



Vol. 05 No04 (2023).

P. 675-706

*The reality of applying electronic management in Algeria between readiness and future prospects*

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*Received: 29/09/2023*

*Accepted: 31/12/2023*

### *Abstract*

The process of implementing electronic management is based on a number of determinants. Through it, it seeks to create a suitable environment for the successful application of electronic administration. In turn, Algeria, like the rest of the world's countries, has begun implementing its policy aimed at introducing major reforms in many central ministerial sectors and their decentralized bodies for the sake of administrative reform characterized by modernization by adopting the application of the electronic administration system.

Accordingly, we have tried, through this research paper, to achieve a number of goals, which are to shed light on the reality of applying electronic management in Algeria and the motives and requirements for switching to it, and then evaluate the reality of its application in Algeria. The results of the study indicated a number of results, the most important of which is that Algeria is making efforts to provide The appropriate and incubating environment for electronic management, through the development and dissemination of information and communication technologies, but it is still unable to keep pace with global developments in this field.

**Keywords:** classic Administration; Local Administration; information and communication technologies; Electronic Administration; digital transformation.

## 1. INTRODUCTION

Change has become one of the civilizational features of the developed world, and this requires the necessity of working to take stock of all the changes that occur in the surrounding environment, out of a desire to confront the effects of this change and keep pace with developments. As a result of these rapid and successive developments and the explosion of knowledge, societies face a set of challenges, which makes it necessary for them to confront them. In order to be able to catch up with the information age and make the most of the technical revolution in all its fields, including the field of management, Algeria, like other countries, has moved towards entering the information age, It adopted a series of changes to its traditional functions in light of the shift towards the use of information technology within its service activities, with the aim of actually embodying the shift towards the concept of electronic management, and from there electronic public services, in search of ways to rationalize public service.

Accordingly, and from what was previously stated, the following problem can be raised: What is the reality of implementing electronic management in Algeria?

The objectives of this research paper can be summarized as follows:

- ✓ Identify the motives behind the transition from traditional management to electronic management.
- ✓ Determine the extent of Algeria's readiness to implement electronic management.
- ✓ Identify the reality of the legislative environment related to electronic management in Algeria.
- ✓ Highlighting and clarifying the extent of application of the electronic management system in Algeria.

In order to answer the problem at hand, a systematic approach was adopted that relies on the analytical approach, or what is expressed as the content analysis approach, by examining with some analysis the provisions included in the Algerian legislator in its texts related to electronic affairs and all legal texts related to the subject.

Relying on the binary division by examining the reality of technical readiness in Algeria (the first Subtitle), and then on the reality and future of information technology techniques within electronic administration in Algeria (the second Subtitle).

## **2. First Subtitle: The reality of technical readiness in Algeria**

Based on the fact that measuring any experience or initiative towards building electronic administration and improving the level of its public services depends on looking at the readiness that has been achieved, and from the reality of readiness towards application and the level of effectiveness in the achievements, as the process of implementing electronic administration is based on a set of determinants, it aims to During which we seek to create a suitable environment for a successful application of electronic management, as the first development steps begin in establishing the electronic management project in Algeria, knowing the reality of electronic readiness to implement the electronic management project, in terms of the quality of the telecommunications infrastructure, the quality of the human resource, and building the information society.

Accordingly, in this regard, we will address, through this part of the research paper, the reality of technical readiness in Algeria through the following:

### **A. Internet and technical readiness in Algeria:**

Algeria's trend towards applying information and communication technology

represents a major change in the culture and practice of government business, as a means of enabling the government to secure more efficient management of its resources, and thus enabling it to implement its policies and plans with high efficiency, as the spread of the Internet as a pivotal technology in the electronic transformation strategy represents an important stage. In the process of moving towards information and communication technology, and the shift to electronic services in government institutions in Algeria, in the interest of public service organizations and the adoption of the concept of electronic management, as a tool for developing and reforming public service organizations.

Algeria's interest in the Internet is highlighted by its conviction of the necessity of possessing and controlling these new technologies because of their economic, social and political effects that benefit the state. This conviction is evident in the state adopting an ambitious policy based on developing this sector and trying to join developed countries. (Zahiwa, 2007, p. 67).

Algeria worked to benefit from the services of the Internet and the various technologies associated with it through its connection to the Internet in March 1994 through the Center for Scientific and Technical Research, which was established by the Ministry of Higher Education and Scientific Research in March 1986, and one of its basic tasks was to establish A national network and linking it to regional and international networks. (Bakhti, 2002, p. 31).

