

The evaluation of e-government in Algeria between reality and prospects

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الملخص

تعتبر الحكومة الإلكترونية تقدم خدمات أفضل للناس والشركات وتعتبر مهمة للعديد من الحكومات في جميع أنحاء العالم. لذا أصبحت الحكومة الإلكترونية أكثر فعالية للعديد من الحكومات في جميع أنحاء العالم ومهما ، فهي تزيد من كفاءة الإدارات وتقلل من التكاليف والفوائد العديدة لجميع أصحاب المصلحة. كما تعتبر الحكومة الإلكترونية أداة فعالة للمؤسسات، والتكنولوجيات الجديدة للاتصالات الإلكترونية من خلال استخدام شبكة الإنترنت على أساس الحكومة الإلكترونية. لذا تعتبر الهدف من هذه الورقة هو استعراض الأدبيات المحدث والممتاحة حول مراحل تنفيذ الحكومة الإلكترونية وأهميتها، وتحدياتها ومنافعها وواقع الحكومة الإلكترونية في الجزائر مع المتطلبات والقيود.

الكلمات المفتاحية: الحكومة الإلكترونية، الأساسيات، أنواع، تحديات، مراحل، أهمية.

Abstract

E-government is better services to people, businesses and is important for many governments around the world. Effective e-government is becoming an important aim for many governments around the world, It increases the efficiency of departments, reduces the cost and several benefits to all stakeholders involved. Electronic Government is considered an effective tool for the organizations; new technologies of electronic communications through the use of the web provided the basis for the Electronic Government. The objective of this paper is to review the updated and available literature about e-government implementation stages, its challenges and benefits and the reality of e-government in Algeria with Requirements and Constraints.

Key words: e-government, Fundamentals, Types, challenges, stages, Importance.

Introduction

The world witnessed the end of the twentieth century with rapid developments in several sectors, which greatly affected the development of the individual and the increasing needs and multiplicity and development of the individual, and produced modern social and economic concepts and terminology. Perhaps the most common developments in the field of information and communication technology, E-GOUVERNMENT which the public authorities in Algeria are seeking to establish, through the introduction of a comprehensive electronic system, and the generalization of the use of the Internet through the launch of the project" Algeria electronic ".

Algeria has embarked on this project in view of the rapid and rapid development of information and communication technology that has led to a new phase in the development of human societies called information societies where the discovery their strategic role in the prosperity of States has encouraged the reflection of the use in various aspects of working life in general , And in restructuring the transactions of the government administration in particular to adopt new forms and methods in line with the new era, and to be able to enter within this evolutionary movement witnessed by governmental organizations in developed countries on the one hand, and On the other hand, after the first experiments began in some Arab countries such as the United Arab Emirates, Jordan, Syria and Egypt, the other Arab countries are convinced of the advantages of e-government. The Algerian government has no choice but to move towards the information society. One of the advantages of this project is the government and the citizen, in order to adapt to the new environment, which is becoming more and more secularized, thus enabling access to the information society and to the knowledge society in the future¹.

What can be seen from the tremendous development of the world in several sectors has had a clear impact on the quality of service delivery to individuals, especially with regard to developments in the field of information and communication technology, which, as a result of the urgent need imposed by global developments in globalization, The e-Government is one of the modern and modern forms of management. It has been a challenge and a challenge to globalization because of the speed of service delivery and the quality and quality of these services. Algeria is one of those developing countries that are striving to establish e-government in light of the current challenges of e-governance. The following issues are posed as follows:

What is the reality of e-governance in Algeria? What are the requirements and constraints in the application of e-government in Algeria? What are the future prospects for activating the role of e-government?

The researcher explains the importance of e-government, its concept and the importance of its applications and learns about the experiences of many countries with a focus on the experience of Algeria in e-government. The research consists of four sections as the first section explains: The concept of e-government, Objectives and importance, the second topic the types and components of e-government and return on investment In particular, the third topic is the

reality of e-government in Algeria in terms of obstacles, how to apply them in the ground, in the last section the most important conclusions and recommendations reached by the researcher.

The first topic: The portal of e-government

The electronic government is a modern concept that emerged as a result of the scientific and technical progress and the development of information technology and in exchange for increasing the use of computers and its various applications. The government is electronic in performing business and exchanging information through electronic means, where it extends to all individuals in the community to facilitate the work and make it easier time and effort.

