Challenges of e-Government Services Adoption in Saudi Arabia from an e-Ready Citizen Perspective

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Abstract—More and more governments around the world are introducing e-government as a means of reducing costs, improving services, saving time and increasing effectiveness and efficiency in the public sector Therefore e-government has been identified as one of the top priorities for Saudi government and all its agencies. However, the adoption of e-government is facing many challenges and barriers such as technological, cultural, organizational, and social issues which must be considered and treated carefully by any government contemplating its adoption. This paper reports on a pilot study amongst online (e-ready) citizens to identify the challenges and barriers that affect the adoption of e-government services especially from their perspective in Saudi society. Based on the analysis of data collected from an online survey the researcher was able to identify some of the important barriers and challenges from the e-ready citizen perspective. As a result, this study has generated a list of possible strategies to move towards successful adoption of e-government services in Saudi Arabia.

Keywords—Challenges, E-government services, adoption, Saudi Arabia

I. INTRODUCTION

INFORMATION and Communication Technology (ICT) is one of the most important characteristics of our age and every new development changes our lives to some extent. Its evolution has dramatically changed how citizens interact with their government, creating an important development in their expectations [1]. Following e-commerce's evolution in the private sector, electronic government (e-government) seems to be the next generation of the development in the public sector. 179 out of 192 UN members reported that they developed strategies to implement e-government systems and therefore e-government has been identified as one of the top priorities for governments across the world [2]. E-government represents a fundamental change in the whole public sector structure, values, culture and the ways of conducting business by utilizing the potential of ICT as a tool in the government agency. In the past few decades, the focus of attention in the public sector was largely on internal automation through introducing data processing machines to gain more efficiency in internal procedures and processes. Led by early initiatives in some Western developed nations, the projects became more extensive and ambitious. The idea was to use the advance of

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ICT to enhance internal processes and to reinvent public services to meet citizens' needs in order to engage businesses and citizens with government administrations at a faster pace, more conveniently and at a lower cost. However, e-government represents a radical change within government and also affects the relationship between a government and its citizens. Recently, governments in the Middle East have started using e-government as a means to achieve a high level of performance while providing cost effective outcomes [3]. However, many of these governments are still in the beginning of that process. Kingdom of Saudi Arabia (KSA), the biggest country in the Middle East, is in process for a transition to e-government. KSA recognized the essential role of e-government and created the "Yesser" program, designed to achieve continuous e-government growth and development within the country [4]. Today, most of the Saudi government agencies have their own web sites; however, most of these web sites are inefficient in that they just provide basic and general information about the organizations and often the data are not updated. While some of these web sites offer better functionality, such as interactive services and the ability to submit a form, it is hard to find a government Web site where you can apply for a job, arrange an appointment, or renew a license. This paper reports on research that seeks to answer the question: *"What are the challenges and barriers that affect the adoption of e-government services in Saudi Arabia from citizen perspective?"* The findings of this study identified some challenges that are likely to influence the adoption of e-government services such as: infrastructural weakness, lack of knowledge about e-government, lack of security and privacy of information, and lack of qualified personnel. Finally, it presents a number of critical strategies for the attention of any e-government project implementation in KSA.

II. RESEARCH METHODOLOGY

In this study qualitative research methods that include interviews and questionnaires were used to conduct an interpretive study. Questionnaires are self-report data collection tools which, answered at a distance from the researcher, eliminate personal influence [5]. Rigorous questionnaire design was undertaken to provide the research reliable measures that have been validated for this application [6], [7], [8]; also ensuring participants can understand the questions and answer accurately with the most appropriate response. The questionnaire was used to determine what citizens perceived as obstacles and challenges facing the adoption and diffusion of the e-government services in Saudi

Arabia. At the beginning of the questionnaire the researcher explained the purpose of the survey and directions for filling out the questionnaire. The questionnaires were mailed to a range of e-mail groups from the researcher's e-mail list such that participants can be generally classified as Saudi citizens that use the Internet and may be employed in a government organization. The first section of the questionnaire was designed to capture demographic information such as age, occupation, work experience, and educational background. The second section was designed to obtain information on their capabilities using computers and Internet services and to determine the IT facilities available in their homes and places of work. The last section was designed to find out what respondents felt were the challenges and barriers facing adoption and diffusion operations of e-government in Saudi Arabia providing e-ready citizens' perspectives. The questionnaires were conducted following Griffith University's Human Research Ethics guidelines and reporting is of de-identified and aggregated results only.