With the launch of Internet connectivity in Algeria, since 1994, Algeria has witnessed significant growth and progress in the field of Internet subscription and interaction. In the same year, it was connected to the Internet via Italy at a speed estimated at 9,600 binary characters per second. It should be noted that this percentage, as Dr. Bakhti Ibrahim believes, is Very weak. (Bakhti, 2002, p. 31).

In 1996, its speed reached 64 thousand characters per second, passing through the French capital, Paris. At the end of 1998, Algeria was connected to Washington

via satellite with a capacity of 1 megabyte per second. In March 1999, the Internet capacity in Algeria became estimated at 2 megabytes per second. More than 30 new telephone lines were established through the centre's access points located across the various states of the country (Algiers, Setif, Ouargla, Oran, Tlemcen and others) and linked to a single exit point, which is Algiers. (Hadar, 2017, p. 124).

The number of organizations participating in the Internet in 1996 was estimated at about 130 organizations. In 1999, that is, five years after the introduction of the Internet to Algeria, the number of subscribers to the network reached 800 organizations, including 100 organizations in the university sector, 50 in the medical sector, 500 in the economic sector, and 150. In other sectors, during the year 2020, the number of Cerist Center subscribers was estimated at about 3,500, as Algeria during this period witnessed weak growth in the percentage of individuals' uses and subscriptions to the Internet, and this is what the opposite can be recorded in institutions, such as Internet cafes and public institutions, due to the rise Network connection costs. (Laqab, 1999, p. 122).

The primary role in the spread of the Internet was initially attributed to the Center for Scientific and Technical Research, as a government organization that assumed responsibility for promoting and using scientific and technical information, and was concerned with supporting information and communication technology in Algeria. It also ensured the implementation of Maghreb projects in the framework of a partnership with some countries in North Africa, in addition to In addition, the center benefited from equipment for connecting to the Internet, and programs for training users, who organize subscriptions through the center to cover different institutions throughout the country (Boumaila, 2003, p. 167).

Looking at the rate of development of Internet subscriptions in Algeria, it is noted that this indicator has gradually changed, as it is linked to various circumstances and reasons, most of which are due to weak individual income and the

difficulty of network connectivity.

As a link in the stages of the development of the Internet, Executive Decree No.: 98-257, dated August 25, 1998, related to regulating the conditions and methods for establishing and exploiting Internet services, issued in the Official Gazette No. 63, dated August 26, 1998, and amended by Executive Decree No.: 2000-307, dated October 14, 2000. Related to regulating the conditions and methods for establishing and exploiting Internet services, issued in the Official Gazette No. 60 dated October 15, 2000, in order to determine the standards and conditions related to the methods for establishing the Internet and benefiting from its services. This stage embodied the emergence of other new providers in the public and private sectors, sharing the task of providing the Internet with the Center for Scientific and Technical Research, which led to a development in the number of network users, and also resulted in the number of licenses granted to private individuals across the entire national territory reaching 65 at the end of 2001.

Accordingly, and based on the above, it can be said that the indicators of Algeria's openness towards the application of information and communication technology were based on an attempt to provide the appropriate environment, most notably supporting connectivity to the Internet, which imposed the necessity of creating a national policy for information and communication technology. According to 2011 statistics, the computers used in Algeria amounted to about 7.3 million devices, and the number of Internet users reached 7.7 million, as for fixed-line telephone subscribers, 3.1 million, and with regard to mobile subscribers, 35.7 million subscribers. The information and communications technology index reached 1.36 points. In its report on information technology and technology, Davos ranked Algeria 129th globally out of 148 countries. All indicators for this report indicate that Algeria ranks last (Ben Qurina and Ben Sassi, 2015, page 17) according to the classification of the World Economic Forum "Davos". Algeria ranked 105th globally in 2015 out of a total of 144 countries in terms of communications and roads

network. (Sayeh, 2018, p. 74).

According to the Ministry of Post, Information and Communication Technologies, the number of high-bandwidth Internet users in Algeria has reached 11 million users, an increase of one million users compared to the year 2011, for Adisan users, laptop holders, and network users in institutions, families, and various social groups. He also stressed that all educational institutions, universities, and institutes The training program is currently connected to the Internet, and about 400 university residences are connected to the Internet. Regarding the education sector, the Minister confirmed that 85% of educational institutions use the Internet, in addition to 70% of middle schools and 25% of primary schools. The health sector also has a reliable information network within the framework of the e-health project. It is also currently working hard to replace classic cables with optical fibers. (Sayeh, 2018, p. 74) Algeria ranked 21st in Africa with 3.3 megabytes per second, according to 2015 statistics.

