Asian Economic and Financial Review

ISSN(e): 2222-6737 ISSN(p): 2305-2147 DOI: 10.18488/journal.aefr.2018.86.832.842 Vol. 8, No. 6, 832-842 © 2018 AESS Publications. All Rights Reserved. URL: <u>www.aessweb.com</u>

OBSTACLES TOWARD ADOPTING ELECTRONIC GOVERNMENT IN AN EMERGING ECONOMY: EVIDENCE FROM KUWAIT



 Abdullah AL-Mutairi¹⁺
 Kamal Naser²
 Fatema Fayez³ ¹Gulf University for Science and Technology, Kuwait Email: <u>Mutairi.4@gust.edu.kw</u> ²Financial Advisor, Kuwait Fund, Kuwait ³Arab Open University- Kuwait branch, Kuwait



(+ Corresponding author)

Article History

Received: 10 May 2018 Revised: 8 June 2018 Accepted: 12 June 2018 Published: 14 June 2018

Keywords E-Government services Technology adoption E-Government implementation Obstacles Kuwait The current study provides assessment to the current system of e-government in Kuwait. It also identifies possible obstacles towards promoting effective e-government and what should be done to alleviate these obstacles. A questionnaire survey has been used to achieve the aim of the study. During January and April 2017 the questionnaire was distributed to 275 public sector employees. Of which 200 returned completed resulting in 72% usable response rate. Descriptive statistics was performed together with Mann Whitney test to identify significant difference in the participants' answers due to their managerial occupation. The study revealed that Kuwait has the required financial resources to adopt an effective e-government system. The participants in the survey indicated that Kuwait lacks an effective infrastructure of information technology and a major proportion of the participants demonstrated that they acquire a low or average level of knowledge and experience in information technology. They consider the current information technology system adopted by the Kuwaiti government is not secured enough to protect public data and information.

ABSTRACT

Contribution/ Originality: This is the recent study that covers different aspects of e-government in a developing rich country such as Kuwait. It documents that the current information technology system adopted by the Kuwaiti government is not secured enough to protect public data and information.

1. INTRODUCTION

As a result of the revolution in information technology, public sectors in many developing countries opted to adopt e-government. The adoption of e-government in developing countries has then received growing attention in the business literature. The focus of the literature was on identifying obstacles toward adopting effective and efficient e-government system. Empirical research have pointed to several factors that represent obstacles toward adopting e-government including computer skill confidence, lack of financial resources, bureaucracy, lack of accountability and transparency, lack of citizen involvement in decision-making process and political issues. The most important obstacle towards adopting e-government in most developing countries is lack of financial resources. Adopting e-government requires an installation of advanced information technology system, educating and training government personnel and the public to use the system and ensuring the system sustainability. This requires significant investment by the government, while the financial resources are not available to a large number of these governments. This would not be the case for an emerging, but a rich, country like Kuwait. Hence, obstacles toward adopting e-government in Kuwait could be different from what has been already reported in previous research. The outcome of this study is expected to assist policy makers in Kuwait in installing effective e-government system. In addition, this study would add a new dimension to the literature on the adoption of e-government.

The remainder of the study is organized as follows. A brief review of the related literature and previous research are presented in the following section. Data collection and research method are described in section three. While the findings are discussed in section four, the conclusion is offered in the last section

1.1. Related Literature and Previous Studies

E-government is more than a website, email or processing transactions via the internet. E-government becomes a natural extension of the technological revolution that has accompanied the knowledge society (Al-Gharbi and Al-Kindi, 2010). The e-government added new concepts such as: transparency, accountability, citizen participation in evaluating government performance (Mohammad *et al.*, 2009). According to Ji and Liang (2016) government should provide reliable policy and standards to guide the construction of e-government. Several studies have been undertaken to examine e-government in many developing countries (see for example, Jordan: (Al-Omari, 2006; Khasawneh *et al.*, 2011; Al-Shboul *et al.*, 2014; Alomari, 2014). Iran: (Atashak and Mahzadeh, 2009; Yaghoubi *et al.*, 2011; Shahghasemi *et al.*, 2013). Pakistan: (Qaisar and Khan, 2010; Kayani *et al.*, 2011; Haider *et al.*, 2015). Egypt: (Abdelsalam *et al.*, 2012; ElBaradei *et al.*, 2012; Gebba and Zakaria, 2015). Malaysia: (Haidar and Bakar, 2012; Ramli, 2012). Bangladesh: (Alam, 2012; Hassan, 2013). Poland: (Ziemba *et al.*, 2015). A brief review of these studies is offered in the following section.