III. DATA ANALYSIS AND DISCUSSION

The following sections highlight the main findings and provide indications as to how the research question might be answered based on the survey results. The first section presents an overview of the online survey questionnaire then the following two sections illustrate the implications for the research question in more detail.

A. Overview of the Survey Questionnaire

As described above, the survey questionnaire was divided into four parts: personal information, information technology knowledge, e-government knowledge, and perceived challenges and barriers facing adoption and diffusion operations of e-government in Saudi Arabia. Informed consent was gained through the explanatory cover letter indicating that consent is implied by completion and submission of the survey. The questionnaire could be accessed through the online survey website surveymonkey.com. It was available for fifteen days to all participants worldwide through this link: http://surveymonkey.com/s/E-Gov. The total number of participants who responded to online survey was 123 to identify important challenges that affect the adoption of e-government services in Saudi Arabia. All of them were classified as Saudi citizens and as Internet users who have the basic knowledge about Internet, websites and its usage. The majority of participants are employees and that gave the research a clear view about the ICT status in their work places. The analysis and processing of which is reported below.

B. Demographic information

Table I shows a sample of respondent's answers to section one of the survey providing personal information. The data showed that the majority of respondents are between the ages of 20-30 years, which is about (60.7%) of the total number of respondents. (5.1%) were below 20 years of age, (29.1%) were between ages 31-40 years old, and (5.1%) were over the

age of 40 years. Participants were mostly governmental employees with high percentage about (64.6 %) and that of course will be a wealthy source of research information and (17.5%) were private sector employees. This section also identified the educational level of the respondents; it revealed that the majority of these participants held a bachelor degree that is (57.6%). (17.7%) of the respondents had higher than bachelor degree, (9.1%) had a high school degree, (15.6%) had high diploma. As shown in Table I about the English proficiency distribution (15.4%) were fluent in language, (38.5%) were good, (43.3%) were in average and only (2.8%) did not know English at all. This explanation of section one of the research questionnaires will help in the interpretation of the following sections to answer the research questions.

TABLE I
DEMOGRAPHIC INFORMATION FROM THE QUESTIONNAIRE

Characteristic	Response	Percentage
Age	Less than 20	5.1%
	20 – 30	60.7%
	31 – 40	29.1%
	More than 40	5.1%
Education Level	High School	9.1%
	High diploma	15.6%
	Bachelor's degree	57.6%
	Above	17.7%
Occupation	Student	12.8%
	Government Employee	64.6%
	Private sector Employee	17.5%
	others	5.1%
English Proficiency	Fluent	15.4%
	Good	38.5%
	Average	43.3%
	Not applicable	2.8%

C. Interpretation of research Question: Barriers and challenges to E-Government services adoption

According to the findings, there are many organisational, technical, social and financial barriers that are facing e-government services adoption and diffusion in Saudi Arabia. These challenges and barriers are listed in Table II and explained in the following sections based on the online survey questionnaire result.

1. Technical Barriers

Results indicated technical barriers and challenges facing e-government services adoption in Saudi's government. Practically, these barriers can have a significant effect on the development of government organizations' capabilities to provide online services and transactions. According to the findings, these challenges include poor ICT infrastructure, security and privacy issues as explained in the following sections.

ICT Infrastructure:

Table II show that (62.8%) of respondents indicated that weak IT infrastructure in governmental agencies is considered as barrier number one to the adoption and diffusion of e-government services. The ICT infrastructure including networks and servers is an essential part of e-government implementation and diffusion [9]. It enables government agencies to cooperate, interact and share work; facilitating the daily tasks and using the technology to save employee's time and effort. This study indicated that some organisations within the public sector are still lacking in terms of their IT infrastructure while others need to invest in the installation of new equipment and need to upgrade their existing infrastructure before considering adopting modern e-government services. This indicates that development of ICT infrastructure within government organisations should be a high priority in order to implement e-government. An indication of lack of networked ICT infrastructure is captured by this participant: *"There are hundreds of computers in our organization as work alone systems and every employee has the same copy of others files, there is no network or file servers. So, we do not have the basic IT infrastructure".* Another participant indicates levels of technology and functionality that exist: *"their ICT infrastructure was built 10 years ago and does not provide any services today, it is really needed to be updated before speaking about e-government or e-services".* Survey findings highlighted the perceived importance of creating a standardized, modern ICT infrastructure and upgrading the existing systems to enable government agencies, organizations, citizens and private sectors to participate in e-government initiatives and accept this new phenomenon. Practically, [10] emphasize the importance of information and communication infrastructure as a foundation for integrating information systems across government organisations. It must be in place before e-government services can be offered reliably and effectively to the public [11]. Indications are that ICT infrastructure, particularly in e-government adoption and diffusion processing, is a most important challenge and one that must be carefully handled at both governmental and private levels. The importance of this factor was noted by several questionnaire respondents. The successful adoption of e-government systems will require a widespread, common and modern ICT infrastructure. In this case, the Yesser program must play its role to unify the ICT infrastructure standards in the Saudi public sector and provide recommendations for private sectors as well.