First: the concept of e-government

The concept of e-government is one of the new concepts related to the revolution of information technology and communication, which has greatly affected the government sector and its performance. The concept of e-government refers to the provision of services to citizens and business sector, relying on modern technologies and networks to improve the performance of government agencies and achieve Effectiveness in dealing with it. So there are a number of definitions are as follows:

Some know it as the use of digital information technology to accomplish administrative transactions and to provide services to staff more quickly and transparently.²

And others are defined as simplifying government procedures and facilitating the system for citizens through the delivery of services to them quickly and fairly through integrity, transparency and government accountability³.

Some believe that e-government is the ability of government sectors to exchange information and provide services among themselves and between citizens, between business sectors quickly and accurately, and at the lowest cost through the Internet while ensuring the confidentiality and security of information based on two principles⁴:

- The first is technical: The preparation of information electronically and transmitted through the Internet and ensure accuracy and confidentiality
- The second procedure: the implementation of transactions and services remotely with the assurance of authenticity and credibility.

The World Bank defines e-government as "the use of ICT to achieve reform by speeding up the process of transparency and rounding off distances, removing obstacles and giving citizens the opportunity to participate in all stages of the political process and decisions affecting them⁵.

The above is illustrated by the following: Exploitation of information and communication technologies for the development, improvement and management of public affairs. This is the achievement of official governmental services between government agencies and their customers, in a computerized manner based on the Internet and its techniques, in accordance with certain security guarantees protecting the beneficiary and the service provider.

Second: The goals of e-government

The e-government is expected to achieve a number of objectives, the most important of which are⁶:

- Rationalizing decisions related to government work and minimizing complex procedures through the reorganization of administrative work and the rehabilitation of human cadres and provide them with modern technology and good training.
- Reduced bureaucratic restrictions and reducing paper packets to complete transactions ,Thus reducing the burden on citizens and reducing the time, effort and costs involved in accomplishing these transactions.
- Simplify and shorten administrative procedures by screening information and selecting what is useful only and removing the rest.
- Strengthen transparency and work in full clarity which gives credibility to the work of government institutions and others.

As a result, we can say that the outcome of the objectives resulting from the use of e-government is specifically to increase the accuracy of data, the optimal use of material and human resources, reduce the size of administrative procedures, thus reducing the voltage, time and costs leading to higher levels of performance in various governmental, economic and other institutions.

Third: The importance of e-government

The interest in the e-government has increased at the last time because of its importance and thus we will highlight two aspects of it⁷:

✓ The importance of e-government at the enterprise level:

The interest in E government has increased in light of the information and communication revolution, which has become an important role in the management of change by employing information and more benefit to achieve the goals , Improve the quality of work, respond quickly to market requirements, and ensure fairness, accuracy and transparency in the implementation of the business will be mentioned the most important advantages in the importance of e government on -level institutions as follows ⁸:

- The breadth of the market in which the company operates, through entering new markets and increasing market share.
- Direct production to meet the needs and desires of consumers by providing accurate information about them.
- Increase the competitiveness of the enterprise by improving the quality of products to be more competitive.
- Contribute to reducing the paper dependence to reduce costs and the difficulty of searching for information.

✓ The importance of e-government at the state level:

The e-government at the state level is characterized by advantages, all of which are in the public interest and contribute directly to the growth of the national economy, And

bring satisfaction to all segments and categories of society, through transparency and social justice and achieve political stability, economic and social, which leads to create a climate suitable for investment, The following are the main advantages as follows⁹:

- Improve electronic services by simplifying and facilitating procedures.
- Encouraging investment through the establishment of projects in various fields.
- Contribute to addressing obstacles through rapid completion and ease of implementation.
- The emergence of transparency in products away from intermediaries and agents.
- Contributes to preventing monopoly and selecting the best offers.
- The ability of SMEs to participate in economic growth and the entry of multinational corporations.

Fourth: Characteristics of e-government

The implementation of the e-government system will provide many of the characteristics of the following¹⁰:

- The speed of service performance : Using the computer replaces the traditional manual system, There has been an evolution in providing service to the public by reducing the time required to perform a service due to the rapid flow of information and data regarding the required service, And then will be carried out at a specific time and very short.
- Reduce costs : the use of administrative work in the traditional way consumes very large amounts of paper and also needs to supply to more than one employee and to see it and signing and this leads to higher costs
- Shortening administrative procedures: There is no doubt that the traditional administrative work is characterized by many administrative complications, because it often needs the approval of more than one administrative body and in the absence or leave of the employee will disrupt the performance of the service from day to day.

