



E-Governance and Its Impact on the Finances of Local Communities

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Abstract:

The use of information and communication technology, computers, and the global network known as the Internet is the defining factor between the developed world and the Third World. Therefore, e-governance has become an inevitable necessity to improve the performance of local communities, particularly in financial aspects. E-governance is also considered an extension and a natural outcome of administrative schools, starting with the classical school, followed by the human relations school, which later evolved into the behavioral school, the quantitative approach, the systems school, the contingency school, and the learning organization approach in the 1980s. E-governance has continued to develop since the 1990s up to the present day.

Keywords: E-governance; Internet; Local communities; Self-resources; Financing.

Received: Dec 05th, 2024

Accepted: Feb 15th, 2025

Published: March 20th, 2025

Introduction:

Local communities in our country, like any other administration, are facing the necessity of adopting what is known as e-governance. This has become one of the most important and successful means of achieving effective local governance, ensuring the efficient management of these communities. E-governance plays a crucial role in achieving key objectives, particularly combating corruption, promoting participatory democracy, and enhancing oversight over the actions and decisions of local communities through their members. Therefore, e-governance has become an indispensable necessity for the successful management of local communities in Algeria.

Various definitions of e-governance have been proposed. Among those who defined it is Moncef Kortas, who described it as relying on the principle of electronic integration of different **data and information** across institutions and processes governing operations. It also encompasses organizational management, business negotiations, contracts, regulatory frameworks, legislation, financial settlements, and taxation.

Significance of the Study:

The significance of this research stems from the efforts of countries in general, and Algeria in particular, to develop e-governance and enhance its effectiveness in improving and increasing local government revenues. The growing burdens on local administration can only be managed through the adoption and development of e-governance to achieve its objectives and meet citizens' needs.

Research Objectives:

Through this study on e-governance and its impact on the finances of local communities, we aim to:

- Define the concept of e-governance and its key components.
- Examine the current state of e-governance and the main challenges it faces.

Research Problem:

The scientific and technological advancements in today's world have significantly impacted management practices across all sectors, both public and private. Consequently, e-governance has become a fundamental aspect of administration in developed countries, where it is an essential and unavoidable necessity for effective governance. In this study, which focuses on local administration, we pose the following research question:

"What is e-governance, and what is its current state in Algeria?"

Chapter One

The Concept of E-Governance

E-governance is one of the most important and effective modern tools for governing regional communities. This chapter aims to explore the concept of e-governance in two main aspects: the first section will define e-governance, and the second will examine whether there is a suitable foundation for implementing e-governance as a means of governing regional communities, improving their financial independence, and reducing their reliance on central authorities. Additionally, the study will explore potential strategies to achieve this goal.

Section One: What is E-Governance?

E-governance is considered a crucial tool for achieving good local governance. In today's world, no local administrator can effectively manage development without integrating e-governance into their operations. This section will first define e-governance and then discuss its key characteristics.

First: Definition of E-Governance

The term "e-governance" is broad and often used in various contexts. To clarify its meaning, we will examine several definitions:

1. General Definition:

Many countries have integrated technology into their administrative reform programs by incorporating information technology into government operations and replacing traditional paper-based processes with electronic ones. E-governance is one of the most effective means of improving administrative efficiency and effectiveness. Most studies agree that e-governance is a subset of e-government. It involves the transformation of administrative processes from paper-based to electronic using modern technological tools such as the internet and business networks. This transformation enhances planning, organization, leadership, and oversight of regional communities' resources, ultimately helping them achieve their goals.

2. Legal and Administrative Definition:

Legal and administrative scholars define e-governance as an administrative process that utilizes internet-based networks and communication technologies to organize, plan, direct, and oversee the capabilities and resources of regional communities. It enables these communities to provide services, transactions, and administrative procedures online with speed, accuracy, and high efficiency.

3. Academic Perspective:

Scholars such as Saeed bin Mualla Al-Omari view e-governance as a fundamental shift in public service administration. It enhances the values of public service by focusing on citizens as the primary beneficiaries. Beyond service excellence, e-governance also strengthens communication between the government and the public, promoting citizen engagement and oversight. It facilitates better interactions between citizens and the state, making government services more transparent and accessible through a single electronic portal.

