

Historical Development of E-Government in the Middle East



Faisal L F H Almutairi, Ramayah Thurasamy, Jasmine A. L. Yeap

Abstract: *The intention of this paper is to explore historical development of e-governance in Kuwait. The study explore the overview of the development of e-governance, the Development of E-Governance in Middle Eastern Countries detailing the level of progress made so far acknowledged by various international organizations which UN, OECD among others. Similarly, the paper explore the Status of E-Government in the Middle East, the Contribution of E-Governance in Sustainable Governance in Middle East. Contextually, the paper thoroughly discussed E-Governance in Kuwait as well the Challenges of Implementation and Development of E-Governance in Kuwait. The paper finally provided Recommendations for Improvement including a call on Kuwaiti government to invest in upgrading its ICT and internet infrastructure in order to enable good provision of services.*

Keywords: *History, Development, e-governance, Middle East.*

I. INTRODUCTION

Several governments worldwide are already leveraging on the opportunities brought about by digital technologies in pursuit of improving governance and provision of public services. As such, governments are already adopting the e-government framework and competing for a leading position in the e-government arena (Al-Khoury, 2013). Interestingly, the concept of e-government stems from the desire to provide convenient and round the clock access of government public services to better serve the people. According to Al-Khoury (2013, p. 1), the United Nations defined e-government as "...the employment of the internet and the world wide web for delivering government information and services to the citizens". From this definition, it can be noted that the concept of e-government can be association with the evolution of public administration and governance towards the use of information and communication technologies (ICTs) and digital technologies to achieve broader policy objectives. Middle East is among the developing regions in the world. It also a region that is currently attempting to transform its governance and public administration towards the provision

of more efficient and accessible government services to meet the changing needs of the people. This paper aims to provide a better understanding of the development of e-governance in the Middle East. In particular, this paper focuses on the development of e-government in Kuwait to provide better insights in terms of realizing long term goals of e-government transformation in the Middle East. As such, this paper begins by exploring the development of e-governance followed by a discussion on the development of e-governance in the Middle East. Next, a discussion on the e-governance in Kuwait is presented including the challenges in the implementation of e-government in the country.

Overview of the Development of E-Governance

In a way, e-governance may be described as the delivery of services and information to citizens or the public using digital technology or electronic means. This entails the use of ICTs and digital platforms by government entities in order to promote a transparent, efficient and speedy process of providing information and government services to the public. As such, e-governance is a growing concept that is being associated with development, services, improved access and enabling of citizen relationship among others (Al-Khoury, 2013).

According to Gronlund and Horan (2005), the concept of e-government emerged during the late 1990s under the context of sharing experiences among practitioners. As years went by, the concept of e-goverment gave rise to the consideration of more scientific and technological contents. Several conferences have been initiated towards the evolution of the e-governance context towards shifting to the use of information technology in governments (Gronlund and Horan, 2005). The reinvention of governments towards the concept of e-government paved way to its transformation to e-governance as the digital era emerged. As explained by Dawes (2008), e-government can be understood as the use of ICTs and the internet as a tool to achieve a better government yet as the world evolves, this definition is added upon to include citizen empowerment through access to information. This broader view conceptualizes e-government beyond services and administration to include relationship with citizens, society, private sector and the state which collectively constituted the concept of e-governance (Dawes, 2008).

In order to cope with emerging trends in today's highly globalized and dynamic environment, governments in several countries worldwide are already adopting modernization and undergoing transformation from traditional department centric to being citizen centric in relation to the delivery of government services and the provision of access to information (Al-Khoury, 2011).

Manuscript published on January 30, 2020.