Al-Omari (2006) proposed an e-government model as a modern evolution of information and communication technology that convert the life of societies to the communication and networked age. He suggested expanding the existing programs that provide the public access to PCs and Internet through schools, libraries and community based organizations. Khasawneh et al. (2011) conducted semi structured interviews with 8 individuals who are in charge of e-government program in Jordan to examine the development of the program. They found e-government program in Jordan is still at an early stage of development and moving at a slower pace than anticipated. They observed that the initial efforts have been focused on launching e-government portal, posting online government information, promoting e-government program, educating the public, providing basic access to the internet and developing the needed technological components. Alomari (2014) examined searched for the factors that could influence effective e-government's functioning in the Jordanian social community through its interaction with citizens. He found trust in the internet, website design, religious beliefs, internet and computer skill confidence, word of mouth, resistance to change, perceived usefulness, relative advantage and complexity are the main factors that should be considered when addressing the e-government services' adoption in Jordan. Alomari concluded that the government in Jordan should be sensitive to the dynamics of social and cultural life when formulating the response needed from citizens after introducing e-government services as a new channel of interaction with government. Al-Shboul et al. (2014) examined challenges and factors affecting the implementation of e-government in Jordan. They found public awareness and lack of an enabling legal framework to be the main challenges facing the implementation of e-government. They believe that political support is necessary to successful implementation of the e-government services initiative.

Atashak and Mahzadeh (2009) examined e-government status in Iran. They contended that implementing a complex and extensive system with high quality must take into consideration existing human resources. They also found supplying and assigning financial resources for performing this plan adds to the complexities of e-government implementation. Yaghoubi *et al.* (2011) examined e-government performance in delivering electronic services through the ICT offices in Mashhad, the second biggest city in Iran. They found switching to e-government is not just technology change but organizational change. They also found that clients are satisfied with

the service delivery and variety and accessibility of services are more than average; whereas, customers are not satisfied with ICT offices' staff. Shahghasemi *et al.* (2013) also reviewed the advantages of e-government in Iran and reported that users will have many problems achieving the targeted information they seek for in the websites.

Qaisar and Khan (2010) explored various challenges that public sector organizations may face in employing egovernment in Pakistan. They found employing e-government is quite difficult especially when basic ICT infrastructure and financial resources are not available to the organization. Kayani *et al.* (2011) examined barriers in e-government implementation in Pakistan. They found that information technology is a major barrier in the implementation of the e-government in Pakistan. They suggested that government should move e-services from federal level to provincial and local council's levels. Haider *et al.* (2015) examined the supply side of employing egovernment in Pakistan by assessing Unified Theory of Acceptance and Use of Technology (UTAUT) as a model of acceptance. They further looked at specific variables used to moderate relationships within UTAUT. Data from the samples they surveyed supported UTAUT model. Moderators variables used in the study, however, appeared to be insignificant.

Abdelsalam *et al.* (2012) examined local e-government projects in Egypt. They observed that management should spend more time on explaining how their e-government projects affect the organization, so that users have a broader understanding of the system. They also noticed that managers need to have an adequate training program for users of the system. ElBaradei *et al.* (2012) examined the effectiveness of e-government solutions from the perspective of marketing effectiveness in Egypt. They found telecommunication infrastructure, socio-economic factors, legal factors, institutional infrastructure factors, cultural factors and degree of citizens' trust of e-government security impact citizens' usage of e-government services. El Baradei *et al.* advised the government to focus on the advantages of e-government services and on what attracts citizens to use the site. Gebba and Zakaria (2015) examined challenges to implementing e-government in Egypt. They concluded that Egypt is still lagging far behind other Arab countries, particularly GCC countries that recently launched their e-government programs. They found that Egypt is still faced by many challenges in its endeavors to implementing e-government initiatives successfully such as bureaucracy, lack of accountability and transparency, and lack of citizen involvement in the decision-making process.

Haidar and Bakar (2012) examined Malaysia government agencies' portals and websites. They believe that website assessment is a contributing factor to enhance the delivery of e-government services. They also found that government agencies' websites that performed well in the assessment responded well in providing services to the citizens. Ramli (2012) attempted to explore the status implementation of e-government initiatives in Malaysia public administration. He found potential areas for improvement in relation to the public administration perspective. He thinks Malaysia can learn some lessons from South Korea's practices to ensure the success of its e-government projects.