Thanks to its strategy to develop media and communication technologies, Algeria was able to impose itself as one of the most vibrant countries in this field during the year 2016, achieving significant progress within the framework of its policy aimed at building the information society and digital economy by improving its position by nine places within the classification of the International Telecommunication Union. And wireless in its resolution on the information society during the year 2016, During the year 2016, Algeria was among the first three countries in the world that achieved more progress in the field of the development index of media and communication technologies, from 3.74 in 2015 to 4.40 in 2016, that is, from rank 112 to rank 103 in the space of one year. It is noteworthy that between 2010 and 2015, Algeria advanced only one place, moving from 114th to 112th in the global rankings that included 167 countries in the field of the Media and Communication Technologies Development Index.

The Secretary-General of the International Telecommunications Union, Houlin Zhao, confirmed that Algeria has advanced very quickly, exceeding 115 percent compared to other countries on the African continent, and advancing 9 places in the world classification for the year 2016. (Sayeh, 2018, p. 74).

### **B. Algeria's position in the information society:**

Information and communications technology, with its great development over the past years, has brought about rapid and important changes in modern society. This technology, especially through the Internet, has brought distances closer together in a way that man has never known before, and has made it possible to store and process huge volumes of digital, textual, bibliographic, and audio data. Images, etc., and enabled information to be retrieved and transmitted very quickly and at a reasonable cost, which helped individuals obtain information with the appropriate speed and accuracy and at the required time (Masaidah, 2013, p. 272). If the industrial revolution produced a society different from the agricultural society, Information and communications technology has created a society that is much different from the industrial society, known as the information society, which is considered a society born of the dense flow of information and technological applications that seep into society to support its activities, explain its phenomena, solve its problems, and correct its performance. (Aluti, 2009, p. 06).

The information society is also considered a networked society thanks to the convergence between communications and informatics, and the flexibility of this type of organization constitutes a winning card in the global open economy. If the primary goal of society in general is to participate in combating social exclusion, then the goal of the information society is to combat a new form of Exclusion (digital divide) by establishing an appropriate framework for digital cooperation. (Masaidah, 2013, p. 272).

The information society is a society that depends primarily on the production and consumption of information and knowledge, without which it loses its active movement, continuity, and desired harmony. Information, as a basis for knowledge, has become a basic axis around which all activities of the information society revolve. When trying to draw an integrated picture of this society, one of its most prominent features in addition to the information It is information and communications technology, and in general it can be said that the information society is the society whose development and growth depends on information and knowledge and intellectual exchange in all fields. Which is considered a very important strategic resource and a fundamental source in production, generation, processing, creativity and innovation, and therefore it is the society whose individuals and institutions deal with information in general and information and communications technology in particular in managing their lives in various economic, social, cultural, administrative, educational and health fields. (Al-Arishi and Maddin, 2016, p. 145).

In this context, Algeria, like the rest of the countries of the world, aspires to reduce the digital gap, build an information society, and develop its dependence on the Internet, because it represents a strong expression of countries' civilization and development, and in doing so it has helpful incentives and motivations, as the Minister of Post presented Previous information and communication technologies at the Geneva Conference, the Algerian strategy for building a knowledge-based information society, She confirmed during the World Summit on the Information Society World Forum, held from July 10 to 13, 2014 in the Swiss capital, that: "Algeria worked to embody the commitments it made on the occasion of the World Summit on the Information Society in Tunisia in 2005 by adopting a strategy to build the information society and the knowledge-based economy." The Minister stressed that Algeria relied on sustainable structured development to benefit all economic and social actors and citizens in a fair manner across the entire national territory.

As an embodiment of this strategy, the postal, information and communication technologies sector sought to achieve a new qualitative leap in the field of information and communication technology, as it is an essential axis for supporting the infrastructure of communication services, developing services and forming basic facilities, in order to build the information society.

The Algerian strategy for building an information society revolved around the following axes: (Hadar, page 185)

- ✓ Generalization and dissemination of fiber optic network.
- ✓ Modernizing and developing the phone access network.
- ✓ Deploying the fourth generation mobile network.
- ✓ Modernizing and developing the Internet access network.
- ✓ Spreading electronic culture.

Accordingly, it is noted that the Algerian state has made significant efforts to establish a telecommunications infrastructure and move to a knowledge-based information society and reduce the digital gap, through the implementation of many initiatives to achieve this endeavor in various fields and sectors, the forefront of which is the work To develop the Internet, which has occupied a great deal of attention, and many efforts have been devoted to it to search for ways to improve and develop it and overcome the delay that it is experiencing, as it is an important step to reach the application of electronic management and achieve the goal of the information society. (Hadar, page 186)