* Correspondence Author

Faisal L F H Almutairi*, PhD, Department of Technology Management, University of Science Malaysia (Usm),

Ramayah Thurasamy, School of Management Studies, Universiti Sains Malaysia. ramayah@usm.my -

Jasmine A.L. Yeap, School of Management studies, Universiti Sains Malaysia. jasmine@usm.my -

© The Authors. Published by Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP). This is an [open access](http://creativecommons.org/licenses/by-nc-nd/4.0/) article under the CC-BY-NC-ND license

This transformation is in pursuit of creating a more integrated government to project a single government view to citizens. According to Al-Khouri (2011), transformation toward e-governance is a process that begins with the integration of isolated departments, followed by the integration of service provider level and finally, projecting a single government view to allow citizens access to one stop shop portals when availing government services.

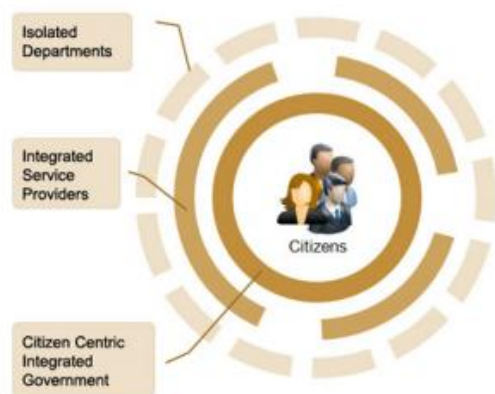


Fig. 1 Stages of E-Government Transformation (Al-Khouri, 2011)

The Development of E-Governance in Middle Eastern Countries

The concept of e-government was first applied in emerging economies as a tool for modernization. It was not until the 1990s that the perspective of modern government as an effective tool for economic and social development appealed to Arab governments (Mishrif and Selmanovic, 2010). Interestingly, international organizations such as UNDP, OECD and the World Bank played vital roles in influencing the modernization of Arab governments towards the implementation of e-governance in several Arab countries. In line with this, a number of initiatives on governance and management of public institutions in the Middle East have been established by various international organizations over the past decade (Mishrif and Selmanovic, 2010). This includes the Programme on Governance in the Arab region established in 2000 by UNDP as part of the organization's drive for democratic governance in the Arab region (Mishrif and Selmanovic, 2010). In relation to this, the World Bank has also sponsored programmes on better governance in the MENA region encompassing the achievement of widening inclusiveness in analysing government policies and reinforcing public accountability (Mishrif and Selmanovic, 2010). Thus, the focus on promoting international exchange of best practices and solutions in relation to public administration efficiency led to the implementation of e-government tools in Arab governments. According to Mishrif and Selmanovic (2010), the MENA region is still in the early development phase of the use of e-government tools. Yet, public governance reforms, particularly in the Middle East region has become a policy aspiration towards fostering economic growth and improving public satisfaction on government services and information transparency (Dixon, Bhuiyan and Ustuner, 2018). Thus, a number of countries in the Middle East have already been implementing

e-governance practices to improve the capacity and efficiency of their public institutions and services. Currently, several Middle Eastern countries, led by UAE and Turkey, already started investing in and embracing administrative reforms towards the use of ICTs in transforming the operations of public administration (Dixon, Bhuiyan and Ustuner, 2018).

Status of E-Government in the Middle East.

The Middle East is among the regions that is currently transforming and taking important steps towards coping with this digital shift. In line with this, governments of several Middle Eastern countries are already making efforts of leveraging ICTs to drive performance efficiency of public sectors (OECD, 2017). This suggests that the development of e-government in Middle Eastern countries is already being implemented in pursuit of advancing their public administration performance and services.

Country	Level of Income	EGDI	2018 Rank	2016 Rank	Change in Rank*
United Arab Emirates	High income	Very High EGDI	21	29	+8
Bahrain	High income	Very High EGDI	26	24	-2
Kuwait	High income	High EGDI	41	40	-1
Qatar	High income	High EGDI	51	48	-3
Saudi Arabia	High income	High EGDI	52	44	-8
Oman	High income	High EGDI	63	66	+3

* A plus sign (+) implies rank improvement, while minus (-) sign implies rank drop.