Alam (2012) examined some current constraints of e-governance in different sectors of Bangladesh and attempted to provide some possible suggestions to overcome those problems. He noticed that many government offices do not have internet connection or using very slow Internet connection. He also observed that government does not design any central database for citizen's access using through internet. Moreover, Alam observed that the majority of the government officials and the public are unaware of the e-Citizens Service application portal. Hassan (2013) examined the performance of Bangladesh in e-government implementation, identified some of the challenges and suggested some remedial measures. He found political, human resources and funding issues are major obstacles towards the implementation of e-governance in Bangladesh.

Ziemba *et al.* (2015) examined the success factors of e-government in Poland. They found economic, sociocultural, technological and organizational factors have significant influence on successful e-government. They also found that public subsidies on hardware, networks and telecommunications as well as financial situation of government units are the main success factors of e-government. They referred to some evidence for the success of e-government in Poland.

As far as the GCC region is concerned, few studies have been conducted to examine the current e-government in GCC countries (see for example, Qatar: (Al-Shafi and Weerakkody, 2009; Weerakkody *et al.*, 2009). Kuwait: (Al Awadhi and Morris, 2009; AL-Hussaini *et al.*, 2013). Oman: (Naqvi and Al-Shihi, 2009; Al-Gharbi and Al-Kindi, 2010). Saudi Arabia: (Alshehri and Drew, 2010; Alshehri *et al.*, 2012; Basamh *et al.*, 2014; Alotaibi *et al.*, 2016). Bahrain: (AL-Kaabi, 2010; Meftah *et al.*, 2015). UAE: Al-Khouri (2012). GCC: Omari (2013). A brief review of studies is offered in the following section.

Al-Shafi and Weerakkody (2009) used Unified Theory of Acceptance and Use of Technology (UTAUT) model to explore the adoption and diffusion of e-government services in the state of Qatar. They found significant positive relationship between performance expectancy, effort expectancy, social influence and behavioral intention to use egovernment services for the citizens of Qatar. They also found facilitating conditions and behavioral intention determine citizens' use of e-government services in the state of Qatar.

Al Awadhi and Morris (2009) used an amended version of the UTAUT to identify determinants of potential users' adoption of e-government services in Kuwait and noticed that the likely adoption of e-government services by student subjects is well predicted by many factors, including technical issues, trust and awareness. AL-Hussaini *et al.* (2013) examined the e-government limits on administrative corruption. They found that the majority of participants agreed that bias and favoritism for groups and individuals are in the patterns of corruption widely spread in the government sector of the State of Kuwait. They also found that the majority of participants agreed that the intervention of individuals and thus reduces, if not eliminates, many kinds and forms of corruption related to individuals such as favoritism, nepotism and bribery.

Naqvi and Al-Shihi (2009) examined the current m-government initiatives in Oman. They found that Omani citizens are seen to be prone to stereotyping, and hence, ensuring proper implementation of programs and successful experiences to users is a step that should precede advertising. They also found that there are very low chances that users will trust or keep trying any m-solution if it has shown to be faulty from the first few attempts. Al-Gharbi and Al-Kindi (2010) examined e-government initiatives in Oman. They found that Oman is working on a project called e-Oman to provide e-government, e-commerce, e-learning and other e-services as an attempt to enhance the quality of services offered by the government to its citizens. They found that the Omani experience in implementing e-government initiatives includes availability of information and providing interaction mechanisms for all users.

Alshehri and Drew (2010) investigated challenges of e-government services adoption in Saudi Arabia. They found IT infrastructural weakness, lack of knowledge about the e-government program and lack of security and privacy of information are the main challenges of e-government services adoption. They recommended training government employees to increase their understanding of the e-government model, technology and an awareness of its benefits is an important factor to accelerate the e-government adoption process at agencies level. Alshehri *et al.* (2012) attempted to explore the key factors of user adoption of e-government services in Saudi Arabia. They found that any weakness in technical support systems may present a barrier to all e-government implementation stages. They also found that there is a need for comprehensive information and training programs that raise citizen awareness and knowledge of e-government services as they become accessible in each region. Basamh *et al.* (2014) attempted to identify challenges and obstacles of e-government implementation in the Kingdom of Saudi Arabia. They found that the challenge 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 employee. Basamh *et al.* (2014) concluded that government should ensure that the e-government system is user-friendlier, so that future citizens' expectations are met. Alotaibi *et al.* (2016) examined potential factors influencing the adoption of m-government services in Saudi Arabia. They found factors such as

trustworthiness, usage experience, awareness and security would influence the adoption of m-government services. They also found that enjoyment does not influence the adoption of m-government services.