In order to eliminate this bureaucracy, following the e-government path, these procedures can be simplified and completed quickly and easily, in order to save time, effort and expenses.

The second topic: The types, benefit and components of e-government

First: Types of e-Government

There are different types of e-Government based on using to facilitate relationships between government and other key stakeholders. The types of relationships are with citizens (G2C – Government-to-Citizen), business (G2B – Government-to-Business), other governments (G2G – Government-to-Government), and employees (G2E – Government-to-Employees). Since e-Government is seen as a means to promote efficiency in government operations and improve the delivery of public services, typically e-Government focuses on the following dimensions seeking to bring about major changes in the quality of services, nature of interactions and governmental relations with relevant stakeholders. This report will use these four categories to describe the different types of e-Government services¹¹:

- **Government to Citizens (G2C):** Here the aim is to facilitate citizens' interaction with the government through the development of user-friendly 'one-stop' centres offering high quality services.
- **Government to Business (G2B):** This seeks to expedite business transactions between government and private agencies through improved communication and connectivity.
- **Government to Government (G2G):** Here the focus is sharing data and conducting electronic transactions between governmental actors. This includes both intra and inter-agency interactions between employees, departments, ministries and even other governments.
- **Government-to-employee (G2E):** G2E refers to the relationship between government and its employees only and the purpose of this relationship is to serve employees and offer some online services such as applying online for an annual leave, checking the balance of leave, and reviewing salary payment records, among other things .

E-Government programmes initiated thus far in most societies are essentially geared towards effecting changes in one or more of these dimensions. Clearly, these dimensions demand an effective and efficient networking of government agencies, citizens, and businesses so as to evolve a collaborative environment. It is only through this connectivity and collaboration between/among various parties and agencies that the goals of offering efficient, high quality services to the citizens and businesses can be achieved¹².

Second: Components of e-Government

It refers to the use by government agencies of information technologies (such as wide area networks, internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government. E-Government is expected to allow for less corruption, provides increased transparency, affords greater convenience, improves revenue and reduces costs. Preconditions for e-government are including¹³ :

- Government in good working order,
- Functioning governance processes,
- Availability of resources,
- Consensus on drivers for e-Government and
- Political support & leadership.

Governments are the societal superstructure for politics, policies, and programs. The components of e-government are as follows:

- ✓ **Electronic Service Delivery:** Governments can query, inform, and transact with the public over electronic networks. The expectations were including¹⁴:
 - Access by a person to all the personal data on that person that is held in government data banks. So far this is limited by security, privacy, and confidentiality concerns.
 - Access to all government documentation of all kinds by anyone. At present the storage and retrieval costs are prohibitive, and there are also security, privacy, and confidentiality concerns here as well.
 - Information architecture that permits one-stop-shopping for all information from all governments in a simple thematic directory. There are also cost constraints, and no known technology to integrate, index and search all of this information.

✓ **Electronic Workflow**

There are some user-friendly templates currently designed and deployed throughout government intranets. There has to be the same standardized set for every type of transaction located in every government department and agency. Like "business rules", there is the potential to develop "administrative rules" that would routines substantially information processing and decision-making. The larger issues in this area are security, privacy, and confidentiality¹⁵.

✓ **Electronic Voting**

The system is working well in India. In developed countries, the concerns over security, privacy and confidentiality could be more challenging than with most other electronic interactions. If the suspicion arises that candidates can access the record of electronic voting, voters are unlikely to trust the process enough to agree to use it. The challenge for any proposal to increase electronic voting is to build sufficient public trust in the security of the record of results¹⁶.

✓ **Electronic Productivity**

The rationale for e-government is better operations at lower cost, i.e., productivity. The social need to ensure public health and safety, national security and crime control, economic prosperity and environmental sustainability, will all guarantee the presence of governments and their active involvement in our lives, whether visibly or "behind the scenes". Efficiency of the expenditures has to be the target¹⁷.

