

E-Government Program in Jordan: From Inception to Future Plans

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Abstract

This research aims to provide a broad knowledge about the development of e-government program in Jordan. Researchers conducted semi structured interviews with 8 individuals who are in charge of e-government program in Jordan, combined with the review of different documents provided by the Jordanian government and the official website of the Jordanian e-government. E-government program in Jordan is still in an early stage of development and is obviously moving at a slower rate than anticipated. It has not even reached midway through what has been sought. The initial efforts have been focused on launching an e-government portal, posting online government information, promoting for e-government program, educating the public, providing basic access to the internet and developing the needed technological components.

Keywords: e-government, benefits, stage models, Jordan

1. Introduction

One of the extraordinary phenomena occurring recently is that the ubiquitous Internet is encroaching upon every part of our lives and causing fundamental changes in both private and public sectors.

It is consequently very apparent that various institutions have been shifting from the traditional 'bricks and mortar' approach to the electronic 'clicks and mortar' approach (Turban et al., 2006).

Mainly with governments the urge to launch electronic government websites that provide e-services to all types of stakeholders has become significantly crucial.

Jordan's government has realized the value of the internet and determined to take an advantage of the digital era by developing an e-government program.

The aim of this paper is to examine the extent of e-government program in Jordan and to provide an insight about the progress of various projects within it. The paper consists of the following sections. Section 2 covers the benefits, definitions, and stage models of e-government, section 3 illustrates the research methodology,

section 4 demonstrates the findings of the research and section 5 is the conclusion.

2. Literature Review on E-Government

2.1. Benefits of E-Government

Various scholars declared that internet offers enormous potentials and extensive possibilities for governments to improve services delivery (Chen, 2002), interact with stakeholders (Chen, 2002; Kalakota and Whinston, 1996), increase accessibility (Abie et al., 2004; Saxena, 2005), increase accountability, increase transparency, transformation (Tambouris et al., 2001), effectiveness, efficiency (Heeks, 2003), reduce service costs (Kalakota and Whinston, 1996; Saxena, 2005), increase accuracy and privacy of information (Abie et al., 2004), increase citizens participation (Heeks and Davies, 1999), CzRM: Citizen Relationship Management (Larsen and Milakovich, 2005) and also increase the acceptance and satisfaction of government stakeholders (Abie et al., 2004; Kalakota and Whinston, 1996).

Additionally, Chen et al. (2006) argued that e-government will support the integration of government services and will also assist in eliminating jurisdictional barriers. Al-Kibsi et al. (2001) and Scholl (2006) also clarified that e-government push towards a transformation of business processes. They believed that government agencies need to reorganize and streamline their processes and services. In addition to the previous point, Barzilai-Nahon and Scholl (2007) added other benefits of e-government. These are: process acceleration, enhance information sharing, improve internal efficiency, bring citizens closer and develop service levels. Likewise, Zhang et al. (2005) and Al-Mashari (2007) declared that the adoption of e-government will improve knowledge and information sharing.

Moreover, Stahl (2005) pointed out that e-government is the best medium that will alleviate weaknesses (i.e. the high level of bureaucracy, the lack of

communication between departments that leads to duplication of efforts and the lack of response) that occur in the traditional bureaucratic paradigm.

Barzilai-Nahon and Scholl (2007) also asserted that a critical factor for e-government success is top management support. Similarly, Moon (2002) and Al-Mashari (2007) highlighted the importance of leadership support and political commitment from highest levels of authorities. Whereas, Ho (2002) stated that the emergence of e-commerce in the private sector has been one of the vital forces influencing the implementation of e-government projects.

Furthermore, Jaeger (2003) stated that e-government benefits can be classified in terms of the three major interactions between departments of government, citizens and businesses. He illustrates that G2G interactions assist in improving communication, efficiency, consistency, information sharing and enhancing transactions speed. Whereas G2C interactions facilitate in connecting citizens with the government, delivering enormous amount of information and services to citizens as well as it allows citizens to be more aware of government policies and rules and hence will be able to participate and get involved with the government. G2B interactions lead to cost savings, develop awareness of opportunities to conduct business with the government and also increase efficiency in procurement processes and conducting transactions.

