# The concept of E-administration: Evolution, Perspectives & challenges مفهوم الإدارة الالكترونية: التطور، الآفاق والتحديات

Dr. DEBIH Hatem Seniro Lecturer class « A » Mohamed Boudiaf's University ctomy@livefr

Date of send: 19/04/2020date of acceptance: 17/08/2021date of publication: 10/06/2022

#### Abstract:

Governments all over the world are in pursuit of Information and Communication Technologies (ICT)-based solutions for facilitating good governance, the phenomenon is popularly known as e-governance or egovernment as per varying country contexts. In the recent past, different terms have been coined to re-brand it alongside the emerging technological developments. Some of the buzzwords in this context are joined-up government, whole-of government, one-stop government, connected government and open government; the latest being digital government. Adopting new technologies into the practice of national government can significantly improve the quality of public services and the government's general performance. The concept of electronic management has spread significantly to include a large part of public service, which benefits the users and contributes to lower traditional services costs, as a result, serves the public interest.

Keywords: E-administration, ICT, tele-service, interaction, obstacles.

ملخص: تسعى الحكومات في جميع أنحاء العالم إلى إيجاد حلول تستند إلى تكنولوجيا المعلومات والاتصالات لتسهيل الحكم الرشيد، تعرف هذه الظاهرة باسم الإدارة الالكترونية أو الحكومة الإلكترونية، إذ تختلف التسمية من دولة إلى أخرى، في الماضي القريب ، تم صياغة مصطلحات مختلفة لإعادة تصنيفها إلى جانب التطورات التكنولوجية الناشئة، بعض المصطلحات الشائعة في هذا السياق هي: حكومة مشتركة ، حكومة كاملة ، حكومة وقفة واحدة ، حكومة متصلة وحكومة مفتوحة، آخر ها الحكومة الرقمية، يمكن أن يؤدي اعتماد تقنيات جديدة في ممارسة الحكومة الوطنية إلى تحسين جودة الخدمات العامة والأداء الحكومي بشكل ملحوظ. وقد انتشر مفهوم الإدارة Author Sent: DEBIH Hatem Dr. DEBIH Hatem

الالكترونية بشكل ملحوظ ليشمل جانبا كبيرا من المرفق العام، الأمر الذي يعود بالنفع على المرتفقين، كما يسهم في انخفاض تكاليف الخدمات التقليدية وبالنتيجة تحقيق المصلحة العامة. المرتفقين، كما يسهم في انخفاض تكاليف الخدمات التقليدية وبالنتيجة تحقيق المصلحة العامة. المعامات المفتاحية: الإدارة الالكترونية، تكنولوجيات الإعلام والاتصال، الخدمة عن بعد، التفاعل، المعوقات.

#### Introduction

The emergence of information and communication technologies (ICT) from the nineties has given rise to the concept of e-government. Often seen as the delivery of new services available via the Internet, e-government goes well beyond that. It corresponds to the use of ICT in the administrations, with an influence on the exchanges with the users as in the internal or inter-institutional relations. It therefore refers to the overall problem of information systems, that is to say to the organization of information exchanges between the various components of the overall system. In this sense, it is at the heart of the administrative simplification and the reform of the State because it induces a flattening of the procedures, the legal texts, the administrative organization and authorizes new services thanks to the functionalities. So it's not about IT issues, "stewardship".

This research paper focuses on the concept of the E-administration or E-Government, it's evolution and perspectives, from the aspect of large utilization as a tele-service in the interest of citizens, so that we are going to make a study's plan as follow:

Chapter I: the conceptual framework of E-administration.

Section 1: the notion of E-administration;

**Section 2:** The benefits of an e-administration;

Chapter II: E-administration : development & challenges

**Section 1:** E-administration and modernization of the administration: development phases;

Section 2: The obstacles of a successful e-administration.