Algeria, like other societies in the world, seeks to achieve progress and development over the coming years, but this will certainly not be possible except through a group of elements. Considering that Algeria is one of the countries of the developing world and applies to it what applies to developing countries in terms of

economic and information dependency on the countries of the developed world, and therefore its first steps towards the information society are still faltering at the beginning and it remains unable to keep pace with scientific and cultural development at the level of the Arab Maghreb - as well as the countries of the developed world. - Comparison with other countries such as Morocco, which has developed a strategic plan for integration into information societies since 1990. (Alawi, 2004, page 68)

**C. Challenges facing Algeria in implementing electronic management:** The Algerian government faces a number of challenges that it must take into consideration to achieve the electronic management project for all public departments and facilities in a more flexible and effective manner, in order to facilitate and spread electronic transformation, which serves the Algerian society, administration and citizen alike. The Algerian government is making great efforts to rise to the challenge to overcome all challenges. Difficulties facing electronic transformation. In order to overcome the difficulties previously reviewed in this research paper, it is necessary to know and prioritize with regard to identifying the challenges that stand as a barrier to the application of electronic management.

Accordingly, in this context, this section addressed the financial and technical challenges, then the administrative and human challenges and finally the security challenges:

**\* Financial and technical challenges:** They are summarized as follows: (Draghi and Moussaoui, 2018, page 35).

- 1- Providing a strong and high-level information and communications infrastructure.
- 2- It is necessary to prepare a strategy in advance for administrative reform and digital transformation that takes into account the worst possibilities, including failure and crises that could constitute an obstacle to change and development.

3- Renewing the necessary means and devices for electronic transformation, and getting rid of the means that are no longer adapted to the new changes in the field of communications and software.

4- The need to secure information and networks from any hacking, tampering or sabotage.

5- Unifying the devices used and their specifications in one department and in one office to facilitate connection and communication between them.

6- Allocating financial amounts commensurate with the importance of transitioning to the world of modern technology and communications.

**\* Administrative and human challenges:** It is summarized in: (Bin Hussein, 2015, page 227).

1- The necessity of administrative flexibility to accommodate all changes and developments.

2- Good understanding of technological development and the importance of its use by many administrators.

3- Developing the legal system by creating a legislative framework that embraces the environment for the transition to applying electronic management, and modifying what exists in line with this environment to guarantee the rights of beneficiaries of the electronic service.

4- Providing training and training centers for employees, which provides a qualified human resource.

5- Instilling information and computer awareness among citizens to facilitate response to electronic transformation.

From this, and through the challenges mentioned above, regardless of their diversity

and complexity, it becomes clear that they represent the basis for any development process, as confronting these challenges or reducing their impact is through the need for material and moral support provided by the higher authorities in the state along with the availability of the desire and strength of those in charge of its organizations to create This is the desired electronic transformation.

**\* Security challenges:** Information security is one of the most important challenges facing the application of e-government in terms of the possibility of penetrating the information system, and the resulting loss of privacy, confidentiality and integrity of the information and ensuring its survival and not being deleted or destroyed. (Waer, no year of publication, page 09).

### **3. Second Subtitle: The reality and future of using information technology techniques within electronic administration in Algeria**

Algeria, like countries on the path of development, has worked to strive, through developing the work of its administrations, to enter the ranks of developed countries. It has adopted many policies and regulations that would improve the quality service of the Algerian administration, as well as bring it closer to the citizen, with the aim of increasing administrative efficiency and meeting the needs of the citizen. And to achieve his satisfaction, among the policies that Algeria has adopted in the field of administrative progress is the Algeria Electronic Policy, which aims to embody the idea of electronic administration and public service on the ground.

Accordingly, in this regard, we will address, through this study, the reality and future of the use of information technology techniques within electronic administration in Algeria, by addressing the modernization of local administration by introducing electronic administration techniques, through the contributions of electronic administration to improving the quality of public utility services, leading to the future of open electronic administration in Algeria and the factors for its success.

**A. Modernizing local administration and introducing electronic administration techniques:**

Algeria, like countries on the path of growth, seeks, through developing the work of its administration, to enter the ranks of developed countries, as it has adopted many policies and regulations that would improve the quality service of Algerian administrations, as well as bring the administration closer to the citizen, with the aim of increasing administrative efficiency and meeting the needs of the citizen. And to achieve his satisfaction, among the policies that Algeria has adopted in the field of administrative progress is the Electronic Algeria Policy, which aims to embody the idea of electronic administration and public service on the ground. (Abban, 2015/2016, p. 93).

At the beginning of the third millennium, Algeria moved, within the framework of administrative reforms, to gradually enter the information age, with the aim of upgrading the functions of government institutions and public service organizations, and adopted a series of changes to their traditional functions in light of the shift towards the use of information technology within its service activities in order to actually embody the shift towards the concept of Electronic administration, in order to rationalize public service, which is known as modernization of administration, (Jabour, 2017, page 13).