Moon (2002) as well identified several perceived benefits of e-government. These are; cost savings, downsizing, entrepreneurial activities, changing work environment as well as general efficiency and effective procurement. Moon (2002) highlighted the importance of economical support, technical support, organizational and managerial commitment for a successful implementation of e-government projects.

In addition, Ndou (2004) came up with seven major reasons behind the

transformation towards e-government upon analyzing the e-government programs in nine different developing countries (China, India, Brazil, Chile, Argentina, Columbia, Philippines, Guatemala and Jamaica). First, cost reduction and efficiency gains. Second, quality of service delivery to businesses and customers. Third, transparency, anticorruption, accountability. Fourth, increase the capacity of government. Fifth, network and community creation. Sixth, improve the quality of decision making. Seventh, promote use of ICT in other sectors of the society.

2.2. E-Government Definitions

E-government has caught the attention of many scholars and the concept has various definitions in the existing literature due to the diverse perspectives of scholars.

Sprecher (2000), Schware and Deane (2003) and Al-Mashari (2007) defined e-government from a techno-centric perspective as the use of ICT to transform government institutions and processes into IT-based enablers.

On the other hand, a citizen-centric perspective was proposed by Burn and Robins (2003) and Banerjee and chau (2004) who highlighted the importance of e-government as a tool that improve the relationship with citizens via offering information and electronic services.

Indeed, another broad definition which combined the above mentioned two perspectives and adjoined another view which is the communication perspective was illustrated by Tambouris et al. (2001), Fang (2002), Carter and Belanger (2004) and Wang and Liao (2008); e-government is the implementation of ICT to improve all governmental transactions with all stakeholders categories (within government, between government agencies, businesses and citizens).

A very significant perspective which highlighted the value of the relationship was proposed by van Engers et al. (2002) who assured that the key factor that distinguishes e-government

from traditional government is the innovative relationship which emerge between e-government and its stakeholders. Also Chen et al. (2006 p. 24) viewed e-government from a relationship perspective; as they defined e-government as “a permanent commitment made by government to improve the relationship between the private citizen and the public sector through enhanced, cost-effective, and efficient delivery of services, information, and knowledge”.

Furthermore, Lieber (2000) characterised e-government as an adoption of cost-effective models to facilitate conducting online business transactions for stakeholders, consequently revealing a business process perspective. As for Wimmer (2002) an administrative perspective emerged from defining e-government as a frame that shapes the direction of public administration into ‘Information Society’. Yet, Montagna (2005) emphasized on the change management perspective, and displayed e-government as a remarkable institutional change. However, Lenk and Traunmuller (2001) presented a more political perspective in defining e-government as a vision that renovates the public administration.

Moreover, Centre for Technology in Government (2002) disclosed four dimensions in their definition of e-government. These are; e-services (delivery of electronic services and information over the internet), e-management (enhancement of government management through the use of information technology), e-democracy (the usage of electronic means of communication to accelerate citizens involvement in the decision making process) and e-commerce (electronic trading of goods and services).

It appears that although diverse definitions were proposed for e-government, still there is no comprehensive agreement on one definition of e-government amongst scholars. In fact, while there are

similarities in some of the above mentioned definitions, differences also occur in many others.

2.3. E-Government Stage Models

Various researchers have characterized e-government development by dividing the e-government implementation process into multiple stages. This section compares and contrasts several models which imply the evolution stages of e-government as proposed by different authors.

E-government is neither a one-step process nor a single project. It is an evolutionary phenomenon that comprises different stages and levels (Layne and Lee 2001).

E-government stage models were put forth either by individual scholars (Layne and Lee 2001; Moon 2002; Reddick 2004; Siau and Long 2005; Belanger and Hiller 2006) or by institutions (Baum and Di Maio 2000; Deloitte Research 2000; UNASPA 2002). Some of these models are discussed below:

- Layne and Lee's Four Stage Model (2001):

Based on managerial, organizational and technical feasibilities, Layne and Lee (2001) suggested four stages model for e-government evolution as follows:

1. Catalogue: This stage involves presenting basic governmental information through websites.
2. Transaction: This stage enables citizens to carry out some simple online transactions.
3. Vertical integration: This stage moves towards the transformation of governmental services rather than automating the existing processes only. It means integrating government tasks at diverse levels.
4. Horizontal integration: This stage involves integrating multiple tasks from different systems.