4. International Organizations' Definition:

The World Bank defines e-governance as the use of technology to enhance the efficiency, transparency, and accountability of public administration—especially in regional communities. By providing citizens with

access to information, e-governance empowers them to oversee government activities, reduces corruption, and fosters public participation in policymaking and political processes.

Second: Components of E-Governance

For e-governance to function effectively, several essential elements must be in place:

1. Human Competencies:

- The success of e-governance depends on skilled local administrators who are proficient in using technology.
- Regional communities must have elected officials and employees capable of meeting technological challenges and keeping pace with global advancements.
- The private sector and citizens also play a crucial role. Citizens must be technologically literate to interact with e-governance systems effectively.
- A comprehensive approach, involving families, schools, universities, and society as a whole, is necessary to develop a digitally competent population.

2. Computers and Hardware:

- Computers and related hardware are fundamental tools for accessing communication networks and the internet.
- In Algeria, regional communities have increasingly adopted computer technology in recent years, which has contributed to improving public services.

3. Networks:

- E-governance relies on different types of networks to connect computing devices:
 - **Local Area Network (LAN)** – connects computers within a small geographic area.
 - **Wide Area Network (WAN)** – links computers over larger distances.
 - **The Internet** – a global information network that facilitates communication and data exchange.

4. Databases:

- Effective e-governance requires well-organized databases to store and manage information.
- Databases ensure that information is systematically arranged, easily accessible, and enables quick and accurate decision-making.

By integrating these components, e-governance can enhance administrative efficiency, improve financial management, and enable regional communities to become more self-reliant.

Third: Objectives of E-Government

E-Government aims to transition from traditional administration and its drawbacks to:

1. **Instant electronic transactions**, reducing processing time and ensuring quick information processing, which saves both local administrators and citizens or partners time.
2. **Eliminating complexity and bureaucracy**, which are major issues in traditional administration.
3. **Enhancing public services** by leveraging modern technologies, with e-Government being the most significant.
4. **Improving governance** by increasing administrative transparency.
5. **Optimizing document management**, allowing for the review of content instead of rewriting, ensuring speed and accuracy in file handling, and replacing paper-based communication with emails. This not only expedites processes but also saves significant financial resources that would otherwise be spent on traditional mail, thus adding to the financial resources of local authorities.

Fourth: Principles of E-Government

E-Government is based on several principles, the most important of which are:

1. **Ease of use**, making it accessible to everyone, whether at home, school, university, or work, and applicable to both public administration, such as local governments and municipalities, and private organizations.
2. **Providing better services to citizens** by accurately diagnosing issues, gathering and analyzing relevant data, identifying strengths and weaknesses, and proposing suitable solutions.
3. **Focusing on results**, ensuring that ideas are translated into tangible outcomes that alleviate burdens related to cost, time, effort, and service quality.
4. **Cost reduction** by investing in information technology and increasing competition in service provision, which leads to lower costs, faster delivery, and higher quality—ultimately fostering more rational and efficient local governance.

Subsection Two: Characteristics of E-Government

The characteristics of e-Government essentially represent its advantages, including:

1. **Speed and clarity**, which eliminate the complexity and bureaucracy of traditional administration by enabling rapid and precise transaction processing.
2. **Reducing paperwork and overcoming spatial and temporal constraints**, as services become instantly accessible through proper internet use.
3. **Privacy and security**, ensured through advanced software that protects data from unauthorized access, requiring specific encryption keys for access.
4. **Achieving true administrative governance** through transparency, allowing local stakeholders—including citizens, civil society, and the media—to monitor administrative activities, thereby fostering participatory management and combating corruption.
5. **Direct oversight and flexibility**, where authorities can monitor administrative platforms and their associated systems while also responding swiftly to developments.
6. **Simplified and streamlined procedures**, allowing for easy document management and service access for all, reducing costs and time constraints while enhancing administrative efficiency and citizen satisfaction.

Chapter Two: The Reality of E-Government in Algerian Local Authorities

Through the administrative reform adopted in local communities, Algeria has taken its first steps toward digital transformation by launching a project called “Electronic Algeria.” This initiative is part of efforts to advance the information technology sector, particularly following the country’s shift toward a market economy and modern economic structures.