Fig. 2 Level of E-Government Development in GCC Member States (United Nations, 2018)

Fig. 1. In figure 2, it highlights that in the Gulf Cooperation Council (GCC) member states, UAE and Bahrain have the highest E-Government Development Index (EGDI) score wherein the countries ranked 21st and 26th in the global EGDI ranking in 2018 (United Nations, 2018). According to the same report, the GCC countries have been noted to achieve substantial accomplishments in relation to improving e-government systems. The ranking of the GCC countries in the EGDI report suggests that improvements in the implementation of e-governance is underway in the Middle Eastern region.

Fig. 2. Moreover, Go-Gulf.com (2018) noted that e-governance in Middle East is currently growing wherein more and more Middle Eastern countries are starting to adopt e-governance and implementing e-government tools in government services and departments. Interestingly, the top goals for the implementation of digital governance strategies include gaining efficiency in government processes and operations, promoting transparency in the public sector, enhancing data information management, developing better services, improving public sector coordination, improving public sector agility and supporting a more inclusive decision making process (Go-Gulf.com, 2018).



Fig. 3 Top Goals for Implementing E-Government Strategies (Go-Gulf.com, 2018)

As shown in figure 3, among the top goals for the implementation of e-government strategies, areas for improvement highlights the need to improve coordination and agility of the public sector and improve support to more inclusive decision making process. Moreover, the current status of the Middle East in different policy areas highlight a 100 per cent focus on general public services and 85 per cent focus on both health and education (Go-Gulf.com, 2018). These statistics suggests that the current status of e-governance in the Middle East is growing driven by the success of the e-governance implementation of the leading GCC member states, UAE, Bahrain and Kuwait.

Contribution of E-Governance in Sustainable Governance in Middle East

E-governance play a vital role in promoting sustainable development not just in the Middle East but in other regions as well. E-governance is currently being associated with good governance due to its capability to facilitate successful civic engagement programs particularly in relation to promoting access to and appropriate use of information, promoting citizen knowledge and awareness and improving engagement with public authorities (Bhargava, et al, 2019). Additionally, e-governance is also being viewed as an effective tool for promoting sustainable development as well as effective contributor to the achievement of sustainable development goals (Estevez, Janowski and Dzhushupova, 2013).

Apparently, the use of ICTs in the government systems contribute to promoting efficiency of government processes and performance leading to enhanced interactions with the people that creates positive impacts to the society as a whole (Estevez, Janowski and Dzhushupova, 2013). As explained by the same authors, e-governance contributes to enabling public participation in government decision making thereby promoting equity and socio-economic development. More so, e-governance is also being viewed as an effective solution to addressing lack of transparency and citizen involvement and lack of readiness and adoption of ICT (Kettani and Moulin, 2014). This suggests that the implementation of e-governance contribute to the adoption of sustainable governance that can lead to the development of sustainable livelihoods and practices.

E-Governance in Kuwait

Kuwait is a developing economy in the Middle East region that is one of those that embraced and adopted e-governance

in pursuit of improving the efficiency of its government services and achieving sustainable development. According to Boujarwah (2006), as part of Kuwait’s commitment to continuously improve its services, projects such as automating manual processes through IT adoption are being implemented by government entities and ministries. In 2000, the Cabinet of Ministers issued a decree to form the Kuwait e-government committee with the main task of developing a vision for e-government projects in the country (Boujarwah, 2006). Since then, Kuwait has been continuously making substantial effort in the effective implementation of its e-government projects. By 2006, there are already about 50 government services that were made available through Kuwait’s e-government portal (Rabaai, et al, 2016).

In the 2018 e-government survey conducted by United Nations, Kuwait scored 0.7388 in e-government development index thereby ranking 41st in the global e-government ranking (United Nations, 2018). Kuwait ranked behind its neighboring GCC countries UAE (ranked 21st) and Bahrain (ranked 26th) with EGDI scores of 0.8295 and 0.8116 respectively. This suggests that whilst Kuwait holds the third position of GCC member states’ EGDI ranking, there is a wide gap in the ranking between UAE, Bahrain and Kuwait demonstrating the need for the Kuwaiti government to improve on its e-governance implementation and adoption. Accordingly, Kuwait still needs to improve on its readiness and capacity to use ICTs in delivering public services.

