E-Government – The Jordanian Experience

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Abstract— **A method for building an E government in Jordan is addressed. The first step of the method takes into account the current status of the information technology in Jordan. The second step is achieved by using the information technology utilities to build the e government. Finally, some suggestions are addressed to speed up the e government in Jordan.**

Keywords- E government, Jordan, IT, ICT, REACH, NTF.

I.   INTRODUCTION

E-Government has many definitions. One of these definitions is digital interaction between a government and citizens (G2C). Furthermore, the E-Government can be defined as a process of conducting business between the public and the government through the use of automated systems and the Internet network. The E-Government main objectives can be classified based on the promising benefits which are provided to citizens, businesses and other governmental agencies. Therefore E-Government is not just a technology project, but rather it is an attempt to accomplish the following tasks:
• Improve the performance, credibility and transparency of the government.
• Provide government products and service electronically.
• Provide services to citizens electronically.
• Improve collaboration between government agencies.
• Improve Jordan's competitive advantage.
• Reduce costs incurred by the government and the private sector.

E-Government presents a new and innovative approach to addressing traditional problems of government services utilizing the Internet and World-Wide-Web. E-Government should deliver public services in ways that citizens and businesses needt them, using the internet and other technologies as enablers. E-Government is much more than building a web site. E-Government is the infrastructure that governments today are building to transform the way they complete their missions. Direct effects of e-Government include cost effectiveness in government and public operations, significant savings in areas such as public procurement, tax collection and customs operations, with better and continuous contacts with citizens, especially those living in remote or less densely populated areas.

We are moving on from Information Technology (IT) to Information and Communication Technology (ICT) and IT to Information System (IS). The penetration of ICT in all facets of human existence is leading to changes in the way humans interact within the society and the way societies involve individuals in the evolution process. The ICT can influence the process of governance in various ways and in varying degrees, from improving the current mechanisms of delivery of services to transforming the entire mechanism and the nature of services themselves. The role played could be purely technical in terms of automation of tedious tasks earlier done by humans, facilitating or supportive role leading to more participatory and all encompassing decision-making and implementation processes, or completely innovative role which involves new services and new mechanisms to deliver these services. The ICT initiatives in Jordan started with the REACH initiative lunched in 1999 (REACH as a concept is the sum of abbreviations Regulatory Framework, Enabling Environment (Infrastructure), Advancement Programs, Capital and Finance, Human Resource Development.) which was the core ICT programmers intended to transform the country to e-Jordan. It promised to play a central role in economical and social improvement of the country. REACH laid out a goal to bolster Jordan's nascent IT sector and maximize its ability to compete in local, regional, and global markets. REACH Initiative set the following targets to be accomplished in Jordan by the year 2004: The E-Government in Jordan has been introduced as a modern evolution of ICT and how to convert the life of societies to the communication and networked age.

The Hashemite Kingdom of Jordan took aggressive steps to transform Jordan to an e-Country by launching a number of e-Initiatives from the start of the year 1999, so that e-Government lay at the heart of the government's efforts. Jordan believed that one solution that could be used to develop the country and overcome its limited recourses was to join the global economy and promote sustainable human development by transforming Jordan into an e-Country. Jordan is a developing country where computers were used recently. Information data processing and Information systems are still in the infancy phase in Jordan. These systems are being used increasingly in government and slowly finding their way into other sectors. To comply with REACH targets, Jordan undertook major ICT programs; one of them has been e-Government. E-Government is a national program initiated by

King Abdullah II in September 2000. The Ministry of Information and Communications Technologies (MoICT), previously known as the Ministry of Post and Communication started the e-Government program towards achieving the e-Government vision in the year 2005. The vision was that e-Government would be a contributor to Jordan's economic and social development by providing access to e-Government services and information to everyone in the Kingdom irrespective of location, economic status, IT ability and education. E-Government represents a major shift in the role of government towards the 'client-focused' delivery of services, rather than government as a collector of information solely for its own purposes.

The min domains of the E Government initiative in Jordan:
* Communication
* Economics
* Education and Training
* Health
* Industry
* Labor
* Natural Resources and Environment
* Population and Human Settlements
* Tourism and Antiquities
* Transportation
* Geography
* Agriculture
* Law and Legislation
* Research, Science and Technology
* Society and Social Conditions
* Political Affairs Culture

Enabling the transformation to e-Government requires a broad vision of realizing and incorporating the perspectives of various parties involved in the process and expected to benefit from such transformation. There are mainly three groups (citizens, businesses and government) involved in enabling the transformation to e-government and their perspectives should be taken into account. E-Government initiatives are complex change efforts intended to use new and emerging technologies to support a transformation in the operation and effectiveness of government. Success stories have been limited in infrastructure building, telecommunication market reform, and conducted training programs for thousands of public sector employees. Stage analysis indicates that Jordan's e-Government is still in the informative level of service delivery, and website usability analysis applied using the Backer instrument revealed that websites have not been designed to meet with people's expectations and needs; instead websites had a very poor usability design reflecting a lack of understanding of people needs to apply online services.

II. MAIN PROBLEMS HINDERING JORDAN'S E GOVERNMENT TRANSFORMATION

There are many significant problems delaying Jordan's transformation such as the lack of infrastructure, the scarcity of funding, and the absence of a well established e-Society.

On an institutional level within government agencies data analysis showed a number of problems which can be categorized in different domains starting from the expected cultural problems such as resistance to change, as well as the lack of coordination, and accountability problems, technical problems related to knowledge management issues, behavioral problems such as the employees' adaptability to the introduction of new working methods. Here the following problems are discussed that are delaying Jordan's e-Transformation.