- Belanger and Hiller Five Stage Framework (2006):

Symonds (2000) identified a four stage model to e-government comprising one-way communication, two-way communication, exchanges, and finally portals. Belanger and Hiller (2006) adopted Symond's four stage model and enhanced it by adding a fifth stage. The stages in their framework are:

1. Information: This stage includes posting information on websites.
2. Two-way communication: At this stage, stakeholders are able to communicate with the government by making some requests such as email exchanges.
3. Transaction: This stage allows for conducting complete online transactions such as paying fines and renewing licenses.
4. Integration: This stage means that all services are integrated on a single portal where stakeholders can use to access and retrieve these services.
5. Participation: This stage entails providing unique online features such as registration and voting online.

- Gartner's Four Stage Model (2000):

Baum and Di Maio (2000) proposed the Gartner four stages model that demonstrates the development of e-government in the associated environment. These stages are:

1. Web presence: In this stage government agencies set up a website in which they post basic information to the public.
2. Interaction: This stage allows stakeholders to communicate with government agencies through the websites.
3. Transaction: This stage means that stakeholders can complete an entire online transaction such as license application.
4. Transformation: This stage involves transforming the existing processes in order to

offer integrated and personalized services.

- Deloitte's six-stage model (2001): Deloitte Research (2000) concluded that e-government evolution will pass through six dynamic stages which were introduced in the Deloitte model. These stages are:

1. Information publishing/dissemination: In this stage government departments create a website that provides basic information about them to the public.
2. Official two-way transactions: This stage allows users to conduct online transactions such as claiming income support and housing benefits.
3. Multi-purpose portals: This stage involves a creation of a portal which is a single point of entry for users to send and receive information as well as to process electronic transactions amongst several departments.
4. Portal personalization: This stage empowers users by giving them the chance to customize portals according to their requirements and needs.
5. Clustering of common services: In this stage governments attempt to improve collaboration by providing services as a unified package.
6. Full integration and enterprise transformation: In this stage government has transformed into a unified, complete and personalized service centre.

- UNASPA's Five Stage Model (2001):

The United Nations and American Society for Public Administration presented a five stage model for e-government progression (UNASPA 2002).

1. Emerging presence: This stage includes establishing a web presence through few

government websites in order to provide static organizational or political information for stakeholders.

2. Enhanced presence: This stage entails an acceleration of the number of the websites. It also means that websites provide more dynamic, specialized and updated information and services such as government publications and search features.
3. Interactive presence: This stage refers to a more formal and sophisticated level of interactions between stakeholders and service providers. It allows users to download applications and search specialized databases.
4. Transactional presence: This stage allows users to completely conduct secured transactions and pay for them too. Transactions such as obtaining passports or driving licenses.
5. Seamless or fully integrated presence: This stage involves having all services on a unified portal that stakeholders will be able to access it directly.

It appears that even though the proposed models differ in terms of the number of stages they entail, but there are several similarities between them. For example, all authors agreed on the first stage which e-government should pass through during its evolution; that is posting government information on a web site. This stage goes by different phrases such as cataloguing, web presence, information, information publishing, or emerging presence. All authors also perceived: completely conducting online transactions as a common stage for e-government development, despite the different names they used to describe it (i.e. transaction, official two-way transactions and transactional presence). Additionally, integration, vertical integration, horizontal integration, transformation, full integration,

and enterprise transformation as well as seamless or fully integrated presence are all phrases used by all authors to express an essential stage of e-government evolution.

On the other hand, there are some differences between the preceding models. For example, some authors Baum and Di Maio (2000), Moon (2002), UNASPA (2002), Siau and Long (2005) and Belanger and Hiller (2006) mentioned a stage which refers to the communication process between stakeholders and the government. They assigned different names to it (i.e. two-way communication, interaction and interactive presence). While other scholars Moon (2002), Siau and Long (2005) and Belanger and Hiller (2006) added a stage that attempts to involve citizens in the decision making process. They called this stage: political participation, e-democracy and participation, respectively.