Despite Algeria’s vast and valuable resources, which could be leveraged to develop this crucial sector, it still lags behind in technological advancements relative to its potential. Internet penetration, for instance, remains at only 10.34%.

This raises key questions: What is the current state of this sector in Algeria? What measures should be taken to develop it and enable local communities—through various means, particularly e-Government—to enhance their own resources?

Section one: Challenges of E-Government

Despite the significant governance efforts made in Algeria, various obstacles hinder the full adoption of e-Government at the local level. These obstacles fall into three main categories:

First Subsection: Human Challenges

Some of the key human-related challenges facing e-Government implementation include:

1. **Lack of sufficient technological expertise** within local communities, both in terms of employees and elected officials. It is unrealistic to expect an illiterate local official to implement e-Government principles.
2. **Outdated selection methods** for personnel managing electronic systems.
3. **Weak evaluation and monitoring** of services provided by local human resources.
4. **Limited awareness among decision-makers** regarding the importance of information technology.
5. **Low public awareness**, both within public administration and among citizens, with the responsibility falling on the media and civil society to address this gap.

Second Subsection: Organizational Challenges

The key organizational barriers include:

1. **Lack of standardized administrative procedures**, even within the same organization.
2. **Dominance of centralization**, with reluctance to adopt decentralization as a necessity for modern governance.
3. **Absence of specialized training programs** for the required positions.
4. **Lack of digital organization**, which often necessitates a complete restructuring of institutions.

Third Subsection: Technical Challenges

The major technical challenges hindering e-Government implementation include:

1. **Nonexistent infrastructure**, which remains a major obstacle to full e-Government application.
2. **Limited financial resources**, preventing investment in training programs and reliance on international expertise in information technology.
3. **Failure to keep up with technological advancements in computing**, often due to a lack of skilled personnel. Even when expertise is available, it is sometimes overlooked or not employed effectively in its specialized field.

Section two: Ways to Improve E-Government in Algeria

Like other developing countries, Algeria is still not fully in control of e-Government systems, as they are still in their early stages. In other words, e-Government in the country remains under construction in most state institutions, particularly at the local government level. This is despite the significant efforts made by the relevant ministry, especially in the last decade, whose impact has become evident in citizens' daily transactions.

First Subsection: E-Government in Algeria and Government Efforts

The use of modern technology, including electronic networks and communication tools, in public service administration—especially at the municipal and provincial levels—has become a pressing necessity in today's world. This technological adoption enhances direct communication between local authorities and citizens, ensuring speed, efficiency, and accuracy while minimizing delays and errors. This is particularly crucial in the financial oversight of local governments. Recognizing the importance of this issue, the Algerian government has prioritized advancing e-Government to improve administrative efficiency.

A/ Infrastructure for Information and Communication Technology (ICT)

A national ICT policy has been established, focusing on:

1. Developing new mechanisms for growth by ensuring a robust infrastructure for optimal utilization of communication networks.
2. Positioning knowledge as the foundation for development and supporting it through various means.

3. Investing in human capital by embracing the knowledge economy as a key driver of progress.
4. Upgrading the national communication network through two key strategies:
 - Expanding the capacity of national telecommunication networks.
 - Modernizing national communication systems, including digitizing networks, integrating advanced technologies, and launching new services such as internet access and fully computerized financial and commercial management.
5. Building an information society capable of keeping up with technological advancements, following the issuance of Decision No. 112 (2006), which called for strengthening technical support under the guidance of the International Telecommunication Union.
6. Accelerating the adoption of ICT in public administration through the E-Algeria 2013 strategy, which initially focused on implementing e-Government. This entailed prioritizing ICT integration in public administration by expanding internet usage and creating a government-to-local-administration portal managed through modern communication technologies.
7. Building an Information Society Capable of Facing Technological Challenges: This was supported by Decision No. 112, issued in 2006, which called for enhancing capacities and providing technical assistance as recommended by the International Telecommunication Union (ITU).
8. Accelerating the Implementation of Information and Communication Technology (ICT) in Public Administration: This was pursued through the E-Algeria 2013 Strategy, with the initial step focused on e-Government. The strategy prioritized ICT within Algeria's public administration by integrating the internet and establishing a digital portal between the government and local administration, managed through modern communication technologies.