1. Lack of an Adaptable Strategy: The Jordanian government did not have a well defined strategy for implementing e-Government; one that responds to the countries and the people's needs and matches their profiles. Even when the government set up 'Fast Track Projects' they were imported from countries who are leading the field in e-Government and then applied to similar Jordanian institutions without understanding what the characteristics are of a Fast Track Project.

2. Lack of Focus: Jordan has launched several e-Initiatives at the same time; these include REACH, e-Government, e-Learning, and e-Health. This has led to a loss of concentration and focus by the government on any specific initiative in spite of the fact that all the initiatives that have been introduced are completely new both to the Jordanian government and to Jordanian society. Another factor that increases the confusion is the involvement of a number of international donors with little co-ordination, if any, between them.

3. Sector Existing Structure and Culture of the Public Sector: The security procedures and the involvement of military based departments makes the re-engineering process by integrating civic and military departments harder due to legal, security and cultural considerations. In addition, the country's hostile geographical location as well as the fact that more than one third of its population is of Palestinian refugees makes integrating civic and military departments difficult to achieve. Within civic public sector agencies especially key ones, there is a sense of resistance to information and databases sharing that would lead to any reduction of institutions power or authority.

4. Lack of Consistency: One of the major obstacles found was the lack of consistency in ICT plans and policies within Jordanian public sector institutions, which has been caused by the rapid change in the positions of IT managers and employees. It was noted that a number of IT experts did not know where e-Government is heading because there were no short term goals to achieve and rapid change in their objectives.

5. Ineffectiveness in Promoting e-Society: Statistics show that during the past six years, the government has failed to connect the vast majority of the

Jordanian population online, with official figures indicating that Internet users accounted for only 8% of the total population in the year 2005. The numbers of PC's in Jordan are 4.5 per 100 users. These numbers reflect the reality of the limited existence of a true e-Society within Jordan. Figures for e-Government spending between the years 2004 and 2006 reflect a huge gap between the spending of tens of millions of dollars allocated to e-Services projects in contrast to only tens of thousands of dollars being allocated to projects aimed to promote Internet access and computer ownership between citizens.

6. Technical Problems and the Lack of IT Expertise: Due to the scarcity of financial and technical recourses, in addition to government agencies resisting change to their systems and working methods, many government agencies are building on existing systems to integrate them. These situations where different existing systems need to be integrated with newly implemented ones make the automation of services a complex process. There is a lack of expertise especially in areas related to IT project management and risk management. Also there are shortages in many technical areas such as system developers, website developers, network experts.

7. This has led to the Jordanian government in most cases consulting private sector firms for the implementation of e-Government projects. This process makes implementation more expensive.

8. Central Government Facing Problems in Achieving Requirements: Although MoICT has identified building blocks to successfully implement e-Government; the government is not fully executing most of the recommended enablers. For example, the legal and regulatory framework is identified in Jordan's e-Government strategy, as an important enabler for e-Government transactions and integration. However, the framework has not achieved any significant progress and is not expected to develop over the coming few years because of the lack of funding.

9. Lack of Monitoring and Testing: Poor government websites in Jordan reflect a lack of monitoring procedure. Many government websites are found in a dire condition, for example a few ministries websites were only in English language, although the main language of Jordan is Arabic. Also the websites have a very poor design and interface, most of their internal links were broken, and information was out of date.

10. The last limitation is the outdated legislation that stood in the way of the establishment of the project. However, current legislations are being reviewed and changed by the parliament.

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III. CURRENT STATUS OF E GOVERNMENT IN JORDAN

The most important step to overcoming all the obstacles that stand in the way of E-Government is the continued seriousness and dedication to the project. His Majesty King Abdullah II certainly expresses his dedication for the establishment of a serious IT sector in Jordan. One of the ways to achieve that is with the E-Government project. On his personal website, his majesty outlines the necessary steps to achieving this goal and that they include "new or amended legislation, necessary government policies, procedures and incentives that would lead to the growth of this sector, and perhaps more importantly a will to make them overcome any obstacle in this regard

IV. CONCLUSION

The long-term vision for e-government is to create a society where electronic government is a coordinator to the economic and social development of the kingdom. Jordan initiated its e-Government project hoping to achieve social and economic development in what seemed a straight - forward implementable project. But e-Government in Jordan faces challenges that do not arise from hardware and software issues, but from the nature of existing social and administrative regimes which cannot be easily re-engineered to accommodate the evolving networked digital environment of the state model wished for by e-Government optimists. It also need integration between the development of the systems, networks and infrastructure, and the social and cultural frameworks of the country. Below, some suggestions for how to speed up the process of E-Government in Jordan:

* Ensuring access by expanding of the existing programs that provide the public access to PCs and Internet through schools, libraries and community based organizations. The digital divide can be bridged by supporting competition, facilitating infrastructure, investing E-Government and testing successful pilot projects.

* Governments should adopt a realistic transformation strategy reflecting acceptable levels of change attuned to the country's resources.

* Protecting information privacy. The legislature needs to ensure confidential information, sharing information and changing information by who provides it.

* The use of digital signature and PIN for authenticating services recipients will have to be explored.

* Modification of the existing systems to work with the E-Government.

* Setting specified deadlines for the projects and not leave many projects open ended so that we can reach the goal in a shorter time.

* Use the successful experiences of the countries that are close to us in size and resources**.**

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