

Development from E-Government to Smart Government in the United Arab Emirates

Sameer Baniyassen

Department of Mass Communication
College of Humanities and Social Sciences
United Arab Emirates University, UAE

Abstract: The government of the United Arab Emirates has been through many administrative reforms ever since the Union began in 1971. In their effort to change the operation of the country, the duty of the leadership of the state has been core in instilling a culture of improving services and implementing effective policies using many tools. More recently, the government's vision to achieve the happiness of its people has played a significant role in the reconfiguration of the e-government tool. At the start of 2013, the government of UAE developed the concept of smart government or mobile government. Analysts viewed that idea as a changed vision to outshine its e-government to get to the level of smart government in just two years. To comprehend the changing relationship between smart government, e-government, quality public service, and innovation, it is necessary to take a look at the various changes that are happening in the modern globalized world. Information and Communications Technologies (ICT) are some of the significant changes that the world has experienced in the last few decades. ICT has affected how governments, businesses, and people relate to each other. The fast diffusion of broadband networks, mobile telephony, and demonstrate the degree of pervasiveness to which ICT has gotten. At the moment, it is seen as one of the most significant segments that create digital economies and digital societies.

Introduction

The pace at which various countries revolutionize their operations depends on how prepared they are in many elements of their political and social environments. Modern technology has shown its ability to threaten the existent economic relationships and power settings. The many usages that ICT has been put to in the past few decades have demonstrated how transformative it can be and how it can be used as a vital tool in arranging political disagreement in many nations across the globe. From a government viewpoint, the adoption of e-government is becoming a necessary task. E-government is mostly about facilitating government operations and enabling the transfer of governmental services and information. The ultimate objective of e-governance is to attain an improved public service portfolio to its citizens in a cost-friendly but efficient manner. The advantages that one should anticipate when they decide to adopt e-government are things like

better service delivery, improved efficiency, more transparency and accountability, and better access to public facilities for citizens. This paper aims to assess some of the challenges that arise when one tries to develop and implement successful e-government policies and the role that ICT has to play in this process.

Defining e-Government

For a person to get an understanding of what e-Government is, they must first understand the general meaning and functions of a government. A government is a dynamic combination of structures, goals, and functions (Chatfield & Alhujran, 2009). The initiatives of e-Government are complicated efforts to change that are expected to employ modern technology to aid a shift in the effectiveness of the government and its operations. One of the major drawbacks in implementing this system is keeping a key focus on government activities and not the technology that is used to run the operations. E-government is not just about building a website for the

relevant people to access information or putting computers to use. It is more about changing the nature of the fundamental relationships between the public sector of a country and its government. It is about using technology to transform how the government offers its services. E-government requires state agencies to continually ask themselves a few relevant questions (Almarabeh & AbuAli, 2010). First, they need to interrogate themselves on what roles they are tasked with, in the overall execution of the business of the government. They then need to ask themselves how they can transform their present models of performing these functions using new and improved technology. Finally, they need to determine whether the new models they think of adopting reflect the collective priorities and concern of the public (Al Nagi & Hamdan, 2009). Why countries need e-governance

During the industrial age, the innovation of airlines and railways changed the businesses and the society of the time in ways that could not be previously imagined. The change allowed the companies that were in operation then, to efficiently move and occupy new markets and easily access new suppliers (Siau & Long, 2006). In the same way that the railways and the airlines were the new public and business utility of the time, the internet is the spine of the infrastructure in the ever-growing age of information. The effect of the web today is being felt across both the old and new economies of the world (Salem, 2006). This effect enables service and manufacturing industries to lower their costs of operation, get into new markets, redefine business interactions, and build additional streams of revenue. "Images of the brave new world made possible by digital governance are everywhere" (Alshawi & Alalwany, 2009). Most of the people reading this article must have in one way or another experienced the immense potential that the web has to change the relationships they have with each other, with the business world, and more recently with their

government.

"Getting citizens out of line and bringing them online" are just but a few phrases that the relevant stakeholders are using to come up with visions of the new citizen-government relationships in their respective countries (Palvia & Sharma, 2007). These images allow businesses, the employees of the government, and other citizens to think about accessing information, registering their cars, electronically filing their tax return, and sorting bills and fees from any location of their choice. The momentum for the new models of delivering government services is surely gaining momentum throughout many sectors of various states. No country wants to remain behind in the race to improve their governance through the electronic provision of services and information to its citizens. The digital government vision that the images create is quite compelling and persuasive. Even as people pay attention to the image, which they absolutely should, they should also pay attention to the processes required to implement the vision (Ciborra & Navara, 2005). Any digital initiative undertaken by the government is usually a complex mix of policy, managerial, and technological challenges. If the people tasked with implementing the new models of delivering government services do not understand and address these complex issues, then they run the risk of a costly failure (Heeks & Bailur, 2007).