In short, there is no universal agreement amongst authors on the number of stages of e-government evolution. That is due to the diverse perspectives various authors have, such as cultural, economical, managerial, organizational, political and technological approaches.

3. Research Methodology

3.1. Research Objectives

The objective of this research is to examine the extent of electronic government program in Jordan. We aim to find out in which stage the Jordanian e-government now? The objective is addressed from the perspectives of real life practical experiences in order to attain a comprehensive outlook about the Jordanian e-government program. Researchers followed a purposive sampling deliberately by choosing participants who are likely to produce rich and valuable data which meet the research objective (Oates, 2006). Therefore, participants chosen were qualified individuals who have significant

involvement in the Jordanian e-government program development.

3.2. Research Method

Researchers decided to conduct face-to-face semi-structured interviews as the major method of data collection. This approach enables to generate detailed information and explore in-depth personal experiences and feelings of participants (Oates, 2006). Researchers started by collecting background information about the interviewees to guarantee that they have sufficient experiences and thus will be able to provide valuable information.

Yin (2009) stated that after interviewing eight individuals, researchers normally reach a point that there is no new information arising, what is called data saturation.

To increase the reliability of the research along with an attempt to make sure that the issue of data saturation is exceeded, researchers decided to depend on documents such as governmental publications, governmental public announcements in newspapers and through government websites, governmental internal reports and prospectus as a complimentary source for collecting data.

3.3. Participants Profile

Researchers interviewed 8 individuals who are in charge of e-government program in Jordan and have exposure to diverse schemes. Five of them were the head of the following streams in the Jordanian e-government program: project management, information security, operations, strategic planning and e-services, technology, change management, and quality, risk & communication, one was the director of e-government program, one was an information security compliance officer, and one was an information technology compliance officer. Participants working experience in e-government project lasted from 18 months up to 5 years and they all were working at the e-government program management office at the

Ministry of Information and Communication Technology (MoICT).

3.4. Research Procedure

Interviews were conducted between June 1 and July 17, 2008. Interviews time lasted between 40 minutes up to 2 hours. 2 interviews were not recorded because the interviewee refused, and the rest (6) were tape recorded. All interviews were in Arabic; they were literally translated into English and transcribed by the researchers. The researchers arranged for the interviews by calling proposed interviewees 10 days before the interview, to inform them about the aim of the interview, the expected duration, and the major themes that will be discussed. Themes revolved around the inception of the e-government program, its goals, stakeholders, champions, major phases, strategies, e-services, pillars, other countries experiences as well as current and future projects.

4. Findings

4.1. Background

E-government program in Jordan is an ambitious initiative launched by his majesty king Abdullah II in 1999 aiming at transforming the nation into a knowledge-based economy country. Accordingly, the Ministry of Information and Communication Technology (MoICT) was assigned to be in charge of implementing e-government program in 2001. In fact the actual implementation was in 2003. During the period 2001-2003; they were working on converting such initiative into a program. Some American consultants from international companies were involved in designing the structure of the program, many studies and strategies were prepared, a plan was set and they developed a roadmap to guide the execution of e-government program.

Based upon the priorities defined in the roadmap, they identified 5 governmental institutions to be the focal entities in launching e-services. This project was called 'Fast Tracks': Ministry of Trade and Industry, the

Telecommunications Regulatory Commission, the Drivers and Vehicles Licensing Department, Income Tax Department, and Department of Lands and Survey (MoICT, 2006). Fast tracks project was supposed to be completed within 1 or 2 years but were dragged for 3 years.

The original strategy which was adopted in light of the American consulting team recommendations that is largely based on the experience of a developed country (USA) did not fit in practice with the Jordanian context as a developing country. Therefore, in 2006, as things did not go on as expected, they were forced to rethink their strategy and come up with re-strategized plan that was approved by the prime ministry. The new strategy was set to cover the period 2006-2010 and included 116 projects that they are still in the process of evaluation and implementation. This concurs with Chen et al. (2006) who declared that "Most, if not all, currently published e-government strategies are based on successful experiences from developed countries, which may not be directly applicable to developing countries" (p. 23).

