ELECTRONIC ADMINISTRATION AS A MECHANISM FOR ENHANCING PUBLIC SERVICES IN MUNICIPALITIES - AN OVERVIEW OF THE ELECTRONIC MUNICIPALITY EXPERIENCE IN ALGERIA AS A MODEL

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Abstract:

This research paper aims to highlight the extent to which electronic administration can augment public services within municipalities. Focusing on the case of the electronic municipality in Algeria, this research endeavors to provide a comprehensive exploration of multiple facets of the subject, thereby yielding precise and substantiated conclusions regarding the issue at hand. A descriptive research methodology was employed, befitting the nature of this investigation. The results reveal that electronic administration is pivotal in enhancing and modernizing public services at the municipal level, as exemplified by the introduction of advanced biometric services.

Keywords: Electronic Administration, Electronic Municipality, Public Service.

INTRODUCTION:

Electronic administration represents a novel concept introduced by the information and communication technology revolution, facilitating swifter, more cost-effective completion of tasks. This innovation has permeated various facets of life, impacting numerous institutions.

As a crucial public entity, the municipality is committed to delivering services to community members equitably and transparently, governed by specific laws and decrees. Electronic administration has markedly enhanced the quality of public services provided by municipalities, enabling the delivery of services in the most expedited and economical manner possible.

This shift significantly improves the quality and uniqueness of public service. Within the framework of enhancing public services in Algerian municipalities, the Algerian legislature has initiated the electronic municipality project to further augment and modernize its services, as evidenced by the implementation of electronic offerings such as the biometric national identity card and biometric passport.

Problem Statement:

What role does electronic administration play in advancing public services in Algerian municipalities?

Study Importance:

This research is significant as it addresses the impact of electronic administration on the enhancement of public services in Algerian municipalities. This analysis is contextualized through a detailed examination of the electronic administration initiative in Algeria.

Study Objectives:

The aims of this study are delineated as follows:

- To establish a theoretical framework for electronic administration;
- To develop a theoretical framework for the electronic municipality;
- To document and analyze the implementation of the electronic municipality project in Algeria.

Study Method:

To gain a comprehensive understanding of the various aspects of the topic and deliver accurate, compelling insights into the posed questions, we employed a descriptive research methodology. This approach is particularly well-suited for the scope of this study, as it allows for an in-depth description and analysis of the study variables

Chapter One: Electronic Administration

Electronic administration is one of the modern terms that has recently emerged on the global stage due to its significance. This is the topic that will be explored in this section.

Section One: Concept and Definition of Electronic Administration

Electronic administration is characterized by a suite of features and attributes that markedly distinguish it from traditional administration. This modern paradigm is founded on several principles which are essential to its operation and effectiveness.

Subsection One: Definitions of Electronic Administration:

The concept of electronic administration has been defined in various ways, reflecting different scholarly perspectives. Key definitions include:

• Electronic administration involves the utilization of information and communication technologies by individuals and businesses to interact with government entities. This interaction aids in participating in decision-making processes, enhancing access to information, increasing transparency, and strengthening civil society.[1]

• It relies on information and communication technologies to streamline administrative activities. By transforming traditional administrative operations into a contemporary management system, this approach utilizes modern technologies to enhance efficiency and effectiveness in service delivery.[2]

• This administrative process features high-speed, low-cost information exchange and service provision via computers and internet networks. It ensures data confidentiality while offering public services.[3]

• Electronic administration is a modern method that uses state-of-the-art technologies to execute various administrative transactions. It aims to provide citizens with easy access to services quickly and affordably, striving to eliminate the detrimental bureaucracy that hinders effective customer service.[4]

Subsection Two: Elements of Electronic Administration

The structure of electronic administration is composed of four fundamental elements:[5]

• **Computer Hardware:** This encompasses all components of computer devices and their peripherals. Institutions are advised to invest in the latest hardware to reduce the costs associated with continual development and maintenance, and to ensure compatibility with ongoing software advancements.