AL-Kaabi (2010) used a questionnaire and an interview to explore critical success factors affecting the implementation of e-government in Bahrain. They reported vision and strategy, leadership, adequate IT, information sharing, change management, marketing and awareness, business process reengineering, identify requirements, process mapping and capacity building as being the main factors. Meftah *et al.* (2015) looked into factors that affect citizen's intention to adopt e-government services in Bahrain. They found a significant relationship between culture, awareness and trust and the adoption of e-government. They observed that trust has significant effect on the adoption of e-government. Meftah *et al.* advised the authority to enhance citizens' trust that increases the rate of e-government adopters.

Al-Khouri (2012) reviewed UAE e-government strategic framework 2011-2013 that attempted to promote the electronic transformation of all government services within a period of three years. He found government-owned identity management systems that provide secure, unique and tamper-proof digital identities should become a primary component of national e-government strategies.

Omari (2013) examined the advantages of implementing e-government systems in GCC countries. They found the advantages are reducing cost, time, efforts and bureaucracy. Omari suggested that the GCC governments need to learn from the experience of other similar countries and get benefit from their success and failure stories

The above brief review of the literature revealed that a limited number of empirical studies have been undertaken to assess the current e-government practices in Kuwait despite of its significant. This suggests the need for additional empirical testing. Therefore, the current research is set out to provide answer to the following research questions.

Question 1: How the public sector employees evaluate the electronic facilities currently available in Kuwait?

Question 2: What are the main obstacles towards adopting effective e-government in Kuwait?

Question 3: What should be done to promote effective e-government in Kuwait?

2. STUDY METHODOLOGY

2.1. Research Instrument

To collect information about electronic facilities available to the public sector in Kuwait, obstacles towards adopting effective e-government and what should be done to promote effective e-government, during the period between January and April 2017, 275 copies of a questionnaire was distributed to public sectors staff who occupy different managerial levels. 200 questionnaires were returned; resulting in 72 percent usable response rate. The questionnaires were then entered in an SPSS file for analysis. Cronbach's Alpha was used to measure the internal consistency of the collected data. Descriptive statistics have been employed to shed some light on the respondents and their response to various aspects of e-government. To identify possible difference in the participants' answers to different parts of the questionnaire due to their management level (supervisory, middle or top), the Mann-Whitney U test has been performed on different sections of the questionnaire.

3. FINDINGS

3.1. Respondents Background

Table (1) summarizes the main characteristics of the participants who took part in the questionnaire. The table shows that the vast majority of the participants (87.5%) are Kuwaitis and 52% are females. This is predictable since the Kuwaiti government is adopting the Kuwaitization policy where jobs in the public sectors are only given to Kuwaitis. Non-Kuwaitis are employed in places where the government faces difficulties in filling them with Kuwaitis. Significant female presence in the public sector is due to the fact that females in Kuwait are highly educated and their participation in the economic development in the national economy is restricted to specific jobs.

Similarly, a significant proportion of the participants are at the supervisory level (84.5%). Participants at the middle and top management were 9% and 6% respectively. The table further demonstrated that 51% of the participants age ranges between 26-35 years and 41% of them hold masters academic degree. As for the participants' level of internet knowledge and information technology levels, 40% or more revealed they have high level of knowledge. However, more than quarter of the participants indicated that they have either very low or low knowledge in internet and information technology. 27% of the participants revealed that have average knowledge of the use of internet and information technology.