Privacy, security and trust in e-Services

Security and privacy of information is another serious technical challenge identified in this research and is a well documented issue for e-government implementation all around the world [12]. More than (46.6%) of the respondents in this study indicated privacy and security to be a significant issue, making it the third ranked barrier to e-government adoption and diffusion. Participants feel that using websites to transfer their personal information (such as name, picture, date of birth, ID number, and credit card details), sharing information with public agencies online or electronically is not safe. They are afraid that e-services websites are not secure enough to protect their private information from being misused or distorted by hackers. They feared that confidential information can be exposed once transferred electronically, or viruses might destroy data. One participant said: *"I do not trust these e-services. How can I get my needs when I sit in my home, I have to go to the right person and get what I want hand by hand".* Another participant commented: *"My friend used his visa card to buy a laptop from the Internet but because the lack of security he lost his money and did not receive any goods so, how can I trust the Internet".* The participants' comments also include some security issues such as viruses, hackers, spam, trojans and other electronic crimes activity that would be a major challenge for e-government adoption and diffusion at a society level. Unfortunately, this fear from a perceived lack of security has created disinclination or unwillingness within Saudi citizens to accept and use of e-government services or e-commerce [8]. In fact, security, privacy and confidentiality are significant and essential issues for all citizens and governments worldwide [13]. Citizens want to ensure that their information and all other data are safe when they are using e-services. The indications are that governments should provide a secure access point to their online services in order to develop citizen trust. In summary, security and trust in e-service systems seem to be a significant challenge for the Yesser program to deal with. It is indicated that an effort to address the combined technical and cultural impediments to adopting e-government may yield positive results. Practically, an increase in public awareness and education initiatives through seminars, TV campaigns, brochures, etc., may be central to public acceptance and adoption and to generate trust in the secure use of networked systems. In technical terms Yesser may benefit from the building of a comprehensive portfolio of security techniques and development of an e-transaction security framework to protect all users' privacy and security.

2. Organisational Barriers:

This section describes the organisational challenges revealed by the participants and includes the following barriers: lack of qualified personnel and training, resistance to change to electronic ways, lack of policy and regulation for e-usage and lack of partnership and collaboration between the governmental agencies.

Lack of qualified personnel and training

Lack of IT professionals and required computer training courses is a major issue [14] acknowledged by the participants and takes the fourth rank in the challenges list for e-government adoption and diffusion. More than (44%) of participants mentioned that there is a lack of IT professionals to lead the implementation of e-government in their organizations. One reason for that lack, as mentioned by one participant, is the moving of IT expertise from the public sector to the private sector because government salaries are relatively low by comparison. Moreover, another participant complained about the lack of IT staff at all levels such as computer technicians, programmers, engineers, web designers and professional managers. As such, the training of existing staff members is very important factor to accelerate the

adoption and diffusion of any new technology. Many participants agreed with the importance of investing in training of existing staff members because they have strong workplace knowledge that will help them integrate the use of e-government services and applications. Supporting this, as revealed by the participants, more than (73%) of organizations have a separate IT department or center that takes care of all ICT related matters and provides some training courses. This is an indication of existing commitment that will help to achieve a successful implementation and adoption of e-government service at agencies level.

Resistance to change to electronic ways

E-government is a new phenomenon which in the (Saudi government) work place means the transformation from manual methods of work to electronic ones. These changes will create a new advanced environment completely different to what has been used over many years in government departments. Significantly, in this pilot study of Saudi Arabia less than (20%) of the participants count this factor as a challenge for e- government adoption and diffusion and gives it the number 10 in challenges list. The country's youthful age distribution and related ICT familiarity for this age group may account for this phenomenon. More than half of the Saudi population is under the age of 30 and this is reflected in the survey result where more than (65%) of the participants are between 20 and 30 years of age. The implementation of e-government is thus easily acceptable and adoptable to more than half of Saudi society. Another reason for resistance to change may be the fear of losing jobs as the organization moves to adopt the new technology [15]. The goal of KSA's e-government project is to develop and improve the workplace, with an emphasis to the staff that they are not the target of change; as more development on the public sectors is done through e-government projects and systems. To summarize, resistance to change seems mostly to emerge from fear of losing privileges or jobs. At this stage, according to survey finding it does not represent a significant barrier to e-government adoption and diffusion in Saudi Arabia.