# p 2081 - p 2095

# **Chapter I: the conceptual framework of E-administration**

We are going to see first the notion of E-administration then the benefits of an E-administration second, as follow:

#### Section 1: The notion of E-administration

The term e-administration, which is commonly used, covers very different realities, corresponding to very variable levels of complexity which need to be clarified.

Electronic administration, as described in the Truche report<sup>1</sup>, refers to a wide field of application<sup>2</sup>:

- The relations of the users with the administrations;
- The contribution of administrations to the animation of the public debate (dissemination of essential public data, public forum, online consultations, and more broadly new mechanisms for consulting citizens);
- The relations of the companies with the administration (declarations of the social data, declarations of hiring, transfers of fiscal and accounting data);
- The implementation of e-commerce techniques for procurement and public procurement (e-procurement);
- The new modes of work and organization within the administration (transformation of trades, cooperative work, teleworking)

Today, all these applications are called tele-services, which can be defined<sup>3</sup> as "value-added services offered by an administration to its partners and users, using telecommunication tools"<sup>4</sup>. This notion is a broader concept than the notion of tele-procedure which is presented as the paperless exchange of formalities between public authorities (ministries, decentralized services, public bodies ...) and their partners and users.

E-government or e-government is defined as the use of information and communication technologies by government agencies, with the following main objectives: to improve the quality of public services, to promote interaction between businesses, strengthen citizen participation through access to information, and reinvent administrative processes to achieve the much-needed good governance. EI has the effect of: reducing corruption, promoting transparency and reducing the costs of administrative services for the administration itself and for citizens. We will see below that there are several types of e-government, but it must be clear to all that a single government website is not an online administration per se  $^{5}$ .

It follows from the previous definition that the public administration has a lot to gain by implementing an e-government. In most countries (provinces and localities), the government is the largest provider and collector of information. And one of his biggest roles is to monopolistically provide public information such as birth certificates, marriage and birth certificates, permits, and more. Thus the absence of a competitive environment in the accomplishment of their tasks, the inherent complexity of the administrative processes and the natural refusal to change are all factors that explain this reluctance  $^{6}$ .

According to the classic theory of public service, "the administration has prerogatives of public power only to best serve the public interest, ie the public services"<sup>7</sup>. The notion of public service encompasses both the physical organ that is the seat of the activity and the activity itself. The traditional public service is delivered from a specific physical place, tangible, by living natural persons, agents, by means of "material" acts also tangible, paper, essentially. Thus enlightened, the notion of public service is illustrated by the names of local public services.

E-government is upsetting these ideas since administrative or teleservice tele-procedures are delivered by machines, and servers, computers, and data processing programs or software are not necessarily localized to the location where the request is made by the computer, 'user and does not translate into tangible operations but by electronic data'. It requires a passage through other machines, such as the printer, to "out" the computer belly files.

Electronic administration and tele-services place most of the activity in the service of the public in a material world consisting of electromagnetic inscriptions transcribed in "machine language" and the data are processed by inaccessible algorithms programs, invisible to the public. Naked eye and untouchable<sup>8</sup>.

The "human" intervention of the agents is then reduced or even nonexistent. Indeed, the data is transferred from the computer used by the user on the server of the Ministry, (for example), then, they are "treated" by the programs, and finally, in the best case, they do subject to control by an agent, control which can relate only to the results calculated by the program.

The purpose of tele-services is an administration without agents, except in the case of particular difficulties of interpretation of legality, ie for a small proportion of files. Teleservices are thus aimed at a radical transformation of the role of agents and the public. Most of the legal administrative ways, ie the "administrative procedures", involve real work and usually a physical presence of the users in the administrative premises, and a real work of the agents present: fill a form, have the vouchers checked, sign, then return and take possession of the administrative act or receive it by post. To do this, it is necessary to find the competent administration, the good counter, the good form, the appropriate vouchers, to telephone, to write, to move, to discuss, to return, etc <sup>9</sup>.