4.2. Organization Structure

E-Government program in Jordan consist of the following streams:

Project Management Stream is concerned for managing e-government program and projects. It develops the methods to evaluate and monitor the progress of the projects and follow up on their implementation. It works on two levels; an internal level which is related to the infrastructure of e-government program, and a national level which is related to apply e-government at different government institutions. It delivers successful initiatives and provides analysis and information on the status of e-government project to stakeholders.

Information Security Stream is in charge of four major activities. Firstly, it identifies

threats and sets up strategies and policies to minimize these threats. Strategies such as establishing CERT (Computer Emergency Response Team); creating information security eligibility criteria and developing business continuity plan. Secondly, it provides e-government program and different government institutions with a legal framework of information security. Thirdly, it conducts information security awareness programs. Fourthly, it implements identity and access management strategy.

Operations Stream is concerned for operating and managing all activities related to e-government operations. It provides institutions with the technical support to issues related to networking, information security and secured government network (SGN). It also supports e-government shared services such as portal and e-payment gateway.

Strategic Planning and e-services Stream is in charge of developing strategic plans for e-government entities in general and e-government program in specific. It defines the priorities of e-services implementations.

Technology Stream is responsible for developing a technical strategy, concept and standards for e-government program. It provides technical support to different government institutions and follows up with them.

Change management Stream is concerned about the human side; the users or service providers. It supports stakeholders acceptance to the changes took place due to technology and developments. It supports the following domains: human resources, organization culture and service delivery. It provides awareness to all types of stakeholders via promotional campaigns and training workshops.

Quality, Risk and Communication

Stream is responsible for supervising, auditing, checking and reporting the performance of the e-government program. It examines the program phases, makes sure that operations and projects finish on time. It concerns about quality control, deals with risks and develops the communication strategies internally and externally.

4.3. Vision

The Jordanian e-government program vision is to transform the government towards a customer centric approach by delivering services to people, regardless of their location, economic status, education or ICT abilities (MoICT, 2006).

4.4. Mission

The Jordanian e-government program mission is to reach stakeholders across society by delivering the public sector services through the available channels and by integrating technological resources with human roles to achieve economical and social development (MoICT, 2006).

4.5. Strategy

E-government Program in Jordan has the following key strategies (MoICT, 2006):

- Develop the public sector.
- Improve government performance and efficiency.
- Enhance transparency of government by increasing information accessibility for stakeholders; the main target is to provide this service to people regardless of their geographical location, educational level or financial situation.
- Improve the quality of the services provided to stakeholders.
- Improve the responsiveness of government by providing new channels of communication not by compromising traditional channels.
- Create positive spin-offs on society through promotion of ICT skills within stakeholders.

4.6. Stakeholders

Stakeholders of Jordanian e-government program fall into the following categories (MoICT, 2006):

- E-government users: citizens, businesses, government entities and government employees.
- The e-government program
- Private sector
- Non-governmental partners
- Political leaders

4.7. E-services

E-services offered by the Jordanian e-government program are four types. These are:

- Shared services are services that are created once and are available for all governmental institutions such as the portal.
- Vertical services are services that begin and end within an institution (i.e. passport renewal).
- Cross services are services that require the involvement of several institutions. For example, obtaining an occupation license; citizen has to go to Ministry of Industry & Trade to register a company, and then to Amman Greater Municipality to obtain the license.
- Composite services are bundles services that flow across several institutions and connected to a main frame. For example, all institutions have financial systems that are linked to Ministry of Finance and also all institutions have human resource systems that are linked to Civil Service Divan.

4.8. Phases

The first phase is launching the portal which was scheduled during the first half of 2006 to offer informational and directory services related to the government of Jordan on one gate (informational portal). The second phase is the communication between user and

government. For that matter, they have launched a communication centre via email named 'Ask'. The third phase is the interaction and e-services (transactional portal). They are integrating the portal with an electronic government architecture framework (e-GAF) to enable transactional e-government services. The fourth is the conversion phase that will be achieved when automating all government services, so users can complete the application and pay fees without necessity to go to the department (transformation). E-government program in Jordan have completed the first two phases, and currently standing on the phase between transactional and conversion.

