

## Electronic government projects: study of Tunisian case

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### ABSTRACT

In reality, public services are an exciting domain for the application of Information and Communication Technologies (ICT). Their application improves the effectiveness and efficiency of services provided by governments.

E-government is part of the modernization of public services. This is in fact the use of information and communication technologies (ICT) by the state and public agencies to provide services to citizens.

The objective of this document is to present the electronic government system and the Tunisian strategy in this area.

*Keywords*—e-government, e-administration, strategy, electronic services, maturity level. Performance evaluation.

### I. INTRODUCTION

The development of the Internet and developments in processing capacity and storage of data in recent years have changed the context of the use of the ICT in society and in the administration. In fact, the development of the digital economy has stimulated the need to innovate and develop e-government services [1].

In fact, and since the late 1990s, governments at all levels have launched e-government project to provide information and electronic services to citizens and enterprises [2, 3].

The objective of this work is to present the state of maturity of electronic government system, the stages of evolution and study the performance of the Tunisian strategy for e-government

### II. DEFINITIONS, CONTEXT AND DEVELOPMENTAL STAGES OF E-GOVERNMENT

Definitions of this concept, which appeared in public administration in the late 1980s, are multiple. Some insist on the effective management of government [4,5,6], others interested in improving the quality of services to citizens [7] and others highlight the new mode of governance [4,5,8]. Despite the variety and the constantly changing definitions of this concept, two basic ideas are still emerging: the use of ICT and the transformation of relations with stakeholders [5].

E-government includes three areas: e-administration, e-democracy and e-soci ty [5]. It is "the adoption by public authorities of the new information technologies and communication in its

relation to the sovereign, and its relationship with citizens, employees and partners in the public service "[4].

There are three relationships in the e-government interactive processes: government-to-government (G to G), government-to-business (G to B), and government-to-citizens (G to C) [3].

(G to C) report aims to improve and deliver services to citizens [1; 9; 5, and 7].

(G to G) report includes relationships and interactions between organizations agencies, departments or organizations to provide integrated services through a single entry point [1, 9, 5]. The goal of G to G is to support e-government initiatives by improving communication, data access and data sharing.

(G to B) report which aims to improve the interactions between firms and governmental agencies how provides services [1, 9, 5].

After having defined the e-government and its areas we provide an overview on the evolution of this system in the Tunisian context.

The evolution of e-government in Tunisia was made by five phases:

#### Preliminary phase (1980-1999)

During this phase, Tunisia started the introduction of information technology in public administration. Computerization results in the creation of several computer applications, such as applications relating to: management of administrative affairs of state personnel (INSAF) Process for Budget Decision (ADEB), monitoring and management orders missions abroad (RACHED).

#### The first generation of public web sites: The information phase (2000-2002)

The purpose of this phase is to have an online presence on the internet to exploit this new communication channel.

#### The second generation of public web sites: The interaction phase (2003-2005)

At this stage, the organization provides a link to more personal communication with citizens by implanting an electronic delivery service that uses email, search engine, download forms and specifications online.

#### The orientation towards the online services: the transaction phase (2006-2009)

This phase is the extension of the interaction phase. We can manage the full cycle of a transaction from

data collection to archiving. (Online registration for university, paying bills online, business creation online, Madania 2 (marital status) ...).

The integrated administrative services 2009 -2014: the integration phase:

The integration of services is a fully integrated electronic service delivery of various organizations on the same portal. Citizens can then benefit from a single point of entry to a service request that requires the collaboration of several organizations. (The project connected government framework, on line tax filing, Tunisia Trade Net ...).

III. MATERIALS AND METHODS

It is a qualitative exploratory study and the interview is the tool for data collection. In fact, the sample of this study is composed of officials responsible for the development, coordination and implementation of the system of e-government in Tunisia. This research was started in October 2013 for 8 weeks.

IV. RESULTS

After analyzing the data collected from several meetings with officials and responsible for the development, coordination and implementation of the system of e-government in Tunisia, we have inferred the following conclusions on the Tunisian context the level of maturity and action plan for e-government.

Tunisian e-government strategy is to enhance the use by the administration of Information Technology and Communication to improve: the relationship between government and citizens, the performance of the administration through improved quality of service and appropriate public governance, increase transparency and control against corruption.

To implement this vision, a number of strategic objectives have been identified as part of an action plan for the development of e-government and are classified into two categories: the development of new online services and improving the quality of online services

V. DISCUSSION AND CONCLUSION

The schedule of the implementation of online services is planned to develop 200 new online services during a period of 5 years. Currently the number of online services is 202 divided into three categories which are: G to G services (7 services), G to B services (57 services), and G to C services (138 services). The maturity level is described in the following table

TABLE I. DISTRIBUTION OF THE SERVICES BY LEVEL OF MATURITY

<i>Maturity level</i>	<i>Description</i>	<i>Number of</i>	<i>Percentage</i>
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		<i>services</i>	
1	1- Online Application (informational)	50	25%
2	2- Following the on line application(interactional)	66	33%
3	3- transaction (Transactional)	66	33%
4	4- intra organizational integration	3	1%
5	5- inter organizational integration	17	8%
Total		202	100%

Regarding the maturity level, the results showed that the majority of services are at the embryonic stage. In fact the percentage of integrated services (intra and inter-organizational integration) is 9%.

This result leads us to wonder about the existence of tool and mechanisms for monitoring and evaluating the performance of the electronic government.

Based on this exploratory study of e-government system and the interviews, we can argue that the tools provided for the evaluation of e-government projects are mainly based on:

- User satisfaction and restoring confidence.
- The positioning of Tunisia at international level in the field of e-government.

In the same context the evaluation system should cover all components of the electronic government (governance, legal framework, Human resources, head direction commitment ...), and the actors involved in the evaluation are mainly users of the electronic government and civil society.

VI. REFERENCES

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