• **Software:** This refers to the various programs that are used to operate computers and to harness their capabilities for a wide range of functions.

• **Networking:** This element involves the infrastructure that facilitates connections across the internet, extranets, and intranets. It forms the backbone of the value network for an institution and its electronic administration capabilities.

• **Knowledge Makers:** This is arguably the most critical element in electronic administration, comprising the digital leaders, managers, and analysts who manage knowledge resources and intellectual capital within an organization. These individuals play a pivotal role in guiding the institution through the digital landscape.

Subsection Three: Characteristics of Electronic Administration

The features of electronic administration can be summarized as follows:[6]

• **Cost Reduction:** Reliance on computers significantly reduces the need for manual labor, thereby decreasing costs and saving money.

• **Precision:** Electronic administration ensures that transactions are conducted quickly, with clarity and accuracy.

• **Transparency Achievement:** Electronic supervision ensures regular and continuous monitoring of the various services provided.

• **Procedure Simplification:** The administration simplifies procedures through optimal use of information, allowing for the quick and straightforward meeting of citizens' needs.

Section Two: Objectives and Importance of Electronic Administration

Electronic administration is significantly beneficial across various fields and aims to achieve several objectives:

Subsection One: Objectives of Electronic Administration

The key objectives of electronic administration can be summarized as follows:[7]

✓   Provide services to beneficiaries in a satisfactory manner within 24 hours and throughout the week;

✓   Achieve the required speed in work completion at an appropriate financial cost;

✓   Foster a society capable of handling technological era changes;

✓   Deepen the concept of transparency and avoid favoritism;

✓   Preserve employees' rights in terms of fostering creativity and innovation;

✓   Maintain the security and confidentiality of information and reduce the risk of its loss.

Subsection Two: Importance of Electronic Administration

The significance of electronic administration is evident in its ability to keep pace with the immense qualitative and quantitative advancements in information technology and systems, amidst an emerging information and communication technology revolution. The importance of electronic administration includes:[8]

•   **Enhancing Service Performance:** Electronic administration allows organizations to improve the way they present and conduct their services to the public. It also opens new channels of communication between management and stakeholders, facilitating business and transaction management and removing many related obstacles.

•   **Reducing Administrative Complexities:** Electronic administration has radically transformed procedures by converting them into streamlined, technical processes that require less effort and time, and are not bound by temporal or spatial constraints.

•   **Improving Decision-Making Processes:** Electronic administration relies on a robust database and information base that aids decision-makers in planning and making accurate decisions.

•   **Improving Internal Organizational Relationships:** Electronic administration assists in reevaluating hierarchical relationships within management, allowing for both horizontal and vertical coordination among different administrative units, thereby overcoming the obstacles of centralized decision-making.

•   **Transforming Organizational Image:** From a traditional image characterized by a large workforce, extensive buildings, and complex organizational structures, to an electronic image that requires fewer operations without the need for physical locations or large buildings. This is because services are delivered through a skilled workforce proficient in information technology.

Subsection Three: Requirements for Implementing Electronic Administration

The successful implementation of electronic administration hinges on a spectrum of interdependent requirements that together construct the framework necessary for its effective adoption and growth. These essential requirements span several dimensions:

First: Economic and Social Requirements

•   A key aspect involves fostering social mobilization that is both supportive and knowledgeable about transitioning to electronic administration. This encompasses understanding the advantages of integrating technological tools within administrative frameworks. To achieve this, utilizing media platforms and engaging civil society organizations are critical. They can facilitate the dissemination of information through meetings, seminars, and awareness-raising events, underlining the benefits of adopting electronic administrative practices.[9]

Second: Administrative and Security Requirements

•   The necessary administrative and security measures for implementing electronic administration include:[10]

o   **Developing Strategies and Foundation Plans:** This might entail establishing a national-level administration or entity tasked with the planning, monitoring, and execution of

electronic government initiatives. Critical at this juncture is the backing and endorsement from top-tier management within the administrative hierarchy, complemented by adequate financial resources to support the requisite transformation.

o   **Reforming Administrative Organization and Services:** This requires a gradual reorganization of structural aspects and various governmental functions to align with the principles of electronic administration. It could involve creating new departments that evolve in step with technological advancements.

