

A COMPARATIVE ANALYSIS OF E-GOVERNMENT IMPLEMENTATION BETWEEN MENA REGION COUNTRIES AND LEBANON

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ABSTRACT

E-Government is the usage of ICT to deliver services to citizens and to improve services of public sector organizations as well as their efficiency and effectiveness. Despite the emergence of the E-Government initiative in Lebanon, only few references define its application and assess its implementation. This study aims at exploring the E-Government project and its implementation in Lebanon through Dawlati E-government Portal with respect to internationally recognized requirements and features. It explores Lebanon's E-Government status and ranking as compared to the MENA countries and the world. Results have shown that Lebanon has stepped back on the United Nations E-Government ranking scale in 2014 as compared to 2012 two spots globally and four spots regionally. The gap analysis has reflected a partial fulfillment of the E-Government requirements and features where the main gap has been recognized in the social acceptance and citizen awareness.

INTRODUCTION

With the tremendous progress of the Internet, governments at all levels are using it to re-engineer their structures and enhance their efficiency (Beynon-Davies & Williams 2003). This initiative to utilize the Internet in governments to achieve better outcomes is referred to as the "E-Government". E-Government includes the use of all information and communication technologies, to smooth the progress of the daily administration duties of a government (Mundy & Musa, 2010). Adopting e-government transforms relations with citizens, businesses and other agencies in the government by simplifying the delivery of governmental services to citizens and enhances the interaction with organizations. It empowers citizens through access to information and services and offers more efficient government management (Kandhro, 2011).

E-Government and its various applications and strategies are relatively popular in the developed world. Studies have been focusing on investigating e-government diffusion in developing countries to understand the barriers and suggest solutions. Our study is interested to examine e-government in Lebanon, a developing country in the Middle East. Despite the emergence of the E-Government initiative in Lebanon in the last decade, only few references have detailed this initiative and defined its application. Our study will go beyond what has been studied by assessing e-government implementation in Lebanon and evaluating its progress. Our objective is to examine the status of E-Government in Lebanon and propose recommendations for enhancing its implementation.

The remainder of the paper includes the literature review followed by the assessment and the recommendations and conclusion.

LITERATURE REVIEW

Since the emergence of E-Government, a number of international assessment and evaluation surveys have been conducted as a number of ranking reports have been produced to evaluate, compare and contrast various countries' performance and progress in terms of their E-Government. For instance, E-Government Readiness Assessment (ERA) is a tool used to evaluate how ready a country is to develop or implement an E-Government. This tool can help governments assess the schema towards the information society in general and E-Government in particular. This assessment could provide a solid base to develop the strategy, plan, policy and decisions. Using ERA, a government is able to assess its level of readiness in both preliminary and intermediate development stages. It helps developing countries plan and measure for ICT integration; do self-assessments so as to decide on whether to seek efforts from within or ask for help from outside experts (Zheng, 2013).

The United Nations Department of Economic and Social Affairs conducts an E-Government survey that assesses the E-Government development status in one-hundred ninety-three (193) UN Member States (United Nations 2014). The UN E-government report includes the E-government Development Index (EGDI), which can be used as tools for stakeholders and decision-makers to examine and evaluate their E-Government status and progress in comparison to their region and the world.

EGDI is a performance index that measures three major components of E-Government explicitly. These components are: provision of online services, existing human capacity, and telecommunication connectivity. The global E-Government ranking derived from the EGDI intends to rate the performance of national governments relative to one another (United Nations, 2014). The online service component of the EGDI is a combined indicator that measures the use of the ICT by governments in order to deliver public services nationally. This index is a comparative tool; the high score indicates best practice and not perfection. Similarly, a very low score does not mean a non-progress in E-Government development. The difference and the distance between the index scores express the gap in online service delivery (United Nations, 2014).