Lack of policy and regulation for e-usage

The e-government systems are new technological revolutions for many countries around the world and to use this technology in an effective manner its needs supporting policy and regulation framework. To be effective, laws and regulations should cover all applications and related functionality such as e-payments, e-mail usage, copyright rules, e-crimes, e-business, e-commerce and others. The existence and effectiveness of these laws will give all users more confidence and assurance to use e-applications and recommend others to use them. Already the Saudi government has issued many government policies and regulations including e-transaction law, information criminal law, shift to electronic methods decision and many others. Although far from comprehensive, these laws and regulations are playing an important function in promoting effective communication between citizens, business and government to accelerate the adoption of e-government service on all levels. This may be indicated in Table II, as only (30%) of respondents suggested

this barrier was significant, giving it a rank of 8 out of 11. The survey group suggests that lack of appropriate laws for e-usage is considered one of the low level obstacles of e-government adoption and diffusion. In summary, existence of these laws and regulations is a significant step in the e-government adoption process. Improvements may be gained as it is expanded and widely promoted so that it becomes part of the community consciousness.

Lack of partnership and collaboration

The sharing of information, experiences and plans between various governmental agencies and organizations is a crucial phase in the adoption of e-government processing. Many benefits can be obtained through the sharing of information and data between governmental agencies and organizations [9]. There is no doubt that, each organization has its own data and information which it has to protect and keep safe but by using security tools with intranet and extranet applications it will become easy to share information especially with other governmental agencies safely and securely. The survey findings showed that only (28.6%) of participants acknowledged the lack of collaboration among the public sector agency as barrier and gave it a rank of 9 out of 11 in the barrier list. It is apparent that Yesser has established excellent collaboration and coordination channels among the public sector in Saudi Arabia [16]. Currently, all private and personal information about all citizens in Saudi Arabia are stored in the National Information Center (NIC) which is under control of the ministry of Interior. They have made an enormous partnership with Yesser program to share aspects of this information to progress the adoption and diffusion of e-government in Saudi Arabia in the scheduled time frame [16]. Finally, the move towards widespread collaboration between different governmental agencies will play a significant role in acceleration of adoption and diffusion of e-government systems in Saudi Arabia.

Lack of programs to promote e-government benefits and advantages

Promotion is one of the most significant factors of successful of e-government systems. For any new technology there are many steps to convince and encourage people to use it [17] and adopt it so, government sponsored promotion and advertising will be a significant aid to accomplish this task. From Table II, it reveals that more than (56%) of participants cited the lack of programs to promote e-government benefits and advantages as one of the most important barriers of e-government service adoption and diffusion and is ranked second in the challenges list. One participant commented: "*I did not hear about any workshops or seminars about e-government in the society I just read about it in the Internet websites*" while a second said: "*I heard only about the reward competition in local news letter and I did not know what is that competition*". The survey results indicate that the lack of programs to promote the e-government services benefits and advantages is considered one of the important barriers to the adoption of e-government in Saudi society. From this it suggests that the Yesser program and all governmental agencies might benefit from the execution of a campaign to

raise and promote awareness of e-government and other new e-services, along with their benefits and advantages. As has effectively been executed by e-commerce a program of cross-channel marketing and advertisements could promote popular and high profile online applications from any e-government portal through a range of public advertising media. This will increase general awareness, acceptance and usage of e-government services among the public. Cross-media advertisements might include newspapers, brochures, TV, messages on public transport and subway, banners in public places, road shows and seminars would also increase e-government user population. Finally, there is an indication that initiatives could be taken by the Ministry of Information and Communication Technology (MICT) and the Yesser program to promote and advertise e-government services among society to promote better understanding and usage of e-government services in Saudi Arabia.