Despite this, Kuwait has shown remarkable advancement in terms of the adoption of e-governance and the implementation of e-government programmes. Among the government institutions in Kuwait that already applies e-government services include the Ministry of Interior (<http://www.e.gov.kw>), Ministry of Health (<http://www.moh.gov.kw>), Ministry of Justice (<http://www.moj.gov.kw>) and Civil Service Commission (www.csc.net.kw) among others (Boujarwah, 2006).

Challenges of Implementation and Development of E-Governance in Kuwait

Whilst significant improvements can be seen in the implementation of e-governance in Kuwait, the country still needs to improve its EGDI score and ranking. In line with this, it is important to note that there are some challenges that need to be addressed in order to improve its e-government readiness index including unsatisfactory use of government services, lack of e-governance public awareness and weak public trust and confidence on the security of e-government (online) services (Rabaai, et al, 2016). Moreover, Boujarwah (2006) identified some of the challenges in the implementation of e-governance in Kuwait to include lack of proper provision for privacy and security of personal information, Most of the e-government websites only support the Arabic language, unavailability of online payment options in some websites and lack of provisions for receiving email updates among others. Moreover, government effectiveness remains to be a challenge for the Kuwaiti government thereby influencing the adoption of e-governance in the country. In 2016, Kuwait scored -0.18 in the government effectiveness index down from its 0.17 score in 2010 (Fakir and Yerkes, 2017).

II. RESULT AND RECOMMENDATIONS FOR IMPROVEMENT

1	Upgrading its ICT and internet infrastructure	In order to improve the EGD ranking of Kuwait and its e-governance implementation, it is recommended for the Kuwaiti government to invest in upgrading its ICT and internet infrastructure in order to enable good provision of services
2	Improving internet services	According to Rabaai, et al (2016), one of the issues that need to be addressed by Kuwait is improving internet services in order to foster ease of access to e-government services.
3	Develop policy frameworks	develop policy frameworks it is also recommended for policy makers to develop policy frameworks associated with moving forward to digital transformation to create public awareness and to encourage citizen engagement. According to OECD (2017), effective policies are viewed as best practices of e-governance implementation in OECD countries.
4	Digital curricula in educational institutions.	Digital curricula in educational institutions. Finally, it is also being recommended for the Kuwaiti government to integrate digital curricula in educational institutions in order to create digital talents for sustainability of e-governance initiative

III. CONCLUSION

This paper aims to provide a better understanding of the development of e-governance in the Middle East using Kuwait as a case study. Based from research, e-governance in the Middle East is currently growing and more and more Middle Eastern countries are beginning to embrace the use of ICT and digital technologies in pursuit of enhancing efficiency of the provision of government services to the public. Kuwait is one of the Middle Eastern countries that has shown remarkable improvements in the implementation of e-governance. However, there are still some areas for improvement particularly in terms of promoting public awareness, enhancing privacy and security of online services and improving internet services and infrastructure among others.