Can the establishment of an e-government to meet the needs of citizens therefore be at the root of a digital divide? Is there a paradox of the public service due to the contradiction between the principle of "adaptation of the public service" and the principle of "equality before the public service"?

#### Section 2: The benefits of an e-administration

E-government generates benefits for citizens, businesses and the government<sup>10</sup> :

## **1-** For citizens<sup>11</sup>:

• More communication channels or services;

• Reduced operating costs (this avoids traveling and taking certain risks if possible);

- Personalized and faster services;
- Citizen participation;

## 2- For businesses and civil society organizations<sup>12</sup>:

- Faster interaction with government;
- Reduction of operating costs (decrease in bribes);
- Reduction or elimination of standards (simplification of administrative procedures).

### **3-** For public institutions<sup>13</sup>:

- More effective and efficient in its operations;
- Reduced costs on operations and transactions;
- Huge long-term returns on investment;
- Better use of ICT investments

4- For the government and society in general: the long-term benefits can be summarized as follows<sup>14</sup>:

a) Simplification of the life of the Administration - automation of certain procedural steps;

b) Staff reduction - automation of certain tasks;

(c) Reduction of time in completing tasks - data transmitted in digitized form need not be re-entered;

d) Print economy - printing, inventory management, shipping costs, etc .;

- e) Citizens' satisfaction with public services;
- f) Less corruption limitation of controls and shuttles;
- (g) More transparency public information is accessible to all;
- h) Promote democracy and good governance.

# **Chapter II: E-administration : development & challenges**

As we have seen before, E-administration is a means to modernize administration, so that there are many development phases (section1), also there are many challenges face a successful E-administration (section2).

# Section1: E-administration and modernization of the administration: development phases

"Administrations, like all organizations, must constantly adapt to the changing needs of citizens and businesses, implement the new technical possibilities available, and manage the financial resources at their best"<sup>15</sup>

We take this statement from *the Carcenac report*, entitled "For a citizen e-government"<sup>16</sup>, which gives very concrete examples. It could be:

- To set up call centers open to victims of different types of violence (marital, school, incivilities etc.);
- To dematerialize the transmission of VAT statements for companies;
- To delete the civil status file, the certifications compliant.

This continuous evolution of the modes of administrative functioning, which in France is what is generally called "state reform", is in line with the principle of adaptation of the Public Service. However, the risk may come less from the difficulty of modernizing the administration than from the slippage that one might attempt to operate, on this occasion, from the public to the private sector, under the pretext of undertaking, according to the jargon used, a "reengineering of administrative processes"<sup>17</sup>.

Without doubt, information and communication technologies must be inseparable from the overall effort to transform the machinery of government and the services it renders to the governed, but they must not become the pretext for State grabbing by the private sector. But there is a moment in the process of modernization where the state necessarily needs the private sector; the choice of policies will likely tilt the system on one side or another. The profitability criterion undermines the principle of equality, so-called digital divide, of temporary will then become final<sup>18</sup>.

The application or development of these models goes through four phases of e-government maturation: Information phase; interaction phase; transaction phase; transformation phase.

It should be noted that it is not mandatory for a government agency to go through the four phases above, it all depends on the importance of the phase in its operations. For example, the General Tax Directorate may be in the transaction phase, while the labor department may remain in the second phase. To ensure the success of each phase, it is necessary for the government to define its vision and put in place a national e-government policy or plan that will be implemented through a government-wide web portal that brings together all the information and services in one place. public<sup>19</sup>.

#### 1. Information phase

This phase means for the public administration in general (ministries, departments and public agencies) to be present on the Web through a static portal site by making more transparent to the public (external and internal) information and administrative processes. This phase plays the role of the brochure and the traditional customer service, so citizens and businesses are not forced to physically go to an agency, queue up and pay bribes to obtain useful information. It is also important that the various websites designed must respect a graphic charter that follows the visual identity established by the government.