	Frequency	Percent		Frequency	Percent		
Nationality			Occupation Level				
Kuwait	175	87.5	Supervisory	169	84.5		
Non-Kuwaiti	25	12.5	Middle	18	9.0		
			Тор	13	6.5		
Total	200	100.0	Total	200	100.0		
Age			Academic Qualification				
Less than 25 years	27	14	Diploma	28	14		
26-35 years	101	51	Bachelor	57	29		
36-45 years	54	27	Masters	81	41		
More than 45 years	18	9	PhD	12	6		
Total	200	100	Total	200	100		
Level of Internet Knowledge			Level of information Technology Knowledge				
Very low	19	9.5	Very low	21	10.5		
Low	36	1.0	Low	44	22.0		
Average	54	27.0	Average	54	27.0		
High	89	44.5	High	79	39.5		
Very High	2	1.0	Very High	2	1.0		
Total	200	100.0	Total	200	100.0		
Experience							
Less than 3 year	54	27.0					
3-10 years	71	35.5					
11-15 years	44	22.0					
More than 15 years	31	15.5					

 Table-1. Respondents background

4. FINDINGS

Before analyzing the questionnaire, it was important to test the internal consistency (reliability) of the collected data; Cronbach's Alpha (α) was performed. The questionnaire contained three sections that measures various dimension of e-government in in Kuwait. The first section seeks information about the current available electronic facilities, the second section requests information about obstacle towards effective e-government and the last section looked for ideas about what should be done to promote effective e-government in Kuwait. The internal consistency of the participants' answers was tested for each of the three sections and for the three sections jointly. The results of the test are summarized in table 2 below. It is evident from the table that Cronbach's Alpha (α) for each of the three parts of the questionnaire as well as all parts of the questionnaire is relatively high.

Table-2. Cronbach's Alpha (α)					
Different aspects of e-government	Cronbach's Alpha (a)				
Electronic facilities currently available in Kuwait P blic sector	0.930				
Obstacles towards effective e-government in the public sector of Kuwait	0.862				
What should be done to promote effective -government in Kuwait	0.949				
All sections of the questionnaire	0.907				

As mentioned earlier the first section of the questionnaire asked the participants about electronic facilities currently available in the public sector of Kuwait. The result of their answers is summarized in table 3. The participants confirmed that the departments they work for have electronic website and they have enough financial resources to promote effective e-government. The participants further confirmed that their branches are electronically connected with the main center. Most of the public sectors employees have email addresses. The public sector's departments provide the public with electronic telephone enquiry and they can submit reports and complaints electronically. The participants were less agreed on availability of infrastructure required to adopt effective e-government and the electronic system is secured enough to protect public data and information. The participants were not firm about whether the public sector has the required human resources to adopt effective egovernment. The results of the participants' answers analysis can be explained on the ground that Kuwait is a small country with tremendous financial resources. Hence, the government can introduce an effective e-government system. In fact, almost all public sectors departments have electronic websites where the public can obtain detailed information they need about the department. However, due to moderate level of public sector staff knowledge of how to use information technology and inability to deal with some hardware problems that result in frequent breakdown in the electronic systems. This delays the completion of the public transactions. In addition, lack of knowledge and training of some public sector staff would compromise the security of the public information.

	Maan	Madian	Std.	Mann-Whitney U	
	Mean	Median	Deviation	Ζ	Sig. (2-tailed)
Availability of electronic website	4.19	5.00	1.24	-1.91	0.06
Availability of electronic emails among employees	3.94	5.00	1.39	-2.41	0.02
Availability of financial resources to introduce e- government	4.03	5.00	1.34	-2.76	0.01
Possibility of submitting reports and complaints electronically	3.92	5.00	1.41	-2.89	0.00
Availability of human resources to adopt e- government	3.91	4.00	1.35	-1.89	0.06
Availability of electronic telephone enquiry	3.92	4.00	1.34	-2.37	0.02
Branches are electronically connected with the main center	3.97	5.00	1.39	-3.09	0.00
Availability of infrastructure required to adopt effective e-government	3.74	4.00	1.52	-2.44	0.01
Availability of a secured system to protect public data and information	3.87	5.00	1.51	-1.67	0.10

Table-3. Electronic facilities currently available in Kuwait Public sector

To identify possible difference in the participants answers on the basis of the level of management (supervisory, middle, top) the Mann Whitney U test was performed and reported in table 3. It shows significant difference with all statements given to the participants except for availability of a secured system to protect public data and information.