4.9. Pillars

Jordanian e-government program has four pillars; technology infrastructure, business level, institutional framework and legal regulations. The core base of these pillars is the leadership vision of e-government as a tool to develop the public sector, and above these pillars are e-services. These four pillars rely on supporting one another; so any delay in one of them will have its effect on the others. In some points they stepped well and in other points they are still delayed; but where are they today?

In terms of technology infrastructure; it is very mature. They created the followings: A one stop portal, in both languages Arabic and English. An electronic government architecture framework (e-GAF) aiming at improving the enterprise architecture of e-government project based on service oriented architecture (SOA). A Secured Government Network (SGN) - also referred to as Government National Backbone (GNB) - that will link all entities together and connect them to the e-government enterprise architecture infrastructure. 18 entities were connected during the first half of 2008 and supposed to reach 52 entities by the end of 2008. Ultimately, their goal is to connect 116 entities to the SGN. An operations centre

that hosts the SGN in addition to other elements and services. An e-payment gateway; to facilitate payment of public services fees. E-payment gateway infrastructure is completed and agreements were signed with payment service providers but linking the gateway and services together is to be done.

SMS gateway that enable providing services via mobile at cheap rates. 60 entities have been connected to this gateway. However, only 14 services are offered from 11 entities only. Services such as inquiries on: vehicles licenses offered by the Drivers licensing Department, vehicles fines and Complaints offered by the Greater Amman Municipality, vehicles customs; status of a custom's consignment offered by Customs department, and balance of Tax for individuals offered by the Income and Sales Tax Department. A set of technology and information security guiding principles to direct e-government implementations. A public key infrastructure (PKI) initiative to ensure secure delivery of e-government services and provide a single sign on to users. Furthermore, a national and technical committee on information protection was formed, consisting of 10 governmental, security and military entities as members, and they meet weekly to discuss draft policy and policy sources.

In terms of business level; they are committed to improve responsiveness to customer needs via transforming to a customer centric approach. They are growing to be more accountable and transparent. They launched a national contact centre for government services to increase communication and a communication centre via email named 'ASK'. They are also focusing on capacity building and maintaining human resources via training workshops and awareness campaigns. They have trained 10,500 employees on the basic computer skills (ICDL) and more than 1,500 on advanced skills like Cisco and Microsoft. Moreover, in 2002; with a royal initiative of his majesty king Abdullah II, they

created around 170 knowledge stations (Kiosks) which distributed all over the Kingdom in 12 governorates.

In terms of institutionalization; they established:

- Standardized e-government units within 64 institutions out of all 116 entities - identified in their new strategy - that have a similar e-government institutional structure in order to facilitate communication and coordination between the e-government program at MoICT and entities. Each e-government unit is headed by a Chief Information Officer (CIO) and includes: Information Security Officer, e-Government Project Manager, Change Officer, Content Manager, and Customer Relationship Officer (MoICT, 2006).
- A national e-government steering committee (eGSC) in 2006 to discuss the challenges and provide leadership to direct e-government development in the country. It is headed by the Minister of Information and Communications Technology, deputized by the Minister of Public Sector Development and includes 7 secretary generals of the following ministries: Industry and Trade, Education, Finance, Planning, Interior, Health, and Justice, the General manager of the General Budget department, a representative of the Public Security Department and e-Government Program. CIOs at e-government units and IT managers are sometimes called for the committee.

meetings. In 2007, the Committee met in wide intervals while in 2008, it met only at the end of every month to discuss the e-government program progress for each month and set the coming tasks. A report is submitted to the Prime Ministry as a result of these meetings to monitor the program and reinforce its achievements from highest levels.

- Inter-agency working groups such as information security steering committee (ISSC),
- A National Information Technology Centre (NITC), but has not been activated yet.
- A performance reporting mechanism on e-government program; to ensure continuous leadership support.
- Quality teams, to find out about errors and bugs that contribute to system failure in the institutions

In terms of legal regulations; In 2001, e-transactions law was established. Although it is a provisional law till this day but it is valid and they work under it. It supports online transactions and determines a lot of matters such as how to deal with any record as a notification and registry. In addition, they are working on governance; setting roles, policies and responsibilities to guide e-government projects and institutions. They are also on their way to establish laws and standards of information security matters such as e-documents, and to create a framework for public-private-partnership (PPP) in order to ensure efficiency. But they are delayed in some areas such as identity management, authentication and single sign on. However, interviewees claimed

that these issues are taken in consideration and will be done within 2-3 years. And because of that they believe that a giant jump is foreseen to happen in the Jordanian e-government program in 2011.