Third: Political Requirements

•   The commitment and political will of leadership are indispensable for supporting administrative structures and instituting significant shifts in management practices. Public commitment by leadership to transition efforts towards electronic governance, manifested through the allocation of necessary financial resources, dedication of time, and continuous oversight, is vital for a successful transformation. Without this political will, the concept of electronic administration risks remaining theoretical and not being practically implemented.[11]

Fourth: Technical Requirements

•   Technology and devices constitute the critical backbone needed for the effective implementation of an electronic administration initiative. These tools enable the electronic representation and transmission of information while safeguarding its confidentiality and accuracy. Moreover, they facilitate the remote execution of transactions and services through electronic networks. Establishing a robust information and communication technology infrastructure, equipped with the necessary devices, equipment, software, and access to suitable knowledge sources, and ensuring their widespread accessibility, is crucial for the practical application of electronic administration.[12]

Fifth: Financial Requirements

For governmental organizations embarking on the transition to electronic administration, robust and motivating financial capabilities are essential. Financial backing not only facilitates the development and training of human resources but also supports the provision of services that are in tandem with technological advancements, ensuring that the transition is both efficient and sustainable.[13]

Chapter Two: The Electronic Municipality

The electronic municipality represents a significant manifestation of electronic administration within municipal settings. This chapter delves into the essence and operational dynamics of the electronic municipality.

Section One: Concept of the Electronic Municipality

•   The electronic municipality is a subdivision of electronic government, offering electronic services on a smaller scale, such as at the regional level. It also involves the use of information and communication technologies, starting with basic tools like fax machines and advancing to long-term communication technologies. This is aimed at facilitating the implementation of government policies, particularly those related to citizen service programs.[14]

•   It represents a new and advanced model of management, designed to elevate administrative performance and efficiency while improving workflows. The goal is to simplify and enhance the delivery of all services and tasks provided by government institutions to citizens.[15]

•   The electronic municipality fosters transparency with citizens concerning the organizational structure of the municipal apparatus and its financial policies. This openness serves to enhance accountability and credibility, building support for sound economic policies.[16]

•   Under this innovative and advanced management model, administrative performance and efficiency are significantly improved, and the work environment is optimized to facilitate all services and operations offered by government institutions to citizens. With this approach, citizens can complete all governmental transactions and even issue official documents through electronic means, such as the internet or mobile and landline phones, with high speed and efficiency.[17]

Section Two: Objectives of the Electronic Municipality

The electronic municipality is designed to foster an environment conducive to communication and the sharing of ideas and aspirations with residents within its jurisdiction. It aims to achieve this through the development of social networks, online forums, local employment websites, and by training local citizens and employees in contemporary skills via the internet. The strategic objectives of the electronic municipality include:[18]

• Bringing the local citizen closer through the creation of a comprehensive electronic portal for the municipality;

• Reducing the transactional burdens on citizens and municipal management through the distribution of electronic investments;

• Promoting the town or village and highlighting its projects, parks, and recreational areas;

• Improving living and economic conditions, which benefits all parties involved;

• Linking the internal systems of the municipality to the internet interface.

Section Three: Importance of the Electronic Municipality

The importance of the electronic municipality is manifested through the benefits of its application, which include:[19]

First: Economic Benefits

• Saving money, time, and effort for all parties interacting through the electronic municipality compared to traditional methods;

• Delivering services directly to the client rather than requiring the client to seek them;

• Supporting economic development programs by facilitating transactions between the municipal government and the private sector, thereby increasing the profitability of the electronic municipality;

• Creating new job opportunities in various fields, such as data entry, operation, and maintenance of the electronic municipality's infrastructure, and information security;

• Opening new investment channels through integration between the local electronic municipality and the central electronic government by utilizing the same applications and technologies and enabling internal data exchange;

• Consolidating efforts instead of duplicating them, as some procedures are in traditional municipalities, by unifying efforts under a single electronic portal.

