TOWORDS AN ALGERIAN E-GOVERNMENT STRATEGY AND ACHIEVEMENTS

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─**Abstract**─

Since the appearance of the concept e-government and the information communication technologies ICTs, countries around the world started their private e-government projects elaboration in order to take advantages of the promised benefits, each country shaped its e-government strategy, a systematic and long-term scheme, as all countries Algeria is too willing to implement an electronic government plan and exploit its strategic objective to support and simplify governance for all parties, government, citizens, businesses and employees in what serves the country, its economy and its citizens. This paper is going to examine the Algerian electronic government strategy, the future challenges, the anticipated benefits and the realized work till now.

Key Words: *Algeria,E-government,   information   communication   technology (ICT), strategy implementation.*
JEL Classification: G38, L96, L98.

1. INTRODUCTION

Many authors and organizations defined e-government in different ways in this section we selected some of the most common ones, SHARMA and his ally defined e-government as follow "E-government is a generic term for web-based services from agencies of local, state and federal governments. In e-government, the government uses information technology and particularly the Internet to support government operations, engage citizens, and provide government services. The interaction may be in the form of obtaining information, filings, or making payments and a host of other activities via the World Wide Web" (Sharma, 2003; 2006). The World Bank has defined e-government as referring to "the use by government agencies of information technologies […] that have the ability to transform relations with citizens, businesses, and other arms of government" (World Bank, 2013).

The e-government allows the government's diverse departments and associations to have direct contact to people and vice-versa. It reduces the costs and minimizes delivery times for the government. The World Bank classify electronic government into three classes and searchers added one class, government to government interaction (G2G) involving electronic information sharing and conducting data exchange between various departments of the government and other entities. The exchange can be either intra or inter department and agency at the national as well as among the national levels, regional and local levels, interaction between government and citizens (G2C) is a communication link between residents, private individuals and government where electronic information deployment and services delivery takes place. The purpose behind this interaction form is to make interactions such as renewing licenses, obtaining certificates, paying bills or taxes and applying the government's plans less time consuming and convenient, interaction between government and business enterprises (G2B) refers to government's agencies communications with, products and services procurement from the commercial business entities. it also includes sale of government's products to the public. This interaction can reduce the costs through increased competition and improved procurement practices. Government to business interaction also includes exchanges and transactions between government and business entities regarding their licenses and policies issued for different sectors and government to employee interaction (G2E) includes

activities and services between government unites and its employees which enable effective communication between both sides. It covers work rules, guidelines and regulations, employment opportunities, payment structures for government's personnel …etc. This categorization is popular among various e-government literature (Riley,2007), (Stoltzfus,2004), (Lee,2005), (Graafland,2003).

This paper focuses on the Algerian electronic government strategy. Firstly, a brief introduction in the area of electronic government is presented which includes some of the most known definitions and the categories of electronic government it will continues with a presentation of the Algerian strategy where the main axes of the strategy are mentioned, then its presents the strategy's achievements and progress, the future challenges and the conclusion and future works.

2. Algerian e-government strategy

The Algerian action plan is organized around thirteen major axes, for each axis a portfolio was developed followed by a definition of specific and key objectives list to achieve by the year 2013 in this section we will present the axes briefly basing on the e-commission report (E-Algeria, 2008).

2.1. The first axis is the acceleration of the use of ICTs in public administration:

This axis is devoted to the involvement of the ICTs, the enhancement of their use in the public administration and to make important transformations in its work and of its organizational modes. These transformations will help the public administration rethink its organization and operating modes with what serves the citizen appropriately, including the put online of its various services

In this context, specific sub objectives and occasionally mutual were set for each ministry department of the government. They concern the following aspects:

- The accomplishment of networks and systems in both intranets and LANs levels.
- The establishment of an integrated information system.
- The deployment of industry-specific applications.
- Increasing human skills and knowledge.
- The development of online services for citizens, the businesses, employees and other government departments.

2.2. The second axis is the acceleration of the use of ICTs in enterprises:

The use of ICTs has become necessary to increase the performance and business competitiveness and to benefit from the opportunities offered by a wider and

highly dynamic market. Hence, a major goal has been defined, namely the integration of ICTs in the economy and support the appropriation of ICTs by businesses. This induces the following three specific sub objectives:

- Supporting the ownership of ICTs by small and medium-sized enterprises.
- Developing applications for the Improvement of business performance.
- Developing and expanding the provision of services online by enterprises.

2.3. The third axis is development of mechanisms and encouragement measures for citizens' access to equipment and ICTs networks:

The process of generalizing access to the Internet which is the major objective has three specific sub objectives:

- Revive OUSRATIC the project that aims to provide each family with a personal computer through the provision of individual microcomputers and broadband lines, providing training on and making available specific contents that suit each segment of the population.
- Significantly increase the number of public community spaces: cybercafés, techno parks, science houses, culture houses, etc...
- Extend the universal access to the internet service.