Modernization of administration means that it is the process of adapting to the changes occurring at the level of the internal and external environment by adopting modern means and methods of management based on a new culture governed by technology and transforming knowledge into services that live up to the aspirations of the citizen and obtain his satisfaction, (Fartas, 2016, page 313). The Algerian citizen is very It suffers from the problems of bureaucracy, the abundance of administrative documents, the loss of time and cost, and the errors that occur in administrative documents at the level of local unit institutions, including the municipality, which

made change inevitable in the e-office initiative, in order to provide quality public service at a lower cost.

This is what led to the introduction of electronic administration into the local administration according to the following mechanisms:

**\* Legal mechanisms:** The transformation from the traditional management system to the electronic management system requires a set of new legal and regulatory texts that are in line with this transformation. This is considered the foundation upon which the electronic management project is built, in addition to the use of new concepts for administrative decisions and administrative contracts, especially with the boom of so-called electronic commerce. (Al-Majzoub, 2005, p. 923).

In this regard, one of the programs of the Electronic Algeria Project for the year 2013 was the Legislation Development Program, which included the preparation of a law regulating electronic government transactions and the development of legislation, as Law No. 15-04, dated Rabi' al-Thani 11, 1436, corresponding to February 1, 2015, was issued specifying the general rules related to electronic signature and certification. Which came as a culmination of many regulatory texts that preceded its issuance at the level of the Ministry of Interior sector, where several laws and regulations related to biometric documents emerged, the most important of which are:

- ✓ Law No. 03-14 of 24 Rabi' al-Thani 1435, corresponding to February 24, 2014, relating to travel bonds and documents.
- ✓ The decision dated 9 Dhul-Qi'dah 1431, corresponding to October 17, 2010, specifying the technical specifications for the birth contract extract for issuing the national ID card and passport.
- ✓ The decision dated the first of Safar 1433, corresponding to December 26, 2011,

specifying the technical specifications for the national electronic biometric passport.

- ✓ The decision dated the first of Safar 1433, corresponding to December 26, 2011, setting the date for the start of circulation of the electronic biometric national passport.
- ✓ The decision dated 22 Jumada al-Thani 1432, corresponding to May 25, 2011, regarding the application file for the national ID card and passport.

\* **Political mechanisms:** They are represented by the presence of a political will on the part of the ruling elite to adopt the electronic administration project, and this is on the basis that the commitment of the ruling political leadership to the efforts aimed at modernizing local administration is considered one of the essential elements of success, through the establishment and placement of electronic administration at the level of public administration structures. (Hamad, 2006/2007, page 18) This is what came in the context of the political and administrative reforms of 2011, which are the necessity of working to combat all aspects of administrative bureaucracy and providing services that rise to the satisfaction and approval of the citizen, and this is through modernizing the public facility and facilitating the provision of public service to the citizen.

\* **Human mechanisms:** The human resource is an essential component of the administrative organization by virtue of it being the pivotal factor that is both affected by and influencing the changes that occur in the organization, which requires that this resource at the administration level be ready and compatible with developments, especially technological development in the media and communication. It entered the areas of administrative work, and based on this, Algeria, through the Electronic Algeria project, adopted a program based on developing young cadres, and working to develop the thinking of government leaders, in line with the concept of electronic government. Preparing appropriate plans for training work teams, Which is formed

by all government agencies to participate in the e-government project, with the aim of increasing and improving the ability to manage and manage according to specialization. Electronic administration does not manage itself, but rather requires efficient human capabilities that improve the use of computers and modern technologies. It graduates the administration and the employee from the crucible of the traditional employee to the modern one, and this can only be achieved by preparing programs and plans for training and qualifying employees at the municipal level to provide quality services. (Fartas, 2016, p. 317).

**\* Technical and technological mechanisms:** It is not possible to modernize the local administration sector without the presence of modern technological means and techniques that the electronic office needs to provide services to citizens, which is represented in providing the infrastructure for electronic administration. Which means the tangible aspect of electronic management, including securing computers, connecting fast computer networks and the devices attached to them, and securing modern means of communication. (Ahmed, Electronic Administration, 2009, p. 72) Meaning that the administration must work to develop communications networks in order to achieve the desired goal of using the Internet. In addition to providing appropriate digital technology, including equipment, computers, data equipment and systems, programs, and providing digital mail services, this is what was stated in the content of the Electronic Algeria project under the name of the technical development program.

**\* Financial mechanisms:** It is obvious that any project needs financial resources to make it successful and provide all the requirements for this project. The transition from traditional management to electronic management requires enormous financial resources to make this transformation successful.