Second: Administrative Benefits

• Organizing processes, improving job performance, fostering teamwork, and unifying efforts;

• Ensuring greater transparency and clarity in municipal administration, eliminating favoritism, nepotism, and flattery, thus eradicating bureaucracy;

• Streamlining the traditionally lengthy administrative hierarchy and accelerating the execution of administrative procedures;

• Facilitating communication with supervisory authorities and oversight bodies, allowing for the swift exchange of reports, receipt of feedback, and implementation of necessary adjustments.

Third: Social Benefits

• Encouraging citizens to use the electronic municipality, thus fostering an information-savvy society capable of handling technological advancements and keeping pace with the information age;

• Simplifying and accelerating various forms of social communication through numerous electronic applications, such as email and others;

• Activating diverse social activities using various electronic applications;

• Promoting and simplifying public oversight of actions that violate the principles of dignified living, thereby reinforcing the principle of reporting, which is prevalent in advanced societies.

Section Four: Foundations of the Electronic Municipality

The foundational elements of electronic administration within municipalities revolve around several key areas:[20]

- **Internal Effectiveness of Municipalities:** For municipalities to deliver superior services to citizens, their internal administrative functions must be streamlined and efficient. This involves a critical examination and potential simplification of these internal processes, while maintaining robust oversight and accountability mechanisms.

- **Development of Structures:** Recognizing that many municipalities in Algeria are structured around outdated needs and capabilities from the last century, there is a pressing need for radical changes. Modernizing these structures to align with today's technological advancements is crucial for the transition to an electronic framework and organizational model.

- **Municipal Electronic Services:** A pivotal aspect of applying electronic administration is the alleviation of burdens on citizens. This entails setting up an electronic service framework that allows municipalities to transition their services to an online format. Such a framework promotes interaction with all local bodies and institutions, reducing the need for citizens to physically travel between institutions. Moreover, it involves the development of electronic citizen relationship services to address complaints and meet needs through digital means.

Chapter Three: The Experience of the Electronic Municipality in Algeria

Like many nations striving to upgrade and modernize public services within municipalities, Algeria has embraced the electronic municipality initiative as a crucial step from traditional to electronic service delivery, offering distinctive, high-quality public services that are both faster and more cost-effective.

Section One: The Electronic Municipality Project in Algeria

The journey of the electronic municipality in Algeria commenced with the introduction of modern administrative services, exemplified by remote services that alleviate bureaucratic obstacles and minimize direct human intervention in public service delivery. This includes the adoption of electronic signatures for administrative documents. Viewed as a strategic opportunity for the state and regional communities, the electronic municipality project addresses citizens' needs while also contributing to national economic development. Officially launched in the first quarter of 2018, its key objectives are:[21]

- Improving the living conditions of citizens and the quality and efficiency of municipal services;

- Promoting the economic and social development of the municipality and enhancing the management of human resources;

- Establishing a solid foundation for electronic administration and electronic government in general;

- Reducing distances and time in citizen-administration interactions by providing electronic services;

- Supporting local development and reducing public expenditures.