E-Government in the MENA Region

Countries in the Middle East and North Africa (MENA) have relatively similar historical, socio-cultural characteristics, religion and population mix, economy, language, and government's form. Most of these countries fit into the same regional bodies. In spite of the civil liberties and little political participations, some MENA countries have progressed significantly in developing and implementing information and communication infrastructure (ICT), they have persistently strived at improving their E-Government development index ranking, as they still competing to provide and deliver good Internet and all sort of online government services to their communities and citizens (Rorissa, Potnis, & Demissie, 2010). Al-Khoury (2013) established a potential roadmap of E-Government in the Arab countries. The roadmap constitutes six stages that guide Arab countries to plan and develop their E-Government systems. The first stage refers to the automation of the administrative processes and back offices in order to deliver services efficiently to the citizens. The second is about the consolidation of service delivery design and architecture to simplify the delivery process through different channels. The third stage includes offering digital entities to people to smoothen the development of innovative E-Services. The fourth stage is concerned with combination of services channels discussed in the previous stage to achieve users'

satisfaction. The fifth and sixth stages involve the interoperability between both vertical and horizontal dimensions of the government, thus achieving regional and international level of interoperability. Finally, this road map, as per the author, can be used as a measurement and monitoring tool for progress to support the development of the public sector among MENA countries (Al-Khouri, 2013).

MENA governments are still behind to adopt a fully integrated E-Government. MENA region in general is still far away from this achievement due to low Internet access and availability while many MENA governments do not provide any useful services using a website (Zawya, 2014). However, Arab Gulf governments are distinguished in the MENA region because they rank at the top fifty countries in EGDI (United Nations 2014). For example, the Kingdom of Bahrain ranks 18th, the United Arab Emirates ranks 32, Saudi Arabia ranks 36 followed by Qatar, Oman, and Kuwait that rank 40, 44, 48 and 49 worldwide respectively (United Nations, 2014).

The Emergence of E-Government in Lebanon

Amidst this improvement in its Internet capability and literacy, Lebanon, among a number of other Arab countries have recognized the benefits of E-Government despite being at an early stage and just using E-Government for disseminating information via websites (Choueiri, Choueiri, & Choueiri, 2013).

As of 1991, Lebanon started to launch the first formal initiatives towards mainstreaming ICT in the public administration under the National Administrative Reform Program (Choueiri, Choueiri, & Choueiri, 2013). Sometime later in 1993, the E-Government project in Lebanon was delegated to the Office of the Minister of State for Administrative Reform (OMSAR) which was newly established at that time (Choueiri, Choueiri, & Choueiri, 2013).

The E-Government project that OMSAR was delegated primarily involved technical assessments, specifications preparations and outsourcing functions (Choueiri, Choueiri, & Choueiri, 2013). About ten years later, in 2003, the national E-Strategy and the E-Readiness report have been developed in collaboration between the United Nations Development Program (UNDP) and OMSAR. The national E-Strategy has set a vision that aims at shifting the economy and society of Lebanon to Knowledge Based Society (Choueiri, Choueiri, & Choueiri, 2013).

ASSESSMENT OF E-GOVERNMENT IN LEBANON

This study compared the EGDI of Lebanon to MENA countries to assess E-government in Lebanon. Table 1 shows the MENA countries' E-Government ranking as per the United Nations E-Government 2012 and 2014 Surveys reports.

While the majority of MENA countries improved their EGDI between 2012 and 2014, Lebanon EGDI decreased, which affected its ranking among MENA countries as well as worldwide. While Lebanon lost 4 spots in world ranking, Morocco advanced thirty-eight spots, Tunisia advanced twenty-eight spots followed by Egypt, the Kingdom of Bahrain, Oman, and Kuwait that advanced fourteen spots. Lebanon has ranked eighty nine (89) among the 193 UN member states which reflects a 2 spots lag as compared to the same UN survey conducted in 2012. Lebanon has also scored an EGDI of 0.49823 that also shows a drawback

of 1.57% as compared to its 2012 EGDI. In 2012, Lebanon EGDI was above MENA EGDI average; however, in 2014 Lebanon EGDI became below MENA average.