**B. Contributions of electronic administration to improving the quality of public utility services:**

Modern information technology plays a major role in bringing about various developments in the field of providing services to citizens. Electronic administration in many countries has contributed to developing the stages and methods of administrative work, as well as providing information in a timely manner and at the lowest cost. In addition, the application of electronic administration will add quality to services provided by public facilities, and although the electronic public service model in Algeria is in its initial stages, its application has made contributions and achievements on the reality of the service provided to the citizen in a relative manner. (Nazli, 2016, p. 185).

The implications of electronic administration on the quality of public facilities are evident in:

\* **Service profitability:** It relates to the extent of the cost-effectiveness of public service projects and their various contributions to rearranging the service provided to citizens, by striving to apply the effectiveness of electronic management applications, especially their smart systems, to gain citizen satisfaction through the quality of service provided to them.

\* **Ease of follow-up and clarity of service:** This is based on the full employment of information technology in the performance and provision of public services, through the possibility of following the stages of its parts until they reach the citizen with high quality. (Hajam, 2017/2018, p. 92).

\* **Increasing the effectiveness and efficiency of the government organization:** As electronic administration is reflected in the work of internal government organizations through their administrative processes, this reflection is represented in achieving speed, transparency, and the possibility of accountability, as well as the

efficiency and effectiveness of procedures for performing government administration activities, as this trend contributes to enhancing interaction and communication between institutions. On the one hand, the government and between it and citizens and other institutions, which allows improving the level of speed and quality of decision-making, and analyzing complex problems that may hinder administrative processes. (Bay and Hadar, 2017, p. 130).

**\* Accuracy and speed in providing the service:** Accuracy, according to the service model for electronic management of services, refers to the process of processing and presenting business according to precise standards, determined through information processing systems in a way that identifies administrative errors, in addition to reducing administrative complications and transgressions that hinder the continuous movement of the service. On the one hand, and affecting its characteristics on the other hand.

The use of the electronic management system in the government organization through the use of information and communications technology in its various forms, especially smart ones such as magnetic cards and remote service provision, allows services to be provided in the shortest possible time and with the least effort. (Bouzalg, 2008, p. 46).

**\* Quality of service:** Electronic execution of transactions will improve the services provided, and enable citizens to obtain higher quality and faster services that meet their personal needs, as multiple services provide the opportunity to access all services by providing multiple channels to deliver the service to those requesting it, which is the case. Which would achieve

Qualitative growth of the services provided by civil services to citizens and reducing the level of errors caused by non-electronic methods. (Al-Aloush et al., 2004, p. 38).

\* **Transparency in service provision:** Complete transparency within electronic organizations is the result of the presence of electronic control, which ensures periodic control over all services provided. Electronic management is based on reducing expenditures in following up on various management processes and reducing obstacles to decision-making by providing a database and linking it. Decision-making centers and the employment of information technology, to support and build a positive institutional culture for all employees. The application of electronic management also adds flexibility to the administrative organization, provides services directly, and allows the elimination of close dependency on the public and private institution and even the nature of the services. Thanks to the tasks assigned to it, electronic management allows the digitization of all Documents and achieves high quality of service. (Salama, 2018, p. 72).

However, research into the element of transparency at the level of public organizations intersects with the concept of accountability, as it is the process of expecting every person in the organization to answer someone's questions regarding a topic, which means holding individuals and organizations responsible for the performance that is measured with the greatest possible objectivity. (Yahyaw, 2017, p. 379).

Transparency and accountability are among the most important new values adopted by technologies at the level of public facilities, as they work to improve the mental image of public facilities by deepening the dimension of trust, which combines accountability, which provides the opportunity to consolidate the process of public communication and improve its quality, through the free flow of information, which will be reflected in Positively on the performance of the public utility.

Therefore, at this level, accountability enables opening the doors of dialogue and inquiry to request the necessary information regarding the required service, which works to achieve trust between the citizen and the public administration,

especially with the widespread global wave of new technology in organizing electronic elections - electronic voting... etc. and other trends. New technologies that expand the functional tasks of these technologies.

This was confirmed by researcher Ranaweera HMBP through a study he conducted in the general governorates of “Sri Lanka” as a public government facility to measure the impact of information and communications technology applications on the quality of electronic service through significant indicators, especially: transparency, efficiency, accountability, reliability and employee satisfaction, where The researcher found that the four variables: transparency - efficiency - employee satisfaction - and their readiness were positively associated with the quality of government service, that is, by 46%, with a clear difference explained by the other values of information and communications technology applications and quality of service in the government sector. (Hosseini, 2018, p. 08).