The Ministry of the Interior took on the responsibility of advancing local public administration by aiming to:

- Complete institutional reforms, including reviewing municipal and provincial laws.
- Develop human resources in local communities, both in terms of employment, elections, and training.
- Modernize local communities by adopting an efficient e-Government system.
- Bring administration closer to citizens by enabling the digital issuance of civil status documents.
- Enhance electronic communication by opening a public media space.
- Improve the efficiency of public administration employees by updating administrative practices with ICT. This effort is critical to enhancing the technical and professional workforce while also developing strategic competencies. The E-Algeria 2013 Strategy emphasized human resource development and aimed to make ICT accessible to all segments of society. Additionally, it called for revising higher education and vocational training programs to better align with ICT advancements.

Furthermore, the government has digitized several traditional documents within municipalities. This includes the launch of an online portal by the Ministry of Religious Affairs for Hajj registration, the establishment of a national civil status register, the creation of a national vehicle registration database, and the introduction of biometric electronic identity cards. Additionally, an electronic urban planning card has been introduced, managed at the municipal level.

Algeria's digital transformation is closely linked to its developmental trajectory across social, economic, cultural, and financial sectors. Over the past two decades, the government has pursued multiple initiatives to transition toward e-Government. These efforts culminated in the E-Algeria 2013 Strategy, which was developed under the supervision of the Prime Minister's electronic committee, in collaboration with the Ministry of Post and Information and Communication Technologies. This strategy established the first comprehensive roadmap for Algeria's digital transformation.

Conclusion:

The reform of Algeria's public administration, particularly at the local level—which serves as the foundation for development and a starting point for progress in public financial and economic management—depends on its ability to keep pace with rapid technological advancements in public service management. This remains one of the most significant and challenging issues that Algeria must address. Despite the substantial administrative and structural reforms implemented by the government, which continue to progress day by day, e-Government has become an inevitable necessity for Algeria's public administration, especially at the local level. It is imperative to continuously explore and implement ways to develop and enhance digital governance through a structured governmental plan based on short-, medium-, and long-term visions. This approach must be scientific, objective, and forward-thinking, relying on Algerian universities, research centers, and the vast human resources available in Algeria, particularly in computer engineering, information technology, and artificial intelligence. Furthermore, Algeria has exceptional talents scattered across the country, many of whom are already working in public administration and local government institutions.

Study Findings:

1. Public administration is a critical field for enhancing governance and public management in Algeria.
2. The Algerian government has made significant efforts to establish e-Government and good governance practices.
3. However, there are still major gaps in Algeria's digital public administration that need to be addressed. These gaps can be categorized as follows:

I.Legislative Framework

- The annual and supplementary Finance Law should include provisions dedicated to the development of e-Government.

II.Human Resources

- Proficiency in IT and digital communication technologies should be a prerequisite for employment in public administration, particularly in local government. This is feasible given the large number of ICT graduates from Algerian universities each year.
- This approach prevents the costly and time-consuming need to train employees in digital skills periodically.

III.Institutional Development

- Establishing a National Electronic Archive and Data Bank as a sovereign institution responsible for managing and securing digital records.

4. Digital Infrastructure and Resources

- Expanding internet and computer accessibility in all sectors to facilitate public access to digital services, recognizing that citizens are the primary drivers of national progress.
- Allocating specific budgets to enhance e-Government services at the local level, particularly municipalities, which form the backbone of development. This includes encouraging digital adoption and fostering competition among local councils to achieve the best implementation of e-Government in public service management.
- Equipping public institutions and local governments with state-of-the-art computers and high-speed, reliable internet services to ensure seamless and sustainable digital transformation.
- Extending e-Government services to the most remote areas of the country. This is a significant challenge for Algeria, but achieving it would position the country as a leader in digital governance. Given Algeria's vast geographical size, its ambition to digitize public services should be compared to large nations like the United States rather than small European countries where digital implementation is easier due to

their compact size. With its strong financial and material resources, along with a growing pool of young professionals and university graduates, Algeria has the potential to become a digital leader in the region.

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