Table 1: MENA Region and World Countries EGDI Ranking (2012 – 2014)
(United Nations, 2014)

MENA Countries	MENA Rank		World Rank		EGDI	
	2012	2014	2012	2014	2012	2014
Algeria	15	17	132	136	0.3608	0.3106
Bahrain	2	1	36	18	0.6946	0.8089
Egypt	12	10	107	80	0.4611	0.5129
Iran	10	13	100	105	0.4876	0.4508
Iraq	16	15	137	134	0.3409	0.3141
Jordan	9	9	98	79	0.4884	0.5167
Kuwait	5	6	63	49	0.5960	0.6268
Lebanon	8	12	87	89	0.5139	0.4982
Libya	NA	14	NA	121	NA	0.3753
Morocco	13	11	120	82	0.4209	0.5060
Oman	6	5	64	48	0.5944	0.6273
Palestine	NA	NA	NA	NA	NA	NA
Qatar	4	4	48	44	0.6405	0.6362
Saudi Arabia	3	3	41	36	0.6658	0.6900
Sudan	17	19	165	154	0.2610	0.2606
Syria	14	16	128	135	0.3705	0.3134
Tunisia	11	8	103	75	0.4833	0.5390
Turkey	7	7	80	71	0.5281	0.5443
United Arab Emirates	1	2	28	32	0.7344	0.7136
Yemen	18	18	167	150	0.2472	0.2720
MENA AVERAGE					0.4939	0.5009

To further assess E-government in Lebanon this study reviewed the main official E-Government website for the Lebanese E-Government portal “DAWLATI” (Dawlati, 2014). We explored the services offered by Dawlati and performed an assessment of this portal’s specifics with respect to the internationally recognized E-Government requirements and features that are reported by the United Nations including usability, reusability, portability, and social acceptance.

To start with, “Dawlati” portal is the main E-Communication channel between the Lebanese Government and the Lebanese citizens and businesses. It almost shelters or gives access to all E-Government applications adopted by the Lebanese Government across various ministries. For instance, “Dawlati” website can be used as a source of information for all website visitors (citizens or businesses) who can also register online for personalized individual or business accounts in which they can perform available transactions, store electronic documents or access individualized or organizational information made available through the website. Besides, “Dawlati” serves as an index for the Lebanese E-Government as it presents the scope of services that Lebanon E-Government offers in various disciplines or ministries on a special sub-menu titled “E-Services”. This sub-menu also differentiates between

business (G2B) and citizen (G2C) pillars as it specifies the individual group of citizens targeted in each of its E-Services. Examples of these citizen groups are: resident citizens, immigrant citizens, foreigners, students. Furthermore, the E-Services menu differentiates the fully established E-Services that include online requests and those that include interactive forms or downloadable or printable forms. In short, the main interface of the website is friendly in terms of the main menu and one can easily identify the category of services he/she targets.