Third: BENEFITS OF E-GOVERNMENT

The adoption and use of the e-government strategy can provide significant benefits for government in the delivery of more effective and efficient information and services to all e-government sectors. It enables government agencies to align their efforts as needed to improve service and reduce operating costs, thoroughly examined e-government initiatives in its members' countries and listed the advantages of e-government as: improving efficiency in processing large quantities of data; improving services through better understanding of users' requirements, thus aiming for seamless online services; helping achieve specific policy outcomes by enabling stakeholders to share information and ideas; assisting government economic policy objectives by promoting productivity gains inherent in ICT and e-commerce; contributing to governments' reform by improving transparency, facilitating information sharing and highlighting internal inconsistencies; and helping build trust between governments and their citizens, an essential factor in good governance by using internet-based strategies to involve citizens in the policy process, illustrating government transparency and accountability¹⁸. E-government has potential for stronger institutional capacity building, for better service delivery to citizens and business, for reducing corruption by increasing transparency and social control. A study measuring the "Return on e-Government Investments" recommends that any successful e-government program should address at least one of the following areas¹⁹:

- financial – reduced costs of government operations with enhanced revenue collection; economic development;
- reduced redundancy - consolidating and integrating government systems; fostering democratic principles; and improved service to citizens and other constituencies.
- Economy- the potential to radically reduce the amount of time; money and effort that businesses and citizens must spend to comply with rules and regulations;
- business- providing information in one easy-to-access location; simplifying delivery of services to citizens; improved interactions among government units and with business, industry and citizens; improved productivity and efficiency;
- production- reducing the number of forms; making it possible for citizens, other levels of government employees to easily find information and get service;
- banking- making transactions (paying fees, obtaining permits) easier; more effective, cheaper and more convenient delivery of information, knowledge and services.

The third topic: The reality of the electronic government in Algeria

First: The requirements of applying e-government in Algeria

The requirements of applying e-government in Algeria must provide a number of essentials that constitute the infrastructure necessary for the establishment of this project, the most important of which are²⁰:

- Provide the necessary infrastructure for communications: The use of information technology to download the work is done all over the networks of communication and therefore the biggest responsibility in this rests with the Ministry of Communications.
- The need for the spread of the Internet: This is the basis of the foundation of e - government building by which the communication between users of the network at all levels of government or non - government and citizens in a digital environment is highly specialized.
- The necessity of providing the computer: Since the total e - government services are carried out through this device, it is an irreplaceable requirement, which requires the ability of the citizen to acquire him on the one hand and familiarity with its multiple uses on the other.
- The need to provide the necessary legislation: This requires the provision of a number of laws that work to maintain and ensure documentary security and protect the confidentiality of data.
- Re-engineering the work procedures in the government: The construction of the e-government project requires the re-engineering of all procedures related to the work of different government and conversion to the digital system and this requires determining the relationship and overlapping procedures with ministries or various departments, and also requires redesigning procedures where the parts that do not fit With this new method, publish the details of the new actions on the Internet site.
- Providing qualified human capital and training and encouraging research, development and innovation on the basis of any project which is the main engine within the framework of the electronic government to provide the human infrastructure that enables it to generalize the use of information and communication technologies.

- Provide the necessary means of introducing information and communication technologies and enhancing their use in public administration in order to make a significant change in the methods of organization and work.
- Providing legal and legislative infrastructure through the establishment of a legal for the use of information and communications technologies, the construction of the information society and the level of the legal framework in line with international practices and the requirements of the information society in order to create an establishment government²¹.
- Provide a financial structure when moving from a traditional to an electronic stage by providing the necessary financial resources to complete the project.

Second: Obstacles to the application of e-government in Algeria²²

- The postal and ICT sector is unable to meet customers' requests for the delivery of the telephone, which is the most important channel for communication via the Internet.
- Delay in completing the communication infrastructure and vary from one region to another, and based on it, the difference is great to bridge the digital divide in the developed world in this area, especially that Algeria is close to joining the World Trade Organization.
- Limited Internet penetration In Algeria, the proportion of users of this technology is still widespread worldwide is still weak in Algeria compared to neighboring countries.
- Electronic financial transactions are still in the beginning, for example, the broad categories of economic dealers and citizens fear the use of electronic card in withdrawing their money because of the large number of errors caused by the electronic drag and the delay in the large improvement of accounts.
- The legal and financial aspects which require the issuance of specialized legislation in this regard and the training of an appropriate group of judges and lawyers by providing them with the basic funding for the project.
- The factor of confidence is very necessary for the successful implementation of the concept of e - government with the availability of the social worker to educate citizens in general and qualify to deal with the uses of modern technology in particular²³.