After the participants were asked to describe the electronic facilities currently available in Kuwait Public sector, they were requested to identify possible obstacles towards introducing effective e-government in Kuwait. The result of their answers is presented in table 4. It can be observed from the table that the lack of proper staff training programs was the greatest obstacle towards introducing effective e-government system in Kuwait as reflected by the related high mean and a relatively low standard deviation. Inefficiency in allocating financial resources is another obstacle identified by the participants that prevents introducing effective e-government system in Kuwait. The participants indicated that the lack of policy and regulation for e-usage hinders the possibility of promoting effective e-government in Kuwait. The participants further pointed to factors such lack of partnership and collaboration, lack of leaders and management support and absence of strategic planning to transfer to egovernment as serious obstacles towards introducing effective e-government in Kuwait. The participants do not

believe that the public sector lacks qualified personnel and the security and privacy of information as major obstacles towards introducing effective e-government in Kuwait. The Mann Whitney U test pointed to significant difference in the participants answers about several obstacles towards promoting effective e-government including culture issues, lack of leaders and management support, lack of policy and regulation for e-usage, inefficiency in allocating financial resources and absence of strategic planning to transfer to e-government. Differences in the participants' answers were mainly due to those who agree or strongly agree to each of these obstacles.

			C4 J	Mann-Whitney U	
	Mean	Median	Sta. Deviation	Z	Sig. (2-tailed)
IT Infrastructural in Kuwait is weak	3.62	4.00	1.41	-0.67	0.50
Lack of knowledge about any e-government program	3.58	4.00	1.40	-0.95	0.34
Lack of security and privacy of information	3.42	4.00	1.49	-0.86	0.39
Lack of qualified personnel in the public sector	3.46	4.00	1.47	-0.81	0.42
Lack of proper training programs	4.10	5.0	1.22	-1.29	0.20
Culture issues	3.80	4.00	1.38	-1.76	0.08
Lack of leaders and management support	3.86	4.00	1.31	-2.57	0.01
Lack of policy and regulation of e-usage	3.92	4.00	1.34	-2.47	0.01
Lack of partnership and collaboration	3.88	4.00	1.32	-1.34	0.18
Resistance to change to e-system	3.64	4.00	1.48	-0.38	0.70
Inefficiency in allocating financial resources	3.93	4.00	1.33	-1.68	0.09
Absence of strategic planning to transfer to e-government	3.84	4.00	1.34	-1.79	0.07

Table-4. Obstacles towards effective e-government in the public sector of Kuwait

The last section of the questionnaire provided the participants with several measures that need to be adopted in order to achieve effective e-government in Kuwait. The respondents were asked to express to what extent they agree or disagree with each of these measures. The results of their answers appear in table 5. The table revealed that the participants either agreed or strongly agreed with all measures contained in the questionnaire as reflected by the reported means and relatively low standard deviation. Yet, the participants expressed higher levels of agreement to measures such providing necessary technical support to insure effective electronic work, marinating electronic equipment and programs regularly, simplifying managerial procedures to enable its electronic use, and providing electronic services to the users anywhere they exist. On the other and, significant differences in participants' answers highlighted by Mann Whitney U test are mainly due to those who agree and strongly agree.

Table-5. What should be done to promote effective e-government in Kuwait

			S+J	Mann-Whitney U	
	Mean	Median	Deviation	Z	Sig. (2-tailed)
Support from top management to adopt e-management	4.28	5.00	1.22	-0.05	0.96
Provide employees with necessary training	4.32	5.00	1.16	-2.10	0.04
Attract specialists in the fields of management and computing	4.32	5.00	1.15	-1.76	0.08
Provide programs to protect public data and information	4.40	5.00	1.08	-2.67	0.01
Simplifying managerial procedures to enable its electronic use	4.54	5.00	0.95	-3.41	0.00
Introducing legislations and regulation that facilitate the adoption of e-government	4.48	5.00	0.92	-2.73	0.01
Supporting research and studies relating to electronic management	4.49	5.00	0.86	-1.98	0.05
Marinating electronic equipment and programs regularly	4.56	5.00	0.87	-2.68	0.01
Providing necessary technical support to insure effective electronic work	4.58	5.00	0.85	-0.88	0.38
Extending participation in decision making circles	4.41	5.00	0.98	-2.07	0.04
Ensuring continuous contact with employees	4.47	5.00	0.96	-3.18	0.00
Promoting trust in electronic transaction	4.48	5.00	0.99	-2.29	0.02
Providing electronic services to the users anywhere they exist	4.51	5.00	0.99	-2.68	0.01