2.4. The fourth axis boosting the development of the digital economy:

The digital economy is based on three major components: software, services and equipment.

A little encouragement may lead to boost the entrepreneurship and the production of local content, which is a driver domain of innovation.

The main objective assigned to this axis is the creation of the appropriate conditions for the intensive development of the ICTs industry. This important goal can be divided into four specific sub objectives:

- Continue the national government-business dialogue initiated for the development process of the e-strategy Algeria.
- Provide all conditions to enhance the national scientific and technique abilities when it comes to the production of programs and providing services and equipment.
- Direct economic activities in the information and communication technology towards exportation.

2.5. The fifth axis is to enable the telecommunications infrastructure in high and very high speed:

Broadband and high speed telecommunication network should be able to provide the requirements across the country, with high quality and security standards.

The main objective assigned to this axis is to make a broadband and high speed telecommunication infrastructure with high and very high speed, secure, and provide high quality of services. A graph that represents the Telecommunication infrastructure status in Algeria provided by the United Nations for the year 2012 is presented in (Fig 1).

Fig.1. Telecommunication infrastructure status in Algeria2012.
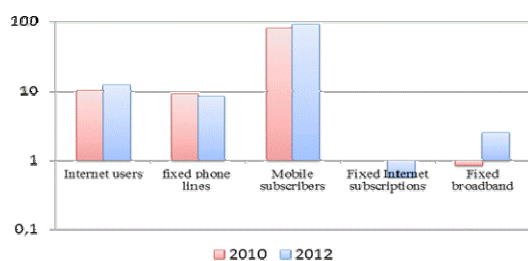
This major objective has four specific sub objectives:
- Upgrade the national telecommunication infrastructure.
- Network security.
- Quality of Services in networks.
- Effective management of the domain name ". dz".

2.6. The sixth axis is the improvement of human skills:

Strengthening infrastructure and widespread access to ICTs must be accompanied by substantial measures for training and development of human skills to generalize the use of ICTs and ensure ownership at all levels.

To achieve this major objective, two specific sub objectives are targeted:
- Integrating the high education and the professional formation domains with the information and communication technology field.
- Training the information and communication technology to all social slices.

2.7. The seventh axis is the reinforcement of research development and innovation:

Knowledge based economy requires good interaction between research development and economic world. It is indeed the innovation that guarantees the development of valuable products and services in the field of ICTs. With this the main objective of this axis is the development of valuable products and services in

the ICTs domain, by the intensification and innovation of research development activities.

To achieve this axis the following sub objectives are targeted:

- The organization, programming and the enhancement of the research results.
- The ability mobility as well as transmitting the technology and knowledge.

2.8. The eighth axis is starting up a national legal frame:

The study of the Algerian legislation tells that the existing low do not cover the issues arouse by the use of ICTs, because of that it is necessary to start up a legal frame suitable to the international practice and the needs of the information society. Thus the main objective is to make up a trustful environment suitable to the electronic governance by defining a legal frame and suitable regulations.

2.9. The ninth axis is information and communication:

The main objective behind this axis is to demonstrate the importance of ICTs in the enhancement of the quality of life of citizens and contribution in the development of the socio economy of the country, in the same purpose the following sub objective were defined:

- Elaborating and realizing a communication plan on the Algerian information society.
- Creating an associative fabric that will work as a continuation of the governmental efforts.

2.10. The tenth axis is valorisation of international cooperation:

The international cooperation, with other countries in the field of ICTs can be characterized by the important number of projects particularly with the European Union in the frame of MEDA II. The major objective of the international cooperation is to develop and upgrade the Algerian technology and knowledge as well as to emit and give out the country's image.

This objective has two sub objectives:

- Actively participate in the international initiative and dialog.
- Make strategic friendships to improve and promote the technology and knowledge.

2.11. The eleventh axis is providing mechanisms of evaluation:

The main objective of this axis is the definition of a notification, tracking and evaluation system that allows measuring the impact of ICTs on the economic and social development form a side, and to constantly evaluates the state of the plan e-Algeria 2013 from another.

This objective can be achieved by attaining two sub objectives:
- The elaboration of conceptual frame of a quality indication system.
- The elaboration of a list of relevant pointers.

2.12. The twelfth axis is organizational measures:

The prime objective of this axis is the creation of a coherent intuitional organization basing on three levels: the direction, coordination among sectors and execution, this organization will guarantee an effective execution of the ambitious plan e-Algeria 2013. In this context some specific objectives will be destined:
- Empowering the coordination in the national level and among sectors.
- Enhancing the intervention abilities in the sectors level and in the specialized institutions level.

2.13. The thirteenth axis is financiers and planning means:

The elaboration of the strategy e-Algeria 2013 requests important financier resources so it is necessary to use it wisely. An important budget of the strategy e-Algeria 2013 is elaborated every year basing on the level of progress of the plan, providing this budget will continue till the end of the year 2013.