Lack of strategic planning

E-government projects are huge, costly and long term projects that therefore require a clear strategy and vision. It will benefit each agency and organization within the public sector to align its goals with the Yesser program and develop its corresponding long term plan to develop and adopt e-government systems. Top management and leaders charged with implementing this plan need to support it at every level by dedicating appropriate budget and resources for the project each year. Without a clear plan and a consequent lack of clear objectives then progress will lack direction and inevitably falter. Survey findings show that more than (25%) of participants emphasized the lack of strategic plan as one of the effective challenges of e-government adoption and diffusion. According to [18] the lack of a strategic IT plan is one of the major problems affecting e-adoption by many organizations in Saudi Arabia. Addressing this, the Saudi government has created the National ICT plan (NICTP) which includes a long-term vision and a first five-year plan for ICT in the Kingdom Of Saudi Arabia [4]. To summarize, it is important for each governmental agency or organisation to develop its own strategic plan that is aligned with the national ICT plan and its vision. Efforts can then be united toward uniform e-government systems readiness in a specific time frame aiming for the highest performance services.

3. Social Barriers

The adoption of e-government services faces significant social issues which must be considered and treated carefully by Saudi government in order to achieve its goals of e-government adoption and diffusion. These issues include culture differences and digital divide which are explained in the following sections.

Culture

Overcoming cultural inertia is one of the main challenges to e-government implementation in developing countries [9]. The issue of culture includes social characteristics, backgrounds, languages, education, religion, experiences and different expectations of the e-government system. To ensure

successful adoption cultural issues need careful study with planned development of interventions to aid acceptance and trust in the use of e-government systems [3]. Reference [19] emphasizes that the main barriers to the implementation and adoption of e-government systems are not technical, but cultural implications of new technologies. He declares that one of the "main barriers toward increasing the potential offered by e-government was the need for change in individual attitudes and organizational culture" According to our survey finding more than (33%) of respondents identified culture incompatibility as one of the significant barriers to e-government adoption. Moreover, culture is still considered as one of the most complex challenges in dealing with new technology, especially e-government systems which need a strong cooperation between services provider (government) and the customers (citizens). Looking within the government entities, the behaviors of governmental employees in public sectors can be seen as an added internal challenge to the implementation of e-government systems in many organizations. Therefore, it is necessary to develop the public sector in Saudi Arabia and train the employees to have a clear vision about the new nature of their public service including their job descriptions, tasks and application to customer service. Government can learn from the development of e-commerce and train employees to see citizens, businesses and other government agencies as their customers and focus on the needs of these customers. To complement this, it is important to educate the public and bring to their attention the importance and advantages of e-government systems by many ways as mentioned on promotion in the last section. It is instructive here to talk about the education level in Saudi society as one important element of culture and its relation to technology adoption. Based on the survey finding, more than half of participants had a bachelor degree, (15.6%) had a high diploma, (17.7%) had a Master or PhD degree and only (9.1%) had high school. In fact, citizens with a higher level of education are more likely to accept and interact with any new technology and e-government systems practically [3]. The Saudi educational systems encourage all students to develop their technical skills to take advantage of any new technology and communication skills. This includes English language training to be effective online communicators and to effectively share and learn about the developed technology of the Western world. In 2005, the Ministry of Higher Education established the largest scholarship program for study abroad in the history of the Kingdom at a cost of more than 15,7 billion Saudi riyals (about 4 billion American Dollars) and that of course reflects the Saudi's government keenness on education and development of the Saudi citizenry [20]. Another important aspect of cultural consideration in KSA is religion. Reference [21] pointed out that in Saudi Arabia, the Islamic religion and traditions diffuse through all aspects of society. It is thus essential for researchers to be aware of the cultural characteristics and the values of the research environment. The religion of Islam is reflected in different aspects of social life. As a result, the researcher believes that the government should take a high consideration of these facts in providing e-services to its citizens and that services should be compatible with Islamic rules. To conclude, the cultural issues are a very

critical matter that needs to be considered and treated carefully at governmental and societal levels in order to gain a successful e-government system.

4. Leaders and Management Support

Top management support is one of the key factors in the adoption of e-government services within the government sector. Top management support refers to the commitment from top management to provide a positive environment that encourages participation in e-government applications. Around the world, effective leadership plays a significant role in the adoption and implementation of e-government [22]. In Saudi governmental agencies the leader and top management support in Saudi public sectors is considered as one of the main factors that can assist and support the adoption of e-government services [21]. According to the survey finding, (32.3%) of the participants identified the lack of top management support as an issue ranking it as the sixth most important barrier to the e-government services adoption. Within the limitations of the survey there is evidence that some of Saudi organisations are suffering from the lack of leadership support which can contribute to an early failure of their e-government project. Adoption of e-government projects needs strong management support especially in its early stages which can be costly to instantiate and take a long time to deliver results [22]. In summary, in order to gain more support for e-government projects the leaders and top management might benefit from aid to understand and value the e-government advantages and benefits which will be gained from these projects. From the researchers' view point, a systemic approach may be the most effective approach. By making it a Yesser program objective to create awareness among the government's top managers the advantages of e-government can be conveyed and managers convinced to adopt these projects and support them.