REFERENCES

- Al-Khour, A. M. (2013). e-Government in Arab Countries: A 6-Stage Roadmap to Develop the Public Sector. *Journal of Management and Strategy*, 4(1), 1-28
- Al-Khour, A. M. (2011). An Innovative Approach for E-Government Transformation. *International Journal of Managing Value and Supply Chains*, 2(1), 22-43
- Bhargava, V., Elmendorf, A. E., Gray, S., Kafka, B., Ritchie, D. and Little, S. (2019). Expanding Civil Society Contributions to the Governance Agendas of the Sustainable Development Goals and International Financial Institutions. Washington, DC: The Partnership for Transparency
- Boujarwah, A. (2006). E-Government in Kuwait: From Vision to Reality. Retrieved from <https://pdfs.semanticscholar.org/2be2/c4868eded8032a19133973c875a724ec9d8f.pdf>
- Dawes, S. S. (2008). The Evolution and Continuing Challenges of E-Governance. *Public Administration Review*, S86-S102
- Dixon, J., Bhuiyan, S. and Ustuner, Y. (2018). Public Administration in the Middle East and North Africa. *International Journal of Public Administration*, 41(10), 759-764
- Estevez, E., Janowski, T. and Dzhusupova, Z. (2013). Electronic Governance for Sustainable Development – How EGOV Solutions Contribute to SD Goals? Proceedings of the 14th Annual International Conference on Digital Government Research. June 17–20, 2013, Quebec, Canada
- Fakir, I. and Yerkes, S. (2017). Governance and the Future of the Arab World. Retrieved from <https://carnegieendowment.org/2018/10/16/governance-and-future-of-arab-world-pub-77501>

- Gronlund, A. and Horan, T. A. (2005). Introducing e-Gov: History, Definitions, and Issues. *Communications of the Association for Information Systems*, 15(39), 713-729
- Kettani, D. and Moulin, B. (2014). E-Government for Good Governance in Developing Countries - Empirical Evidence from the eFoz Project. International Development Research Centre. ISBN 978-1-55250-561-8
- Mishrif, A. and Selmanovic, S. (2010). E-Government in the Middle East and North Africa, the Role of International Organisations in the Experience of Egypt and Morocco. 2010 International Conference of Public Administration (ICPA 6th), At Canberra, Australia, January 2010.
- OECD. (2017). Benchmarking Digital Government Strategies in MENA Countries. OECD Digital Government Studies. Paris: OECD Publishing. <http://dx.doi.org/10.1787/9789264268012-en>
- Rabaai, A. A., Zogheib, B., Alshatti, A. and Al Jamal, E. (2016). Adoption of e-Government in Developing Countries: The Case of the State of Kuwait. *Journal of Emerging Trends in Computing and Information Sciences*, 7(2), 77-101
- United Nations. (2018). United Nations E-Government Survey 2018. New York: United Nations

AUTHORS PROFILE



Faisal L F H Almutairi, holds a bachelor of business in information system from Victoria University (VU) Melbourne, and master in MBA from University of Central Lancashire (UCLAN) UK. Currently, he is doing a PhD in technology management in the University of Science Malaysia (USM), in the School of Management.

His research areas include technology implementation, adoption and diffusion.



Ramayah Thurasamy has an MBA from Universiti Sains Malaysia (USM). Currently he is a Professor at the School of Management in USM. He teaches mainly courses in Research Methodology and Business Statistics. Apart from teaching, he is an avid researcher, especially in the areas of technology management and adoption in business and education. His publications have appeared in *Computers in Human Behavior*, *Resources Conservation and Recycling*, *Journal of Educational Technology & Society*, *Direct Marketing: An International Journal*, *Information Development*, *Journal of Project Management (JoPM)*, *Management Research News (MRN)*, *International Journal of Information Management*, *International Journal of Services and Operations Management (IJSOM)*, *Engineering, Construction and Architectural Management (ECAM)* and *North American Journal of Psychology*. He is constantly invited to serve on the editorial boards and program committees of many international journals and conferences of repute.



Jasmine A.L. Yeap, holds a PhD in technology management, an MBA and a Bachelor of Management degree specialising in Marketing from Universiti Sains Malaysia (USM). She joined the School of Management, USM as a lecturer in 2015 and teaches marketing-related subjects. Prior to that, she has worked with numerous researchers under diverse research projects ranging from topics in marketing, organisational behaviour, psychometrics and technology management to strategic planning in education. She is actively involved in research having most of her works published in journals of repute as well as presented at both local and international conferences. Her research areas include technology implementation, adoption and diffusion; social media and its impact; retailing as well as consumer behaviour.