In addition, electronic management provides and simplifies many things, which can be identified as follows:

**\* Improving the organization’s performance:** Electronic management helps improve the procedures for providing services, which facilitates the work and transactions provided to customers, and achieves communication between the organization and its customers, as data and information can be provided and made available to them with complete transparency. Electronic management also enables the organization to display models and procedures for providing its services to its audience. In a better way and facilitating the movement of dealing with the organization’s employees, which provides the opportunity to open new communication channels between those responsible for its management and the customers, which would facilitate the performance of business and transactions and remove many of the obstacles related to them. (Al-Daini, 2010, p. 19).

\* **Reducing administrative complications:** Electronic administration has contributed to bringing about radical changes at the level of procedures by transforming it into a technical and shorthand process that does not require a lot of effort and time, by providing the service to the beneficiary continuously via the Internet, especially since this machine is not restricted. In time and place.

\* **Improving the decision-making process:** This is based on the fact that electronic management depends on the existence of a database and information that helps decision-makers plan and make the right decisions. Therefore, the importance of electronic management is measured by the importance of information, which plays an effective role in the decision-making process at the level of organizations.

\* **Improving relationships within the organization:** which helps electronic management to reconsider hierarchical relationships between administrative structures, by redeploying competencies and increasing the degree of horizontal and vertical coordination between various administrative units, by establishing private and shared information banks among them to exchange information properly. Without following procedures, the effectiveness and ability to process and store, as well as the speed of communication and flexibility that characterize electronic administration, facilitated the possibility of overcoming central obstacles and decision-making. (Mahdi, 2012, p. 11).

\* **Changing the image of organizations:** by transforming and moving from the traditional image that employs a large number of workers, constructing large buildings, and using complex organizational structures, to the electronic image that requires little work without being restricted by the presence of geographical locations or large buildings, because services are provided through a number of Limited staff with competence and skill in using information technology. (Al-Ghouti, 2006, p. 33).

Electronic management can also work to achieve the quality of the regulatory environment of the public facility by providing the following mechanisms:

- Building the quality of the organizational structure: It works to enhance cooperation and harmony between all parts and components of the organization, including subordinates and administrators.
- Creating a quality organizational culture: Directing organizations towards creating a culture of excellence is the most difficult thing in the absence of an organizational culture with a high level of harmony. Adopting this approach achieves transparency and accountability, which works to achieve coherence, expand participation, and expand the circle of participation in decision-making.
- Excellence of administrative processes: This is based on the fact that it is an important entry point in achieving excellence, which inevitably leads to a positive impact on the efficiency of administrative processes towards comprehensive quality.
- Its contribution to oversight: The effective use on which electronic oversight is based achieves effective use of information systems and networks based on the Internet with all that is involved in the matter of examination, auditing and follow-up, which would ensure a continuous flow of information and stimulate trust-based relationships in a way that leads to reducing administrative effort. . (Abdel Aziz, 2018, p. 397).
- Promoting public communication for public facilities: New changes in public administration have led to a new understanding of the functions and roles of communication in the public sector by providing more information about the activities of these institutions with a kind of transparency in discussing public policies and new services provided, with the aim of making them less bureaucratic and more Effectively and quickly meets the needs of the local community.

**C. The future of open electronic management in Algeria and its success factors:**

Developmental transformation, in all its economic, social, political and cultural meanings and implications, requires speed, accuracy and mastery in performance, simplifying administrative procedures and improving the individual's relationship with the state, which is what prompted Algeria to think about adopting a strategy to address the imbalances that the public administration suffers from in an effort to move to what is called electronic administration. Which would get rid of the network logic and the traditional management logic that produced many negative practices such as bureaucracy, bribery, and administrative corruption. (Hosseini, 2018, p. 12).

Accordingly, in this context, this part of our research paper will address the future of electronic administration in Algeria, and the success factors of electronic administration.

**\* The future of electronic management in Algeria:** The future of electronic administration in Algeria depends on a group of obstacles and challenges facing this experience, which are:

- Algeria's lack of an electronic environment that suits its electronic strategy: This calls for the necessity of considering what has been planned and what will be implemented.
- The plans and programs for electronic transformation in Algeria are dominated by long-term strategic planning: which does not serve the path of electronic public service at the present time, especially in light of the lack of a national system that sets plans and undertakes the tasks of follow-up, implementation and coordination with most of the concerned parties. (Belkasimi, 2018, p. 274).
- The problem of electronic illiteracy that hinders electronic services in Algeria: it affects almost all segments of society, in addition to the weak volume of investment in information and communication technology, which constituted a threat to the

reality of electronic readiness and weakened the returns of digital content, which raises the need to pay attention to the problem of technical illiteracy and support education programs. Information and communication technology at various levels. (Belkasimi, 2018, p. 274).