Third: Stages of transformation Traditional government to e-government²⁴

To transform the traditional government into e-government in successive stages so that the government gradually progresses to move to e-government, which is the development of traditional government, and can limit the stages of transition to e-government as follows²⁵:

- The first phase: The role of the governmental institution is limited to the preservation, updating and presentation of the data in a manner appropriate to the citizens or parties that request it, and depends the role of the government at this point is unable to provide any services beyond the presentation of information.
- The second phase: The government moves at this stage to provide services and simple transactions to the user, so that the interaction here in one direction only, so that the services receive private data from the user and the adoption and registration in the archives of the government institution, that is, the user is developing its own data.

- Stage 3: The Government takes another step where interactive services and transactions between the governmental institution and the user take a bilateral form of communication. The user is allowed to enter specific data, and then the public institution runs the data electronically to give the user a new result. At this stage, the citizen is contacted by a reply from the government via the website. At this stage, the government provides online services such as licensing services and official certificates. The difficulty is in identifying and confirming the user, the information.

- Stage 4: The existence of the link between the various governmental institutions, so that the user to obtain public services from various government agencies interactively and from one website. The eGovernment is characterized by the possibility of providing government services connected to the needs of the user through a single electronic portal through which the user can extract his birth certificate, in addition to renew his car license and inquire about the payment of other obligations, without having to paradox website to enter a new site.

- Stage 5: The governmental institutions here communicate with the citizens through the means of communication that suits them, without waiting for them to initiate contact, for example send a message to citizens via cell phone to remind him to renew the driver's license or pay the phone bill, to enter some data that enable him to Get the public service in a timely manner, get the license or pay the phone bill from the mobile phone, and at this stage, the e-government linked itself to citizens in a single electronic system and integrated, so that the role of the staff completely mediators, Centipede by 100 per cent.

Fourth: Possible solutions to activate the e-Government project in Algeri

- Start the marketing of e-government services and clarify their advantages and their great impact on the citizen in many way.

- The announcement of e-government services in the famous sites on the Internet, so that their services are advertised on the largest Internet sites, updating information on-the-go, by ensuring that information on government websites is updated immediately across all channels and citizens should be alerted to advertising in ways that And many styles.

- To direct investment in information technology, to include information technology in all educational curricula in the country, to provide the basic environment necessary for the success of e-government applications. Work on organizing educational programs in the field of information technology for all employees of the public sector to ensure their qualification and prepare them to exploit technology to develop public service²⁶.

- Coordination and cooperation between the government and the private sector, between the various government departments and with the eGovernment Department during the project implementation stages, improving the quality of services and reducing the percentage of errors, and increasing the speed of response and providing services and information on time.

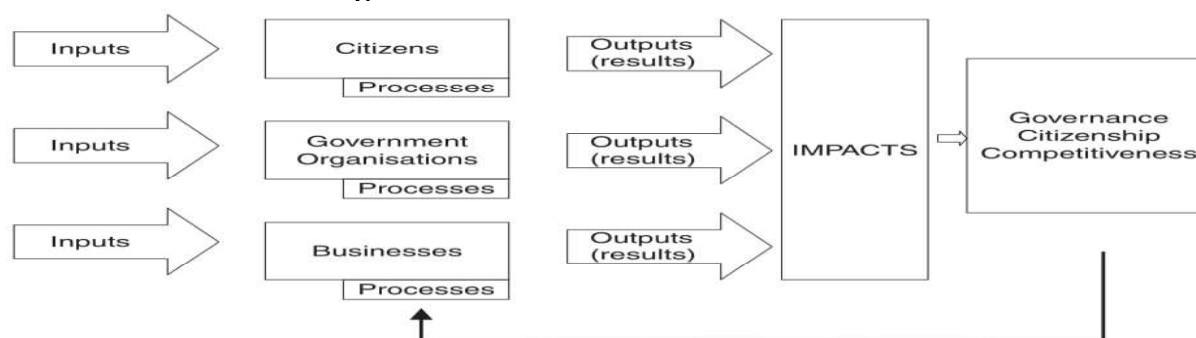
- To define a clear vision and strategy for the implementation of e-government, to implement and follow-up the implementation of e-government in various government departments, to define clear vision and realistic and concrete objectives in the near and long term, study the information technology infrastructure and analyze its ability and readiness to operate e-services.