The first requirement emphasized the Usability of the E-Government. This requirement highlighted the importance of ensuring a friendly interface that users can easily navigate, find relevant information, and perform transactions smoothly (Signore, Chesi, & Pallotti, 2005). We found that Dawlati interface is clear and simple. Visitors can easily locate services and information on the landing page and main menu of the website. In addition, all three main languages utilized in Lebanon (Arabic, English and French) are made available on the website general information and in some services and forms to cover language needs across the population. Moreover, user guides that include information and graphics (but not animations) on how to use and navigate through the website are made available in the three languages. Besides, an interactive forum is also launched in all three languages but it does not seem to be active. Furthermore, if we delve further into the sub-menu, we can denote some limitations that this portal shows in terms of usability. For instance, all forms under the English and French versions of the website are clustered by the user category (i.e., citizen, immigrants, students, foreigners) instead of the actual services. One can never know what the form is about without opening it - or referring to the Arabic version - and screening its content. This is apparently a confusing and time consuming matter at the same time. As such, the inquirers, who choose to navigate the English or French versions of this website, cannot locate a certain form over to complete any sort of transaction and they have to open all forms one after the other until they find the desired one for their transactions. Furthermore, we noticed that the forms' identifiers contain an abbreviation of the related ministry (ex: AGR for ministry agriculture, LAB for ministry of labor, etc.); however, we need to consider at this stage that not all citizens who visit this website are aware of the abbreviations made for each of the ministries. As far as transactions' instructions are concerned, we noticed that clear instructions exist for some transactions once you open the codified form. These instructions include a general description of the transaction, documents required for their processing in addition to the processing procedure, time frame (for some) and fees - if any - which is with no doubt a good resource for the inquirers. However, this fact is in turn not consistent as instructions are not made available for all transactions and services especially the electronic service transactions. This, again, is a limitation in the application as it may mislead the users, make them miss some important details, and even consume more of their time. Nevertheless, having talked about the forms located in each of the services categories, we can't miss another strong factor that enriches the usability aspect of this portal. For instance, we can notice that each of the forms we accessed on "Dawlati" presents information regarding its fulfillment to the complete electronic state. As such, the maturity level and functionality for each of the forms are indicated. This includes access and whether the form in question should be printed, downloaded or even processed online. It also indicates the language/s available for the form and whether E-Signature or online payment are permitted. For example, services with an interactive PDF form can be completed online and then printed so that it can be signed and submitted wherever applicable. On the other hand, a downloadable /printable form can be accessed and downloaded from the website so that it can be completed and delivered to the concerned administration. All these features provide

certain, though varied, degree of facilitation. They all help save the time and efforts of going to a public administration to get a certain form for a certain transaction.

Another requirement is Re-usability which refers to the possibility of using some modules and applications in various administrations. This feature is not easy to assess while reviewing the user interface of the “Dawlati” website. We cannot tell which modules and applications are common among administrations. In fact, and as per Ms. Tania Zaroubi’s assessment, this might just apply to the generic services like complaint management and correspondence tracking system (Zaroubi, 2014).

The next requirement on our list is the Portability which refers to availability of portable applications irrespective of hardware and software (Signore, Chesi, & Pallotti, 2005). For instance, “Dawlati” has launched a mobile application that provides information regarding transactions and other ministerial news and updates and ensures transaction tracking service (Zaroubi, 2014) .

The final requirement on our list is the Social acceptance of the E-Government, which refers to the citizens’ awareness and will to use E-Government applications such as Dawlati. By visiting Dawlati app in Play Store we can find that only 100 people downloaded or are using this app, which is clear that Dawlati has failed to achieve social acceptance. That could be related to many factors including lack of marketing, lack of citizens trust with the government, privacy and security concerns, and/or lack of usefulness. We believe that our negative findings from assessing the usability of Dawlati may be the major reason for Dawlati’s failure in social acceptance

CONCLUSION

The strengths of this study arise being among the very few studies that discuss the E-Government in Lebanon. It is a comprehensive and systematic study that moved from the more general topics on the evolution of the Internet and government to introduce the concept of E-Government and its application in the world, the MENA and Lebanon. The study has also extracted a set of internationally recognized E-Government requirements and features from the literature that can facilitate the Lebanese Government evaluation of its E-Government. Our study has presented a gap analysis of the E-Government in Lebanon that reflected its level of fulfillment for each of the requirements and features, a thing that we didn’t find in the related literature on the subject. This analysis may serve as a starting point to locate the points of weaknesses so that they can be addressed.

Our study sheds the light on the status of the E-Government and its implementation in Lebanon thus pointing to limitations it encounters at various levels. Hence, moving forward in addressing potential challenges and weaknesses and therefore developing and expanding the scope of Lebanon’s E-Government to cover all services and ensure citizens’ active participation and involvement, is the major factor towards its realization and success. We recommend that the Lebanese Government address the findings of our study as a start to improve its E-government services by improving Dawlati portal functions to satisfy citizens’ needs and expectations.

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