- Poor access to the global information network: in the absence of encouraging factors for citizens, such as reducing the price of using the Internet.
- The weakness of the legal arsenal that secures electronic transactions in Algeria: which is supposed to protect customers via electronic networks, especially the financial services of the Algeria Post Corporation.
- The poor quality of electronic services in Algeria: which causes their incompatibility with the characteristics of electronic administration, in addition to the slowness or absence of accelerating applications of electronic services in the field of civil status. (Ashour, 2009/2010, p. 175).

In addition to what was previously stated, the importance of the human element must be considered as a basic pillar for activating electronic management by attracting the best elements and training the human element on the foundations and levels required by technological development. (Talhi, 2014, p. 273).

#### 4. CONCLUSION

Finally, and in conclusion of what was previously explained through this research paper, it can be said that Algeria's interest in modernizing administration and adopting the electronic management project is not an option, but rather a necessity that Algerian organizations must follow, given the rapid development of media and communication technology and modern management methods for organizations.

However, despite the efforts made to implement electronic administration in Algeria, its goals aimed at bringing the administration closer to the citizen and

eliminating injustice against him have not been materialized on the ground, and this is acknowledged by those in charge of the project, as this appears through the United Nations indicators on the readiness of countries for electronic administration, In which Algeria recorded weak indicators at the global, continental and even Arab levels, this is due to the incompleteness of the electronic administration infrastructure, and the matter is related to the weakness of programs aimed at disseminating information and communication technology and the failure to create legal conditions for the project, in addition to the spread of illiteracy. The lack of awareness of the importance of modern technology among the majority of Algerians, which contributed to increasing the digital divide.

Therefore, it can be said that the Algerian experience in the field of electronic administration is experiencing a gap between theory and practice and poor public service.

Through this study, a number of results were reached, including some recommendations:

**First: Study results:**

- ① Algeria has achieved a qualitative leap in the field of transition to applying electronic administration in many sectors, and the public service provided has witnessed a remarkable development through the elimination of a large part of the bureaucratic procedures previously established during the era of traditional and paper-based administration, which contributes to bringing the administration closer to the citizen.
- ② Implementing electronic management requires providing the basic infrastructure for its establishment, which is represented by a number of necessary requirements such as providing a communications and computer network as a mechanism, expanding the spread and quality of the Internet, enacting special laws and

regulations in this field, and preparing the qualified human element.

- ③ Catching up with what some Arab countries and most Western countries are witnessing in the field of electronic administration requires solid structures and rules in all human, financial, technical and legislative fields and adapting them to modern technological developments.
- ④ Perhaps one of the biggest obstacles preventing the implementation of electronic management, in addition to the lack of provision of infrastructure, is the limited awareness and sensitization work on the importance of this project and activating knowledge management and the lack of providing the necessary support related to the prices of electronic equipment and communications devices.
- ⑤ The connection of public administration with the development in information and communication technology has produced what is called “electronic government”.
- ⑥ Algeria launched its e-government initiative in order to keep pace with the global development taking place in this field, which included a set of goals and a set of mechanisms for implementing them. However, the failure to materialize the government project within the deadlines set for it is primarily due to the lack of control over implementation mechanisms, which led to the failure of the policy. public in this field.
- ⑦ Algeria has always made great efforts to provide the infrastructure for implementing electronic management, but the failure to complete major programs such as generalizing rapid flow, providing legal protection and a regulatory legal framework, and providing trained personnel to implement the project, are all factors that led to the failure of the electronic management plan in Algeria in The

### **Second: Study proposals:**

- ❶ Actual and diligent work to eliminate digital illiteracy, raise the educational level,

and spread information culture, by providing the infrastructure of the necessary modern devices and means.

- ② Working to remove the prevailing ambiguity in the concept of electronic management by holding seminars and meetings aimed at removing the fears of some customers.
- ③ The necessity of effective investment in information and communications technology and the provision of communications infrastructure and software to access the electronic world in its true sense and apply it in the optimal manner expected of it. deadlines allocated for them.
- ④ Providing appropriate basic facilities for implementing electronic management by providing all the necessary material, human and technical capabilities to support this model.
- ⑤ The necessity of providing Internet service to all departments and sections in government institutions and centers, which facilitates the work of electronic administration.
- ⑥ The necessity of providing computers and connecting the network across all different parts and regions of the country, while working to reduce the costs of using the Internet to spread its use to all segments of society.
- ⑦ Work to strengthen the training and formation system for employees in the field of electronic management techniques and methods, under the supervision and follow-up of specialists and experts in this field.
- ⑧ Creating an organized electronic environment that is protected from all forms of harm, by monitoring its own legal system to keep pace with this desired electronic transformation.

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