In terms of e-services; they are few. They have 8 institutions linked to the portal; each one has more than 7 e-services provided online. These institutions are:

- Prime Ministry
- Income and Sales Tax Department
- Departments of Lands and Surveys
- Ministry of Industry & Trade
- Government Tender Directorates
- Jordan Customs
- National Information Technology Centre
- Housing and Urban Development Corporation

4.10. Current projects & Future Plans

The e-government program in Jordan has completed various core projects that are very advanced and still working on many other projects such as:

- Launching 47 effective electronic services at the Civil Status Department within the first quarter of 2010; such as Passport and ID cards issuance and renewal. There is also projects related to Border & Residence and visas; citizens will be able to obtain work permission for a servant or worker without the necessity to visit governmental institutions.
- A project called 'the smart card' that is expected to be completed in 2010. It is a

multi application card that consists of two divisions: the ID which is related to Civil Status such as e-voting, and the public key infrastructure (PKI) which is related to health such as medical insurance. There will be a full resettlement and people who have traditional IDs will be given the chance to replace these IDs with smart cards; they have to refer to Civil Status Department within 2 or 3 months to change their ID card because it will be no longer valid after a certain period, and the newborn will immediately be given smart cards.

- Creating a unified database with the assistance of Ministry of Public Sector Development.
- Creating e-kiosks that are linked to the main e-government portal; so that stakeholders who don't have internet connections can access the portal and conduct any transaction from wherever for example a mall, a trade center or even a governmental institution, with no need to stand at the counter waiting for an officer.
- A legal framework project.
- Reorganizing the regulations at the departments in general and at licensing department in specific. For example; if a citizen get fined in a particular governorate, the fine has to be paid there and unless it is paid, the citizen will be called to court, so citizens suffer; however, today they are trying to

change that regulation to allow citizens to pay their fines wherever.

- An initiative that it is not officially announced yet; it is a Security Glossary; they are translating (from English to Arabic) every term regarding security and are placing them in a glossary in order to be used later as a Security Terminologies Arabic Dictionary.
- Inviting the Private Sector companies to a universal day; this has not been made yet.

4.11. Other Arab Countries Experiences in E-Government

They studied advanced countries experiences such as Singapore, Korea, Belgium, Canada, Japan and America. They also examined experiences in regional countries such as Egypt, Dubai, Qatar, and Tunisia. There were also site visits to those who worked in the Jordanian e-government program to several countries that applied e-government; with the purpose of benefiting from good experiences and avoiding bad ones.

According to the interviewees' opinions, the most useful experience at the World level is Singapore, followed by South Korea and Japan. They elaborated that Singapore is doing things in a very simple manner. Regionally, they clarified that it differs from one country to another; for electronic documentation, Egypt is the most useful experience; in addition to its advanced infrastructure jointly with Sudan. For CERT, Emirates and Qatar are on the top. Tunisia is the superior regarding legislations of information. Oman is good to some extent in terms of implementing their plans properly; it has smart card implementation project. The most appealing country to the interviewees is Saudi Arabia. They illustrated that Saudi Arabia works in the same manner as

Jordan; focussing on the government infrastructure to create the core components and implementing one project at a time (A-Z implementation). However, interviewees pointed out that what distinguishes Saudi Arabia e-government program is the availability of financial resources which are much greater than the financial resources available to the e-government program in Jordan.

5.0 Conclusion

E-government program in Jordan has broadened throughout the past years, and this paper has traced the history, transition and development of the project. From the inception of this initiative throughout the progress and the changes that influenced it, to the current projects and future plans. It demonstrated how this initiative has transferred from vogue to conviction. It presented the findings based on a qualitative assessment approach. The researchers concluded that even though e-government program in Jordan has started many years ago and various projects have been implemented, it has been such a slow process with many deterrents, thus stakeholders are still unable to truly see the fruit of an effective e-government program due to the fact that most projects are not yet linked together or activated.

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