The inaugural step towards this digital transformation was the digitization of civil status documents through the establishment of the National Electronic Registry for Civil Status. This significant initiative has eased the administrative burden on citizens by enabling them to request and receive documents promptly, without the lengthy waits traditionally associated with such processes. Additionally, it has granted citizens the right to access their documents from any municipality nationwide, eliminating the previous requirement to return to their hometown municipality for such services.[22]

Section Two: Models of Electronic Municipality Project Applications in Algeria

Subsection One: The Electronic Biometric Identification Card Subsection One: The Electronic Biometric Identification Card

The introduction of the electronic biometric identification card in Algeria was marked by significant delays, as it remained a theoretical project for over eight years following the adoption of the Electronic Algeria initiative. This card, a cornerstone in the modernization of civil status services, features a unique national identification number. Defined as an official document for verifying individual identity, the card was established under Decree 67-126 and is issued to all Algerian

citizens, regardless of age. For adults, the card is valid for ten years, while for individuals under the age of nineteen, its validity is limited to five years.

The card incorporates biometric and electronic features and is delivered in a sealed envelope containing a confidential code. This code, which falls under the responsibility of the cardholder or their legal guardian, is essential for accessing electronic services. This initiative not only modernizes identity verification but also facilitates digital integration in public service delivery.[23]

Subsection Two: Biometric Passport

The biometric passport, due to its significance for citizens, has been a top priority for the Algerian government in its transition to digital governance. As one of the initial documents converted from paper to electronic biometric format under the Electronic Algeria project, it underscores the government's commitment to modernization.

Outlined in Law No. 14/03, dated February 24, 2014, the biometric passport is mandated for any citizen traveling abroad. It meets international standards by being biometric or machine-readable, with its preparation and issuance entrusted to competent governmental services. This move not only aligns Algeria with global practices but also enhances the security and efficiency of its travel documentation system.[24]

Subsection Three: Unified Electronic Service Window

The unified electronic service window is a pivotal technological advancement that centralizes the processing of various requests for biometric documents. It instantly registers applications into a central database via direct connections with the biometric document database and the National Automated Civil Status Registry.

This initiative has been implemented across all municipalities and their administrative branches to optimize procedural efficiency. By reducing processing times and simplifying the documentation process for applicants, the unified service window significantly enhances the user experience while ensuring transparency and reliability.[25]

Subsection Four: Digitization of Civil Status Records

To streamline procedures and execute its strategic action plan aimed at improving public services with efficiency and transparency, the Ministry of Interior and Local Communities undertook the comprehensive digitization of civil status records nationwide. This effort culminated in the establishment of the National Automated Registry for Civil Status, a centralized system interlinking all municipalities, their administrative branches, and Algeria's diplomatic missions and consular circuits.

This innovation enables citizens to instantly access and extract any civil status document from any municipality within the national territory. Furthermore, it facilitates the Algerian diaspora's ability to request the S12 birth certificate via internet services from their respective diplomatic or consular representations. [26]

Section Three: Field Barriers to the Implementation of the Electronic Municipality in Algeria

Despite the political will and the financial, human, and technical efforts exerted by the Algerian government to realize the electronic municipality project aimed at improving service performance for citizens, several challenges and obstacles have negatively impacted the progress and ambitions of the government, including:[27]

• Delays in completing communication infrastructure and regional disparities, creating a gap in the availability of electronic administrative services at the same level across all Algerian municipalities.

• Limited geographical spread of internet usage in Algeria, affecting the effectiveness of communication systems between citizens and municipalities, thereby impacting the principle of equality in service provision without geographical discrimination.

• Low levels of education and information technology literacy within the general Algerian society.

• Despite the availability of political will and financial resources for the success of the electronic municipality project, the quality and training of human resources in electronic applications have not yet reached the required level.

- Lack of complete trust by Algerian citizens in their interactions with the administration, especially the municipality, even in the electronic management phase, due to previous experiences of bureaucracy and corruption.

CONCLUSION:

This research paper demonstrates that electronic administration plays a pivotal role in modernizing public services, as exemplified by the electronic municipality project in Algeria. The initiative has facilitated the introduction of innovative services such as the biometric passport and the national biometric identification card, showcasing the potential of electronic governance to enhance service delivery. Despite the undeniable progress, the challenges identified must be addressed to achieve a comprehensive transformation and ensure equitable access to high-quality public services for all citizens.

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