Here are some examples of information that can be published during the first phase, which can be spread over a relatively short period of time:

- Presentation of services and their administrative processes;
- Performance indicators;
- Environmental indicators;
- Audit results;

- Management reports;
- Matches;
- Internal policy documents;
- Geographic, demographic and economic data;
- Personal data;
- Yellow pages of companies;
- Press notes;
- Government Journal;
- Health and Safety Council.

## 2. Interaction phase

The second is to bring the first to a basic interaction phase by enabling a two-way communication between the administration and its citizens (internal and external)<sup>20</sup>. Thus the public can:

• Ask questions via e-mail or communicate with officials (or officials) from different levels of public administration;

- Use search engines to find information;
- Download and submit all kinds of utility forms;

• Participate in forums and in some social and political debates (e-democracy);

- Online registration and vote (e-democracy);
- Application and renewal of driving licenses;
- Vehicle registration; o Payment of taxes;
- Inter-agency data exchange;

• Personal accounts (montaxe, monpermis, mesamendes, personal data, etc)<sup>21</sup>.

For the GtoG internal model, the government uses local area networks (LANs), intranets, e-mail, and discussion boards to allow its various agencies and ministries to communicate with each other and exchange data. During this phase a lot of the tasks were carried out online, information, communication, acquisition and sending of forms, it remains now to go finalize the process by paying directly to the agency concerned.

#### 3. Transaction phase

This phase gives another alternative to users by allowing them to complete their transactions online without moving. This step is often called e-service or *tele-service* when the government manages to deliver its services through the Internet<sup>22</sup>.

Most governments around the world are at this stage and are preparing for the transition to the fourth by adapting or formulating new laws, simplifying procedures and even legalizing new ways of doing business<sup>23</sup>.

#### 4. Transformation phase

During this phase, the government carries out a complete reform aimed at transforming its relations with its governed by putting in place a strategy that favors the citizen and not the public administration itself. It is often important for the government during this phase to reinvent administrative processes and procedures (simplifying them) to make services faster and cheaper while ensuring the interoperability of public bodies in their operations<sup>24</sup>.

This phase allows the following services:

• Personalized website with integrated personal accounts for online public services;

• Database integrated into the service of public bodies ad hoc<sup>25</sup>.

#### Section 2: The obstacles of a successful e-administration

There are several obstacles related to a successful E- administration, organizational obstacles, Legislative and regulatory obstacles, financial obstacles, we are going to study every category as follow:

#### 1- Organizational obstacles:

The context influences e-government initiatives, yet the dominant structures in all OECD member countries are, to varying degrees, "*siled*" or

"silo" based on relatively clear areas of competence, mutually exclusive, with specific control mechanisms and responsibilities<sup>26</sup>.

External barriers to e-government are often due to lack of communication or lack of flexibility in the frameworks that may prevent an interdepartmental perspective. This is particularly the case when e-government is seen as a purely technical issue and not as a matter of the core public service delivery mission - or when government agencies neglect the added value of better service delivery. Collaboration with other agencies providing related services. Organizations that focus solely on bringing their own services online, without taking into consideration the broader context that determines what they can do (ex: public procurement, human resource management and budget rules ) may also encounter obstacles. In particular, the regulatory and financial provisions may seem insurmountable barriers to the establishment of e-administration<sup>27</sup>.

#### 2- Legislative and regulatory obstacles

Success depends largely on the establishment by governments of an appropriate legal framework. The introduction and use of e-government services will remain minimal in the absence of legal equivalence between digital processes and paper-based processes. OECD member countries are aware of the need for such a framework for electronic transactions to be effective, both in the area of administration and electronic commerce, and have taken steps to that effect. For example, the legal recognition of digital signatures is necessary for the communication of electronic forms containing sensitive personal or financial data. In 2002, 26 of the 30 OECD countries have adopted laws recognizing digital signatures but only a much smaller number have actually implemented applications beyond a pilot phase. Many of them are waiting for the private sector to fill the void <sup>28</sup>.

