are not properly secured. Saudi Arabia's potential cyber intrusions and attacks include denial of service attacks (DOS), unauthorized access to e-government networks, theft of employee or citizen information, online financial fraud, website default, e-government web application attack and system penetration [20]. The government is a provider of online public services to its citizens. It is therefore of primary importance that the use of E-government services is safe and secure, that the citizen's privacy is protected.

# ADVANTAGES OF E-GOVERNMENTS TO GOVERNMENT AGENCIES

The measure of association and correspondence between different government organizations is enormous, and the expenses incurred in the process are tremendous. The appropriation and execution of E-government mitigates and significantly reduces these expenses [21]. Such government must win the trust of most natives in order for any

administration to survive or to maintain control of power. E-government can simply bear the cost of this for any legislature that grasps it. It enhances benefits by better understanding the prerequisites of residents, thus achieving consistent online services [21]. That it accomplishes by enhancing simplicity, accuracy and encouraging changes in data between governments and natives. E-government is extremely cost-effective. The use of E-government spares assets, exertion and cash as well as broad increases benefit quality levels and decreases the time spent in government divisions [21].

#### **ECONOMIC BENEFITS OF E-GOVERNMENT**

The rapid economic development and increasing complexities of the governance system have dramatically increased the need for an e-government system to reduce costs, save time, improve services, improve the efficiency and efficiency of public sectors. Nations around the world are adopting e-government systems and using the potential of information and communication technology to improve their existing economic environment [22]. E-Government helps reduce corruption, increase government openness and trust, and contributes effectively to a nation's economic policy goals [22]. Specific impacts include reducing government spending through effective programs and improving business output through simplification of ICT-enabled administrative and government information. Likewise, E-government effectively reduces service costs through additional channels. Additionally, E-government adds to the goals of the financial strategy, where E-government reduces defilement, builds transparency and confidence in government, and subsequently adds to monetary goals [23].

# E-GOVERNMENT INTEROPERABILITY IN SAUDI ARABIA

E-Government interoperability enables one-stop, complete online services for natives and organizations by connecting the various services offered by different offices. Interoperability also allows governments to better deal with their inward operations [21]. Government offices can trade or replace programming between different suppliers. Interoperability also blocks the need to buy more equipment and programming to get more data and deliver better services [24]. The improved data stream between government and subjects, realized through e-government interoperability prompts great governance at the national level. Interoperability between governments can help make the infrastructure important for dealing with cross-border issues such as drug trafficking, environmental pollution, tax evasion and illegal arms trade [24]. Interoperability between governments can also mean transferring e-government-driven organizations to subjects and organizations locally and encouraging exchanges between a group of nations and their trading accomplices [24].

#### VISION 2030 AND E-GOVERNMENT IN SAUDI ARABIA

Saudi Arabia is likely to be among the top five nations in E-government by 2030 as a result of the progress that has been made by the legislature [25]. Saudi Arabia has been given an execution positioning of 70 percent as indicated by the International Telecommunications Federation (IFT) record on the use of data innovation [26]. These measurements show that the government is good at its approach to be positioned by 2030 among the best five nations on the planet [25]. South Korea, Netherlands Singapore, Australia, and France are now holding the best five spots [27]. The measure taken by the government would allow nationals to spare time and effort in getting their printed

material finished by different divisions of government, ensure a high level of straightforwardness and help fight corruption. Government offices must ensure that they can adjust to the new type of organization that would accompany the e-government arrangement and Internet use. E-government has also helped to reduce the number of employees employed by the government before the system was introduced [28]. This is a great benefit for the government as well as the general public as it is now possible to channel funds used in wages in development projects [28]. The government can easily track tax, fines, and rates collections. There is also a limited possibility of embezzlement of public funds. In general , Saudi citizens have benefited a lot from the introduction of the e-government system since its launch in 2003 to date [8,19].

# COMPARISON OF SAUDI ARABIA TO THE GULF COUNTRY BASED ON EGDI

Over the years, the comparison of Saudi Arabia with the five countries of interest in the gulf region based on E-Government Development Index (EGDI) is quite significant [29]. This index rating, best between 0.75 and 1, basically includes online services, telecommunications infrastructure, and human capital. Online services include the quality and coverage of Internet services that the government provides to the nation. An example of such services includes e-tools. The government's presence on the internet is vital to the virtual interaction between it and its citizens. Human capital includes the literacy level of the working class, the employment ratio, and the education system. For a good index rating, Saudi Arabia as a country needs to eradicate analphabetism, regulate mean years education system, and create job opportunities to be productive. in the Telecommunications infrastructure examines mobile or fixed connectivity, broad use of communication subscription and, of course, internet use. Table 1 shows the comparison of Saudi Arabia to the Gulf Country based on EGDI [29]. Based on Table 1, Bahrain's values would be highest among all countries within the 8 year period. It is also evident that Saudi Arabia's EGDI has increased over the years. This is similar to all over nations in the region. In the year of 2003, the EGDI value of Saudi Arabia was 0.3376 and it steadily increased to it highest in 2014 with EGDI value of 0.6900. In the year of 2016, the EGDI value of Saudi Arabia was 0.6822.

Year	Saudi	Qatar	Kuwait	UAE	Bahrain	Oman
	Arabia					
2003	0.3376	0.4110	0.3701	0.5345	0.5097	0.3548
2004	0.3858	0.4005	0.3649	0.4736	0.5323	0.2884
2005	0.4105	0.4895	0.4431	0.5718	0.5282	0.3405
2008	0.4935	0.5314	0.5202	0.6301	0.5723	0.4691
2010	0.5142	0.4928	0.5290	0.5349	0.7363	0.4576
2012	0.6658	0.6405	0.5960	0.7344	0.6946	0.5944
2014	0.6900	0.6362	0.6268	0.7136	0.8089	0.6273
2016	0.6822	0.6699	0.7080	0.7515	0.7734	0.5962

Table 1. Comparison of EGDI values among Gulf countries

# CONCLUSION

E-government appears to have brought many changes in Saudi Arabia's governance. There are many advantages that both citizens and the different government agencies have realized. Since the programs are primarily aimed at helping citizens, there is a need for comprehensive studies that define the role of citizens in these programs. The studies should also be able to prove that genuine citizens have gained from the programs. Since technology is changing every day, there is a need to conduct comparative studies that look at how e-government has grown and improved over the years. The study should be able to highlight various milestones that have been overcome to date. The achievements that have been achieved over the years should also be of interest. It is through such studies that it will be able to predict the future of e-government in Saudi Arabia and make the necessary adjustments to work for the better of the citizens. Finally, there is a need for comparative studies comparing e-government in Saudi Arabia and other countries such as South Korea and Malaysia. There are developing countries that have very effective e-government programs where the Saudi government can learn a lot. It is also through comparative studies that the Saudi government can identify countries with which they can collaborate in order to share ideas and do more research.

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