5. CONCLUSION

This study is set out to assess the existing electronic facilities available in the public sector of Kuwait, to identify possible obstacles towards introducing effective e-government and what should be done to overcome these obstacles. To achieve these objectives, during the period between January and April 2017, a questionnaire was distributed to 275 public sector employees at different managerial levels. 200 questionnaires returned completed resulting in 72% usable response rate. The participants in the questionnaire survey represent different managerial levels with Kuwaiti and non-Kuwaiti nationalities and a significant proportion of them are females. The participants also represent different age groups and different levels of academic qualifications. The participants further possess different levels of internet and information technology knowledge with variations in their levels of experience. The result of the questionnaire analysis revealed that Kuwait has the required financial resources to enable it to run an effective e-government system. They believe that Kuwait lacks an effective infrastructure of information technology. Many of the participants in the questionnaire survey demonstrated an average or low level of knowledge and experience in information technology. The participants believe the current information technology system adopted by the Kuwaiti government is not secured enough to protect public data and information. The participants consider lack of staff proper training programs, inefficiency in allocating financial resources, lack of policy and regulation of e-usage and lack partnership and collaboration are the main obstacles towards introducing effective e-government in Kuwait. Although the participants either agreed or strongly agreed with what should be done, included in the questionnaire, to promote effective e-government in Kuwait, the participants attached their highest agreements to providing necessary technical support to insure effective electronic work, marinating electronic equipment and programs regularly, simplifying managerial procedures to enable its electronic use and providing electronic services to the users anywhere they exist.

Funding: This study received no specific financial support.

Competing Interests: The authors declare that they have no competing interests.

Contributors/Acknowledgement: All authors contributed equally to the conception and design of the study.

REFERENCES

- Abdelsalam, H., C. Reddick and H. El Kadi, 2012. Success and failure of local e-government projects: Lessons learned from Egypt. Digital Democracy: Concepts, Methodologies, Tools, and Applications, 3: 183-201. View at Google Scholar | View at Publisher
- Al-Gharbi, K. and A. Al-Kindi, 2010. E-Government Initiative in the sultanate of Oman: The case of Ubar. International Journal of Technology Diffusion, 1(1): 70-74. *View at Publisher*
- AL-Hussaini, A., N. AL-Mutairi and S. Thuwaini, 2013. The impact of adopting E-government on reduce administrative corruption: Empirical evidence from Kuwait's public sector. Academy of Contemporary Research Journal, 2(2): 31-43. View at Google Scholar
- AL-Kaabi, R., 2010. Secure and failure factors of e-government projects implementation in developing country: A study on the implementation of Kingdom of Bahrain. International Scholarly and Scientific Research & Innovation, 4(6): 659-662. View at Google Scholar
- Al-Khouri, A., 2012. E-government strategies the case of the United Arab Emirates (UAE). European Journal of ePractice, 17(September): 126-150. View at Google Scholar
- Al-Omari, H., 2006. E-government architecture in Jordan: A comparative analysis. Journal of Computer Science, 2(11): 846-852. View at Google Scholar | View at Publisher
- Al-Shafi, S. and V. Weerakkody, 2009. Understanding citizens' behavioral intention in the adoption of e-government services in the state of Qatar. 17th European Conference on Information Systems. pp: 1-13.