5. Financial Barriers

The most serious and significant barrier to the implementation of e-government is a lack of money. The financial barriers include the following three identified obstacles: limited financial spending on ICT, high cost of ICT and high-priced services of telecommunications [3], [23]. Based on a literature review, the limited financial spending on ICT is considered one of essential obstacles of e-government implementation around the world [23]. However, this pilot study is limited to the Saudi citizen's perspective and does not include other stakeholders such as leaders from the public sector, the e-government project team or IT managers view whose main concerns are the e-government implementation cost. As a result, the survey outcome shows that the majority of participants do not count the lack of funding as an essential barrier for e-government services adoption. This barrier ranked as the lowest barrier for e-government services adoption in the challenges list from the citizens view. According to the Saudi e-government program (Yesser), the budget assigned to the program has been increased to 4 billion riyals (about USD 1.2 billion) for this year 2010 [24]. It is therefore clear that Saudi's public sectors have financial support from the government to publish their own e-services

and make it available in a professional and safe form to all citizens.

TABLE II
CHALLENGES OF E-GOVERNMENT SERVICES ADOPTION

Rank	CHALLENGES	Level of agreement from respondents
1	IT Infrastructural weakness	62.8%
2	Lack of knowledge about the e-government program	56.5%
3	Lack of security and privacy of information	46.6%
4	Lack of qualified personnel and training courses	44.7%
5	Culture differences	33.8%
6	Leaders and management support	32.3%
7	Lack of policy and regulation for e-usage	31.3%
8	Lack of partnership and collaboration	28.6%
9	Lack of strategic plans	25.6%
10	Resistance to change to e-systems	19.3%
11	Shortage of financial resources	19%

IV. RESEARCH RECOMMENDATIONS

Based on the research result, the researchers suggest the following recommendations which could help successful adoption of e-government services in Saudi:

1. A strong and modern ICT infrastructure in all Saudi governmental organisation and agencies is the foundation stone of the adoption process and that need to be ready before introducing e-services. The weakness of ICT infrastructure is an essential barrier for all e-government implementation stages.

2. Security and privacy are critical issues that need to take the highest level of priority in e-government implementation process. Particularly, after start publishing the e-government services which then requires e-government users to pay and give their information online for their transactions.

3. Citizen's awareness of e-government services and other new e-services need be addressed so a comprehensive campaign is required to raise and promote the e-government benefits and advantages.

4. Training government employees to increase their understanding of the e-government model, the technology and an awareness of its benefits is an important factor to accelerate the e-government adoption process at agencies level.

5. Professionally built and updated websites that provide a high level of transaction security and ease of use for all e-services in all Saudi ministries and public agencies is an important facilitator for the use of online services.

6. Training of top management and authority leaders within the public sector's to understand and support considerations vital to the adoption and success of e-government projects in KSA.

7. A high level of collaboration and cooperation between all government agencies and with Yesser project is

fundamental factor in the adoption process of e-government.

8. Issues relating to Saudi culture and societal structure should be addressed very carefully to influence and convince the Saudi citizens to participate and become involved in e-government systems.

9. Creating a uniform strategic plan for e-government projects is the first step for successful adoption of e-government services. Each government organization strategic plan could include development of processes and policies, purchase and maintenance of hardware and software, development of operating environments and services, management, outsourcing of consultancy and ongoing training courses for their staff.

V. CONCLUSION

E-government has the potential to greatly improve how government operates internally and how it serves its customers. E-government is much more than a tool for improving cost-quality ratios in public services. It is an instrument of reform and a tool to transform government. Thus, e-Government is not primarily about automation of existing procedures (which may or may not be effective), but about changing the way in which government conducts business and delivers services [20]. The main objective of this research is to draw upon current views of e-ready Saudi citizens regarding factors affecting the adoption of the e-government program in Saudi Arabia. This is carried out in order to support better decision-making by e-government stakeholders, and to improve the e-government services outcome for the Saudi society. Research findings are validated against current literature addressing e-government services adoption obstacles and challenges. As a pilot study this will guide further research into the perspectives of other significant stakeholders in the successful adoption of e-government in the Kingdom of Saudi Arabia.

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