- To facilitate the attraction of investments in various fields, the most important investments in the areas of digital technology, which contributes to the creation of a private sector is very effective, and a major pillar of the e-government project.
- The creation of laws and legislations that are compatible with e-government applications, aimed at facilitating electronic
 - correspondence, minimizing cases of fraudulent electronic correspondence and subsequent amendments, establishing uniform principles of electronic correspondence, and enhancing public confidence in the integrity and validity of electronic transactions.
 - Arrange a number of training courses for e-government employees as well as clients on how to use and benefit from e-services. Issuing information security policy throughout the national territory, and qualifying officials and employees to implement it.

The forth topic: A Case Study: Algeria e-Government Evaluation Model

In the practice of e-Government evaluation, many governments use a combination of both of the models and they also incorporate project management techniques to assess and act on the degree of completion of their plans. What follows is a brief presentation of a case study of an e-Government evaluation programme in Algeria, a country which has been regarded as given the growth in the number of e-Government services being provided in the last few years and the rankings obtained in the United Nations index of e-Government²⁷.

Fig. 1.1 e-Government evaluation model



Reference: Karen Layne A. and Jung woolLeeB. 2001, "Developing fully functional e-government: A four stage Model government information quarterly 18, p-p122-136

There are three main user groups involved in e-Government evaluation, citizens, businesses and government organisations, for which evaluation has a number of components: inputs, processes, outputs and impacts. As the figure above shows, processes require certain inputs to run and will generate certain outputs or results which in turn can be used to assess different impacts (including benefits) of e-Government in governance, citizenship and competitiveness.

Each of the components of the model (inputs, processes, outputs and impacts) has associated a number of attributes (adjectives) and aspects which in turn have indicators. Indicators are measured via variables for which data (quantitative, qualitative) is collected from the main user groups. For government organisations, data is collected via questionnaires from interviews and by also examining each organisation's website or portal. For both citizens and businesses, data for variables is collected in the form of questionnaires²⁸.

The Fifth topic: Conclusions and recommendations

E-government is a new way to provide services to citizens in order to raise the efficiency of government performance and reduce routine procedures suffered by citizens and provide information and data in an easy way to benefit from the enormous digital revolution, and e-government was the result of multiple transformations, the traditional functions of government but through an electronic pattern uniform, by reducing the administrative complexities, and strengthen transparency, speed and ease of transactions and the application of e-government system requires the availability of many otherwise Your area in order to provide outstanding service to the citizen, and to achieve an appropriate level of performance for organizations of public administration (government), but if we look at the subject of e-government on the other hand, we find there are some obstacles facing e-government applications, notably e-illiteracy and poor communications infrastructure, information and poor public awareness of the importance of the application of e-government as a tool to improve the quality of services and then head towards the information society, knowledge-based, so you must develop a vision and a realistic strategy for e-government at the state level and a plan of action carried out by a team of all disciplines, so light A set of important and represented mainly with the following recommendations:

- Intensifying training courses for employees in line with modern technological developments, which increases the confidence of the worker himself that the level of new challenges, which is reflected positively on raising morale and efficiency of work performance.
- To spread the electronic awareness of employees and citizens and provide them with modern knowledge that allows the embodiment of the concept of e-government and then move to the knowledge society.
- Calling on governments to try to find ways to treat the resistance and to benefit from its negative results, in order to re-improve development programs and avoid them in the future.
- To consolidate the concept of development and activate it within the culture of society, because the success of the application of e-government depends mainly on the extent of adaptation and response of various actors.
- Need more than others to take advantage of these technologies and engage in the digital economy thanks to the ease and speed in the conduct of local and international transactions with the least effort and costs.
- The need for effective investment in information and communication technology and provide the necessary infrastructure to build a strong electronic government which requires the spread of the Internet.
- The provision of legislation sponsoring this technology and the development and rehabilitation of the human element to cover the whole technical issues generated by digital uses within the electronic space excellence.
- The need to work to sensitize and mobilize the citizens of the benefits and benefits of these technologies and provide the necessary facilities for them on the cost of acquisition of necessary equipment.

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