3. Future challenges for E-government:

E-government is a big opportunity to provide services to all citizens, though there are some challenging issues
- **Privacy issues:**

  The privacy is a problem in implementing e-government services, citizens will be concerned on the privacy of their life, the security and confidentiality of their provided information in order to obtain the government services.
- **Security issues:** security is an absolute requirement especially in payment transactions such as taxes, … etc
- **Economical issues:** costs of implementation operational and maintenance must be low so a good cost and a benefit   ratio can be guaranteed
- **Acceptance issues:** making public sector accept the e-government services is quit a hard task because of the required changes in its organizational structure. Unless citizens know what is available from the e-government, they will not likely seek to use the e-government, defeating the purpose of the development of e-government information and services (Signore, 2005).
- **Required technologies issue:** government must take on consideration the case where a citizen is unable to use the technologies that e-government relies upon, for lack of education or limited ability or resources.

- **Presenting useful information and services:** the accessibility of significant content is a vital concern. The content presented on e-government websites must be more than just a large amount of information.
- **Language and communication issues:** in Algeria we have more than one spoken/written language by populace, effective e-government requires the use of a common language or languages in which citizens are comfortable communicating.
- **Geographical historical issues:** the study of Algerian Geography and it's society history prove that the application of successful e-government models such as the south Korean one is difficult with uncertain results.

4. The strategy achievements and progress:

Because they realized the extraordinary benefits that came from the adaptation of the electronic government services and the information communications technologies, countries around the world started a race to accomplish their e-government projects, thus the United Nations started presenting an investigation reports every year about this topic, those survey reports present information and statistics about the progress of e-government projects in all countries. The following table Tab1 illustrates the state of development on the North African countries, their electronic government index "the measures are from zero to one" and their ranking among the world countries, here we are only interested in the status of Algeria.

Tab1. E-government development in Northern Africa united nations survey 2012

	E-gov. development index		World e-gov. development ranking	
Country	**2012**	**2010**	**2012**	**2010**
Tunisia	0.4833	0.4826	103	66
Egypt	0.4611	0.4518	107	86
Morocco	0.4209	0.3287	120	126
Algeria	0.3608	0.3181	132	131
Sudan	0.2610	0.2542	165	154
South Sudan	0.2239	N/A	175	N/A
Libya	N/A	0.3799	N/A	114
SubRegionalAverage	0.3159	0.3692		
World Average	0.4882	0.4406		

According to United Nations e-government survey for the year 2012 Algeria occupied the fourth place among north African countries, the thirteenth place in

the Arabian world and the 132th place of 193 countries in the world, Algeria increased its e-government development value by 13 per cent in the year 2012, Algeria made a huge step in the domain of electronic government as results in the field of e-government services we present in the table below Tab2 a list of some e-government sites however this list is far from being exhaustive.

Tab2. Some Algerian e-government services web sites

E-government sites	URL
Bank of Algeria	http://www.bank-of-algeria.dz/
Constitutional Council	http://www.conseilconstitutionnel-dz.org/
Elmouwatin	http://www.elmouwatin.dz/
Ministry of Energy & Mines	http://www.mem-algeria.org/
Ministry of Education	http://www.meducation.edu.dz/
Ministry of Culture	http://www.mcc.gov.dz/
Ministry of Commerce	http://www.cnrc.org.dz/

The following graph (Fig2) data is extracted from the United Nations electronic government survey for the year 2012, this graph presents the four stages of the Algerian electronic government strategy with the rates of progress and achievements in each stage.

Fig2. The four stages of the Algerian electronic government strategy.
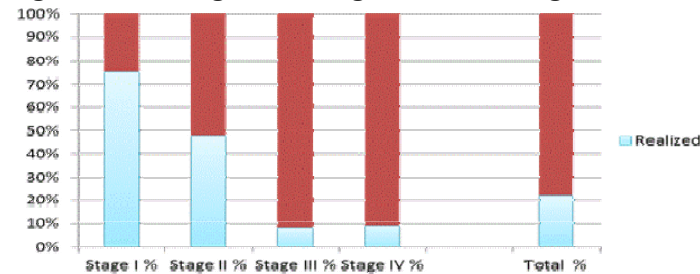
5. Conclusion and future works:

The purpose of this paper was to study the Algerian electronic government strategy, we presented the main axes of the Algerian strategy, we found that there were thirteenth axes we presented for each axis its sub objectives, then we used the United Nations' reports to show the progress and the results achieved till the moment In our future work we will follow the development of the e-government project, and by the end of the year 2013 which is the last year of the strategy plan, we will evaluate the final progress and achievements then criticize the situation from the strategy axes to the methods applied to accomplish the axis's objectives, we will not stop at this point we will try to present some ways to improve and

upgrade the e-government services we may too make use of the ICTs benefits by involving the concepts of ubiquitous serves and context awareness.

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