Otherwise, current public management frameworks are based on the assumption that public bodies act in isolation (ex: performance management, accountability frameworks, data exchange) and may have to hinder collaboration and the exchange of information. The complexity of regulations and the obligations imposed on public bodies may be another obstacle to investing in an inadequate project. In addition, privacy and security issues need to be addressed through appropriate legislation and regulations (as well as in practice). All government requirements for ICT procurement, support to industry, contract clauses, compliance with security requirements, and other standards can increase costs and drag out schedules. Integrated services requiring the intervention of multiple organizations inevitably increase the complexity of this process <sup>29</sup>.

Rules and regulations governing the use of ICTs can accumulate and impose obligations regarding the acquisition and financing of ICTs, network operation and security, personnel and qualification issues, service design, monitoring and reporting. They are usually issued by more than one agency or the e-government coordination unit. It would be useful to periodically review the regulations and general requirements governing the acquisition and use of ICTs, identify unnecessary or duplicative regulations<sup>30</sup>.

## **3-** Financial obstacles

OECD member countries operate in vertical funding structures, in accordance with the fundamental principle of public management, which is to hold a public body accountable for achieving organizational objectives and to give it the resources to achieve those objectives. However, these budget frameworks sometimes do not take into account the specific needs of some e-government projects, particularly those that require long-term funding and collaboration between different agencies. To maximize the benefits of e-government, funding issues need to be addressed<sup>31</sup>.

Some argue that there is a near-inverse relationship between traditional government budgeting and investments in ICT. Many of the features of the current fiscal arrangements in OECD member countries run counter to the effective implementation of e-government. Current budget frameworks allow the funding of projects in isolation but do not allow for the shared responsibilities inherent in many e-government projects. Dr. DEBIH Hatem

Financial rules may also contain rigidities that hinder collaboration in e-government by preventing joint funding arrangements. There are few mechanisms for shared funding, and it may be difficult to assess the benefits of a project of this type. In the absence of a framework for benefit sharing, organizations do not have incentives to eliminate duplication by sharing systems with other organizations unless they can share some of the savings. The use of results-based budgeting can also create barriers to collaboration by rewarding self-reliance at the expense of joint projects<sup>32</sup>.

#### Conclusion

The development of e-government introduces significant changes and plunges the public sector into the digital age. Today, E-government (or e-government) is becoming a reality. Experiences are multiplying, public services are getting organized, technology providers are fine-tuning their offers, and citizens are consuming more and more online services.

However, this modernization of the administration must necessarily be accompanied by legislative reforms and a legal framework of its own. This is particularly the case with regard to the legal status of exchanges, the protection of personal data and the implementation of an electronic signature procedure which will make it possible to authenticate the origin of the message and ensure the integrity of the message of its contents. The same is true of relations between the administration and the actors involved in the process of shaping the " interface ", as well as the participation of citizens in public decisions via cyber-democracy.

In addition, public authorities must ensure that e-government does not further increase the digital divide, that e-government benefits only a minority. It would be useful to advocate for training programs to acquire the basic knowledge necessary for the use of ICT.

Finally, today, with e-government and e-democracy, we are witnessing a historical process, analogous to the transition from the feudal state to the modern State. We move to the networked state. It is not only a question of saving the state but of making it progress, of making it succeed in its transformation.

#### Margins

<sup>1</sup> « Administration électronique et protection des données personnelles", La Documentation Française, 2002, p.15

<sup>2</sup> Jean-Marc LALIER, Développement de l'administration électronique : où en est-on ? sur le lien

http://www.vie-publique.fr/actualite/dossier/administration-electronique-

2005/developpement-administration-electronique-ou-est-on.html

<sup>3</sup> Thierry BERTON, Rapport "Les téléservices en France: quels marchés pour les autoroutes de l'information?",La Documentation Française, rapports, 1994.Modifiée par Philippe Schnäbele, in "Réforme de l'Etat et téléprocédures", AJDA juillet 2001, p.608.