The E-government Journey in the UAE

Over the last few decades, many nations have concentrated on coming up with strategies and policies surrounding the emerging idea of e-government. Some countries have made faster progress than others in terms of action and implementation and successfully registered the intended results. Through constant initiative and enthusiasm from its leader and with a drive towards reforms, the UAE has managed to achieve tremendous successes with its e-government initiatives. The pairing of the paradigms of government performance, excellence models, and ideas on quality

management naturally led the UAE to adopt e-government as a new century began. In February 2001, the UAE government came up with the first e-government concept in the ministry of finance (Layne & Lee, 2001). This concept was known as the E-Dirham and was launched in the federal government to face out the traditional fee collection means. In November 2002, a federal government commission on the formulation and implementation of the e-government initiative was formed under the “Ministry of Finance and Industry” (Al-Khour, 2012). Nearly four months later, the government of UAE assigned IBM to carry out a study of the governmental bodies and come up with an implantation strategy. The Ministry of Finance also led this process. In June 2004, the UAE government signed a Memorandum of Understanding that gave the “Emirates Telecommunications Commission (Etisalat),” the rights to provide the necessary infrastructure to implement e-government (Bertot, Jaeger, & Grimes, 2010). The plan was sub-divided into three segments which were supposed to conclude in 2007. In March of the following year, the government launched the country’s first e-government portal in conjunction with Etisalat which got the official assignment of implementing the project (AlAwadhi & Morris, 2009).

March and July 2006 saw the Government Issue a ministerial order to transfer the programme of e-governance from the finance ministry to the Government Sector Development Ministry (Salem, 2006). Nearly two years later, the government issued another ministerial directive to give the Telecommunications Regulatory Authority (TRA) the duty of heading efforts to come up with a strategy for UAE information systems. The TRA then co-operated with Booz Allen Hamilton to come up with “information systems strategies for the UAE federal government” (Cordella, 2007). Another two years later, the Prime Minister’s Office created a “Government Service Development Strategy”

that became the third foundational aspects of the e-government plan in the UAE (Bin Touq, 2015). Sheikh Mohammed bin Rashid Al Maktoum, in May 2013, to provide round the clock government services and enable people to access these services from any part of the country, presided over the launch of the Mobile Government Initiative. Many people refer to the initiative as the United Arab Emirates’ smart government (Bin Touq, 2015). In his inauguration speech on the launch of the smart government, Sheikh Mohammed expressed his optimism about the success of his government in promoting innovative e-government. He mentioned that he was happy with the progress that his cabinet, through the relevant ministries, was making on the e-government platform. However, he added, that there was a need to make the system more efficient and more convenient. As a result, he proposed that the e-government services be made available on the phone for everyone that needs it. The smart government was reliant on the fact that the UAE has one of the world’s best communication infrastructure with nearly “14 million mobile phone subscribers” and approximately one phone for every two people (Bin Touq, 2015). After more than 13 years and 1000 more e-services since the e-Dirham was launched, the visionary and wise leadership of the United Arab Emirates have further simplified the process that citizens have to go through to access services from the government. Smartphone technology has made it possible for people to access government services at the convenience of their phones.

How ICT has helped the United Arab Emirates Implement its E-government system

ICT can play a significant role in poverty eradication and development of innovative systems that sustainably improve the lives of human beings (Pons, 2004). It is also an active facilitator of development goals due to how it enhances communication and the transfer of information and knowledge that is necessary for

any process of development (Evans & Yen, 2006). ICT is cross-cutting and pervasive, and has a broad range of impacts on various human activities and is a significant tool in the creation of wealth in developed countries like the United Arab Emirates. As an innovator, multiplier, driver, and accelerator, ICT are "a powerful if not an indispensable tool" in the significant scale-up of interventions like the e-government (Evans & Yen, 2006). However, the rate at which various countries around the world adopt ICT in their operations depends on the preparedness of several elements (Al-Khouri, 2012).