- Al-Shboul, M., O. Rababah, M. Al-Shboul, R. Ghnemat and S. Al-Saqqa, 2014. Challenges and factors affecting the implementation of E-government in Jordan. Journal of Software Engineering and Applications, 7(13): 1111-1127. View at Google Scholar | View at Publisher
- Al Awadhi, S. and A. Morris, 2009. Factors influencing the adoption of e-government services. Journal of Software, 4(6): 584-590. View at Google Scholar | View at Publisher
- Alam, M., 2012. E-governance in Bangladesh: Present problems and possible suggestions for future development. International Journal of Applied Information Systems, 4(8): 21-25. View at Google Scholar | View at Publisher
- Alomari, M., 2014. Discovering citizens reaction toward E-government; factors in E-government adoption. Journal of Information Systems and Technology Management, 11(1): 5-20. View at Google Scholar | View at Publisher
- Alotaibi, R., L. Houghton and K. Sandhu, 2016. Exploring the potential factors influencing the adoption of M-government services in Saudi Arabia: A qualitative analysis. International Journal of Business and Management, 11(8): 56-71. View at Google Scholar | View at Publisher
- Alshehri, M. and S. Drew, 2010. Challenges of e-government services adoption in Saudi Arabia from an e-ready citizen perspective. World Academy of Science, Engineering and Technology, 66: 1053-1059.
- Alshehri, M., S. Drew and O. Alfarraj, 2012. A comprehensive analysis of E-government services adoption in Saudi Arabia: Obstacles and challenges. International Journal of Advanced Computer Science and Applications, 3(2): 1-6. View at Google Scholar
- Atashak, M. and P. Mahzadeh, 2009. E-government status in Iran (TAKFA Plan Case Study). World Applied Sciences Journal, 4(Supple 2): 12-20. View at Google Scholar
- Basamh, S., H. Qudaih and M. Suhaimi, 2014. E-government implementation in the Kingdom of Saudi Arabia: An exploratory study on current practices, obstacles & challenges. International Journal of Humanities and Social Science, 4(2): 296-300. View at Google Scholar
- ElBaradei, L., H. Shamma and N. Saada, 2012. Examining the marketing of e-government services in Egypt. International Journal of Business and Public Management, 2(2): 12-22. View at Google Scholar
- Gebba, T. and M. Zakaria, 2015. E-government in Egypt: An analysis of practices and challenges. International Journal of Business Research and Development, 4(2): 11-25. *View at Google Scholar* | *View at Publisher*
- Haidar, G. and A. A. Bakar, 2012. E-government success in Malaysia through government portal and website assessment. International Journal of Computer Science 9(4): 01-909. View at Google Scholar
- Haider, Z., C. Shuwen and Z. Abbassi, 2015. Adoption of e-government in Pakistan: Demand perspective. International Journal of Advanced Computer Science and Applications, 6(5): 71-80. *View at Google Scholar* | *View at Publisher*
- Hassan, R., 2013. E-governance and e-government in Bangladesh: Performance, challenges and remedies. Asian Journal of Applied Science and Engineering, 2(3): 210-216. *View at Google Scholar*
- Ji, H. and Y. Liang, 2016. Exploring the determinants affecting E-government cloud adoption in China. International Journal of Business and Management, 11(4): 81-90. *View at Google Scholar* | *View at Publisher*
- Kayani, M., M. UlHaq, M. Perwez and H. Humayun, 2011. Analyzing barriers in e-government implementation in Pakistan. International Journal for Infonomics, 4(3/4): 494-500. View at Google Scholar | View at Publisher
- Khasawneh, S., H.Y. Jalghoum and R. Obiedat, 2011. E-government program in Jordan: From inception to future plans. International Journal of Computer Science Issues, 8(4): 568-582. View at Google Scholar
- Meftah, M., B. Gharleghi and B. Samadi, 2015. Adoption of E-government among Bahraini citizens. Asian Social Science, 11(4): 141-149. View at Google Scholar | View at Publisher
- Mohammad, H., T. Almarabeh and A. A. Ali, 2009. E-government in Jordan. European Journal of Scientific Research, 35(2): 188-197. View at Google Scholar
- Naqvi, S. and H. Al-Shihi, 2009. M-government Services Initiatives in Oman. Issues in Informing Science and Information Technology, 6: 817-824. View at Google Scholar | View at Publisher

- Omari, A., 2013. Technology adoption in the Arabian Gulf Countries: The case of E-government. International Journal of Computer Science, Engineering and Information Technology, 3(3): 1-8. *View at Google Scholar* | *View at Publisher*
- Qaisar, N. and H. Khan, 2010. E-Government challenges in public sector: A case study of Pakistan. International Journal of Computer Science Issues, 7(5): 310-317. View at Google Scholar
- Ramli, R., 2012. Malaysian E-government: Issues and challenges in public administration. International Proceedings of Economics Development & Research, 48(September): 19-23. View at Google Scholar | View at Publisher
- Shahghasemi, E., B. Tafazzoli, M. Akhavan, G. Mirani and T. Khairkhah, 2013. Electronic government in Iran: A case study. Online Journal of Social Sciences Research, 2(29): 254-262.
- Weerakkody, V., S. Al-Shafi, Z. Irani and H. Lee, 2009. E-government adoption in Qatar: Investigating the citizens' perspective. Diffusion Interest Group In Information Technology, Proceedings Paper, 3: 1-19.
- Yaghoubi, N., A. Haghi and S. Asl, 2011. E-government and citizen satisfaction in Iran: Empirical study on ICT offices. World Applied Sciences Journal, 12(7): 1084-1092. *View at Google Scholar*
- Ziemba, E., T. Papaj and M. Jadamus-Hacura, 2015. E-government success factors: A perspective on government units. Issues in Information Systems, 16(2): 16-27. *View at Google Scholar*

Views and opinions expressed in this article are the views and opinions of the author(s), Asian Economic and Financial Review shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.