<sup>4</sup> Véronique BELOULOU, "Les téléprocédures un enjeu essentiel pour le citoyen et pour l'Etat", AJDA 20 juillet 2000, p.624.

<sup>5</sup> Guyverson VEMOUS, Gouvernement électronique, sur le lien : <u>https://fr.wikibooks.org/wiki/Gouvernement\_%C3%89lectronique</u>, vu le 01-11-2018

<sup>6</sup> Jean-Jacques-LAVENUE, E-administration ; fracture numérique et égalité des citoyens, sur le lien :

http://droit.univ-lille2.fr/la-faculte/enseignants/jean-jacques-lavenue/e-admistrationfracture-numerique-et-egalite-des-citoyens/

<sup>7</sup> René CHAPUS, Droit Administratif Général, T.1, 2000, p 563.

<sup>8</sup> Jean Jacques LAVENUE, Op.cit.

<sup>9</sup> René CHAPUS, Op.cit.

<sup>10</sup>Jean-Marc LALIER, Op.cit.

<sup>11</sup> Mylène RAMM "Objectifs et avancées de l'administration électronique", en ligne <u>http://www.renupi.org/article.php3?id\_article=193</u>, vu le : 2-11-2018.

<sup>12</sup> Ibid.

<sup>13</sup> Ibid.

<sup>14</sup> Valentina (Dardha) NDOU, E-Government for developing countries: opportunities and challenges, Electron. J. Inf. Syst. Dev. Countries, 18 (1) (2004), pp. 1-24.
 <sup>15</sup> Ibid.

<sup>16</sup> La Documentation Française, juin 2001.

<sup>17</sup> Jean Jacques LAVENUE, Op.cit.

<sup>18</sup> Jacques SAURET, l'administration électronique, sur le lien :

https://www.lajauneetlarouge.com/article/ladministration-electronique#.W-

GXrDGNyHs

<sup>19</sup> Ibid.

<sup>20</sup> Jean Jacques LAVENUE, Op.cit.

<sup>21</sup> A.M. Al-KHOURI, E-government in Arab countries: a 6-staged road map to develop the public sector, J. Manage. Strategy, 4 (1) (2013), p. 2013

<sup>22</sup> Electronic Government for Developing Countries, ICT Applications and Cyber Security, Policies and Strategies Department, ITU Telecommunication Development Sector (2008) <sup>23</sup> A.M. Al-KHOURI, Op.cit.

<sup>25</sup> Guyverson VEMOUS, Op.cit.

https://www.cairn.info/revue-francaise-d-administration-publique-2004-2-page-225.html

<sup>27</sup> Ibid.

<sup>28</sup> Francis JUBERT, Elizabeth MONFORT, Robert STAKOWSKY, Le e-administration
, levier de la réforme de l'État, 4e de couverture, Dunod, Paris 2004, p 53.

<sup>29</sup> Mohammad A.Sarrayrih, B.Sriram, Major challenges in developing a successful egovernment: A review on the Sultanate of Oman, sur le lien : <u>https://www.sciencedirect.com/science/article/pii/S131915781500021X</u>

<sup>30</sup> Ibid.

<sup>&</sup>lt;sup>24</sup> Ibid.

<sup>&</sup>lt;sup>26</sup> Edwin LAU, Principaux enjeux de l'administration électronique dans les pays membres de l'OCDE, in : Revue française d'administration publique 2004/2 (n°110), CAIRN, sur le lien :

<sup>&</sup>lt;sup>31</sup> Edwin LAU, Op.cit.

<sup>&</sup>lt;sup>32</sup> Francis JUBERT, Elizabeth MONFORT, Robert STAKOWSKY. Op.cit, p 54.