In summary, through e-government, the government of the UAE can facilitate the working of the government and "the distribution of the governmental services and information" (Al-Khouri, 2012). In its most basic form, E-government is the use of ICT to give citizens the access they need to national information and to give public services to business partners and citizens. However, practitioners in the UAE are still trying to discover ways in which they can explore the full potential of the tool in implementing their e-government. ICT plays a vital role in helping the government of the UAE to FastTrack the flow of knowledge and information between the government, its citizens, and the businesses that they interact with (Al-Khouri, 2012). The government of the UAE has made massive investments in ICT in the last decade. This investment follows the realization that without ICT, the e-governance the country so much hopes to implement successfully will remain a dream. E-government is a route to good governance that can only be enabled through ICT; therefore without employing ICT; there is no e-governance. ICT allows for the integration of the processes, people, and infrastructure that is required to ensure that any e-government succeeds. For the e-government of the UAE to succeed, it needs continuous updates and feedbacks from all the important participants in the process. There is no better tool to allow for

that in today's word than ICT. Since some of the services and information transferred through the platform are very sensitive, ICT is necessary to secure the interactions that take place on the platform (Al-Khouri, 2012). Through ICT, the government of UAE can pick up the electronic identities of every person using the system and give them unique codes to be able to access and protect their details in the system.

A Nexus between Smart Government and E-government

"At the start of the new millennium, some new public management (NPM)" skeptics like Dunleavy argued categorically that the spirit of reform of NPM has gradually declined in many nations (Bhatnagar, 2004). It has gotten more complicated as a form of governance in managing policies and institutions. Based on the research of these skeptics in "seven leading-edge nations," they observed that digital-age governance has made as a shift from NPM has made the state-citizen closer through service integration, engagement, and openness (Cordella, 2007). Undoubtedly, governance led by ICT (e-government) is now one of the public sector's most popular tools. It plays the roles of aiding in better decision making, enhancing transparency and accountability, and data analysis (Kumar et al., 2007). On top of that, these frameworks facilitate the interactions of businesses, governments, and citizens across levels of government like federal, state, and municipal levels. People refer to these automated systems as e-government in theory.

E-government can be defined, in a narrow sense, as the use of ICT, most so web technology and the internet to run the activities of the government as relates to the stakeholders of the government. Employing ICT in executing government functions is not a new phenomenon. Most programs that are considered to have started with e-government are just a continuation of the 1980s and 1990s project computerization in state

agencies (Jaeger & Thompson, 2003). For instance, the Korean government used computers during this time to store government information in a digital setup. Different administrative infrastructure and databases were created to offer particular public services to the citizens. Other states like South Korea and Singapore even started a campaign for increased use of e-government and the Internet by its citizens (Dada, 2006). With the growth of web technology and the internet, government and business innovations have begun to flourish at a high pace. E-government systems have grown over the years and gained acceptance in many nations around the world.

The term smart government has recently received a lot of attention in the public management literature of the UAE government. The smart government can be defined as a government which “integrates information, communication and operational technologies to planning, management, and operations across multiple domains, process areas and jurisdictions to generate sustainable public value” (Bin Touq, 2015). Nations like South Korea are going on with the agenda of moving from e-government to smart government; a concept they refer to as the “e-government paradigm shift in the smart society” (Bin Touq, 2015). Countries like UAE are looking at that direction after having enjoyed tremendous successes with e-government.

E-government Challenges and Opportunities in the UAE

E-government, as discussed in the paper, will enable the citizens and businesses in the UAE to have improved access to the services of the government. Once the citizens and companies have better access to government services, they are more likely to participate more in government activities like filing returns on time. As a result, the business environment in the country appears to be healthy, and more investors are attracted to the country. The implementation of the e-government system also requires significant

investment in software and employment of people who know how to handle the software. Such software is expensive, but the need to operate it creates employment for many ICT specialists in the UAE. Also, the UAE citizens who are not tech-savvy find it difficult to use the system and might require special assistance from the computer literate population.

Besides those, the internet presents special security issues that the government has had to address by providing the citizens with special codes that allow them to log onto the system and do whatever transaction they have to do. On the upside, once someone can use the system, they can promptly fulfill the obligations they have to the state like filing tax returns. The government is also able to serve the citizens better and faster, and the economy grows and attracts more investors. Ever since the UAE started implementing the e-government, it has managed to climb several spots in the UN rankings. For instance, it was the second in the Arab world and GCC in the “e-government development index” among Asia’s top 20 nations in terms of e-government development (Bin Touq, 2015). The number of people employed to maintain the e-government platform has also been increasing annually for some time; this helps reduce the rate of unemployment in the country.

The Strategic Framework of the UAE Federal E-government

The government of the United Arab Emirates came up with a “federal e-government framework for 2012-2014” that planned out various initiatives that the government intended to undertake within the three years (Bin Touq, 2015). This framework was designed to add to the UAE's vision 2021 program. This program provides a very strategic goal for the country and requires the e-government to be in line with it for its realization to be feasible. This vision envisages the creation of an economy based on the knowledge that will be flexible and diverse and has only skilled professionals at the top. The

vision consists of four essential elements: economy, national identity, health, and education. It desires to make the UAE a place of confident and ambitious people who cling to their heritage despite their level of technological advancement. The framework also references particular existent strategies if the federal government to make sure that the e-government system is in line with the other strategic intents and plans of the government. The leadership of the country exudes strong confidence that the full implementation of the framework would aid in improving the global competitiveness of the UAE and enhance the nation's electronic transformation.

Development from E-Government to Smart Government in the United Arab Emirates

As technology changes, governments in the UAE have also become dynamic. One of the significant changes that have been recorded in the UAE governments is the movement from e-governance to smart governance. Smart governance is an extension from the concept of e-government by improving the government services through the advancement in information technology (Shtait et al., 2018). Although e-government has been of benefit to UAE countries, smart technologies have advanced and improved the connection between the citizens and the government and have also improved global connectedness in the economies (Harsh & Ichalkaranje, 2015). Therefore, the smart government has been a better option to go by because of the increased benefits which it has presented to the countries.

The sustainable city serves as the key driver for the development from e-government to the smart government in UAE. According to Dhaheri (2016), a sustainable city needs to use different methods such as ICT to be innovative. It also needs to use other methods to improve the lives of people. Efficiency in urban operations, economic competitiveness, and effectiveness in meeting the needs of residents also have to be

established, and this is made possible through smart government (Yaghi, 2016). In response, the UAE has developed improved technologies such as the introduction of initiatives for the smart city and smart governance (Government.ae, 2015). Indeed, many benefits have been realized from the smart city and smart government initiatives.

The smart government has improved the general effectiveness in remission of services. Through smart governance, UAE countries have been able to adapt to the fast-changing social lives as well as technological advances (Salem, 2016). By keeping in pace to the social changes, the smart government has enabled countries such as Dubai to increase its economic competitiveness (Salem, 2016). In addition, environmental sustainability and the general quality of life has also been guaranteed through smart government and smart city initiatives in the UAE (Salem, 2016). Quality of life has been improved in the sense that smart government enhances collaboration among the various entities of government and the citizens (Shtait et al., 2018). Khan, Woo, Nam, and Chathoth (2017) also stated that the aim of smart cities is to improve the outcomes for the people of that city. Therefore, it is evident that the smart government has some promising goals to improve the quality of people's lives.

However, challenges have been recorded in the implementation of smart initiatives. The practicality of smart government has not been realized. The UAE's motives for moving to smart governance was to make the delivery of services to be more effective and also to reduce costs in the payrolls of offices which has not been practical (Alahmed, 2018). Furthermore, allocations for the budget in the implementation of the smart government has been costly (Yaghi, 2016). Other challenges with smart government implementation include increased costs in making the initiatives available, difficulties in operation, and language barriers because of the large language diversity among the clients (Yaghi,

2016). Because of these challenges, there is a need for improvement and make smart government more effective to maximize the benefits that it comes with.

Conclusion

In this age of increasing connectivity and digital communications, governments are increasingly paying attention to the interactions they have with their citizens in the virtual universe. Governments such as the UAE's, while making these attempts, realized that the traditional physical models are no longer enough and that there is a need to come up with new systems that can accurately pick up the identities of all the people using the system. ICT has not only helped governments like the ones in the UAE to maintain the security of the information in the system, but it has also helped them ensure that the whole system is secure and can remain functional despite the rapidly growing number of users. Through advancements in ICT, UAE has been able to also develop from e-government to smart government and smart cities. However, such developments have been faced with challenges which can be addressed through improved innovation. To be concise, the importance of ICT in the implementation of e-government in the UAE as well as in many other regions of the world cannot be overstated.

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