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Research Article

Contributions of Electronic Information Systems in Improving Administrative Processes in Public Institutions: A Field Study in B.B.A. Province Algeria.

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ABSTRACT

It has become essential today to renew and develop administrative services, especially given the crucial role they play in the lives of societies and nations at all levels, in various forms and languages. This need is further emphasized by the continuous increase in demand for information, which has witnessed an enormous explosion, making it difficult to manage in recent times, along with the services provided by modern information systems.

This study aims to introduce archival system technologies and their role in improving and facilitating administrative work through the electronic information system implemented at the Archive Center of Bordj Bou Arréridj Province. To study this topic scientifically, both theoretically and practically, we employed the descriptive method. The study led to several findings, the most important of which is that electronic archival systems play a significant role in enhancing and simplifying the administrative management of public institutions.

Keywords: Electronic information systems – Archive – Electronic archiving – Administrative management – Public institutions – Bordj Bou Arréridj Province.

Introduction

In the last decades of the 20th century, there have been profound and comprehensive developments in the fields of electronics, communications, and information technology. Modern advancements in networking have made it possible to connect different parts of the world, compelling many institutions and administrations to fully embrace the digital era. This shift allows them to benefit from these technologies and services more efficiently, ensuring faster communication with clients and employees while maintaining their competitiveness. With the emergence and advancement of electronic devices, particularly computers, new methods have transformed the traditional ways of storing and archiving essential documents. These methods now utilize computer memory, cloud storage, and advancements in storage and information retrieval software. Administrative institutions have sought to leverage these technologies in administrative management through electronic archiving applications. The importance of electronic archives has become evident in an era dominated by information, where there is a growing emphasis on the public's right to access official documents and information. Traditional methods can no longer provide these services on a large scale, whereas electronic environments offer unlimited access to documents for people worldwide. Electronic archiving plays a crucial role in governments' efforts to implement electronic systems for managing administrative services and digitizing their operations entirely. As a result, the electronic document has become the primary record, while paper copies remain merely stored images on shelves.

Statement of the Problem

The urgent need to renew and develop administrative services has become increasingly evident, given their crucial role in the lives of societies and nations at all levels and in various forms and languages. With the continuous surge in information demand—leading to an unprecedented explosion that has made control difficult—electronic information management systems have proven to be the most capable of meeting these requirements. They efficiently handle the technical processes of archival records and documents, ensuring their accessibility in line with modern information-oriented trends.

The emergence of modern technologies, in general, has significantly contributed to the electronic management of documents, particularly archival collections. As a result, administrative institutions must adopt electronic archival systems to enhance performance and ensure better control over information and documents. This necessity applies to governments, organizations, administrations, institutions, and associations, particularly local communities such as municipalities and provinces. One such example is Bordj Bou Arréridj Province, which houses an archive center designed according to international archival building standards. This center holds a vast collection of administrative records and archival documents that should not remain confined to storage boxes and shelves. Given their historical and scientific importance, these records must be well-organized, managed, and made accessible.

This necessity has driven the province to keep pace with the information era by providing advanced technological tools to address key challenges affecting daily archival operations. The goal is to develop optimal solutions for enhancing archival services and administrative management at the archive center amidst globalization and the widespread expansion of information technology. This situation calls for the implementation of a strategic approach to mastering these technologies, particularly through automated systems that process archival records and improve services to meet user needs. Ultimately, this serves both the administration and the public, prompting the central research question:

How do the electronic archival systems in Bordj Bou Arréridj Province contribute to the success of administrative management? .

As such, the study aims to answer the following research questions:

- Are there specific technological tools dedicated to managing and preserving archival records in Bordj Bou Arréridj's archive center?
- How has the electronic archiving system at the province's archive center contributed to improving administrative performance?
- What challenges and obstacles hinder the effective implementation of this electronic system in Bordj Bou Arréridj?

Study Hypotheses:

Based on the previously mentioned questions, the study develops the following hypotheses:

First Hypothesis: The Archive Center of Bordj Bou Arréridj Province has a dedicated electronic archiving system due to its significance.

Second Hypothesis: The available electronic archiving system at the Archive Center of Bordj Bou Arréridj has contributed to improving administrative performance by enabling faster service delivery to citizens.

Third Hypothesis: Several challenges and obstacles hinder the effective implementation of this electronic system at the Archive Center of Bordj Bou Arréridj, primarily due to a shortage of specialized personnel in this field.

The Importance of the Study

Today, information systems and electronic archiving represent a modern administrative approach that relies on information technology and advanced software to enhance the administrative performance of public institutions. This underscores the significance of our study, as it has become essential for all public institutions in Algeria, particularly archival administrative institutions, to keep pace with these developments. This necessity arises in the context of rapid technological advancements and the shift toward a digital society as an alternative to the traditional paper-based system.

The focus is on selecting the best and most intelligent systems to enhance archival and administrative performance, thereby improving practices in the field.

Study Objectives:

The study aims to achieve a set of objectives, which are as follows:

- Examining the current state of archival institutions and modern archival systems in Algeria.
- Identifying the electronic systems used in documentary institutions and assessing their impact on improving administrative services.
- Highlighting the importance of electronic archival systems and their role in administrative processes.
- Identifying and analyzing the key challenges and obstacles that affect performance enhancement and the development of administrative services.

Theoretical Framework of the Study

Public Institutions definition

A "institution" refers to a group of human and financial resources that operate according to a specific system, governed by a set of laws that regulate their operations. It involves a group of individuals working together with the goal of producing consumer goods and services. (Alpert, 2024)

It is an institution that is accessible to everyone, classified as a public administrative entity. It possesses legal personality, allowing it to operate independently in terms of administrative resources and financial assets. This institution is established by the state and is granted an independent legal personality. It is managed through a

decentralized administrative approach to achieve specific objectives as defined by its legal framework. The capital of such institutions belongs to the public sector, which is the state. These institutions may include public schools, hospitals, clinics, health centers, or police stations. (Giucă, Management of public institutions, 2022, p. 293)

An archival institution can be defined as: "An institution that is concerned with receiving and collecting information containers resulting from human activities, whether within an organization, government or semi-government body, or individually. This institution is responsible for evaluating, organizing, preserving, and providing these containers to beneficiaries in the best manner and at the lowest cost, through optimal and economic use of available resources and capabilities." (Roper, MANAGING ARCHIVES, 1999)

An electronic information system (EIS) is a system that utilizes electronic technology to gather, store, process, retrieve, and disseminate information. It encompasses various components, such as hardware, software, data, procedures, and personnel, to facilitate the management and flow of information within an organization or across multiple entities. (Makhene, 2024)

Electronic Information Systems refer to digital platforms or networks designed to collect, store, process, and disseminate information. These systems integrate various technological tools and processes to facilitate the management of data and information across different levels of an organization or society. EIS can include databases, content management systems, digital archives, and communication platforms, which enhance the accessibility, accuracy, and efficiency of information processing and retrieval, ultimately supporting decision-making and knowledge sharing.

Key characteristics of electronic information systems

The key characteristics of electronic information systems (EIS) include:

- **Data Collection**: EIS allows for the efficient gathering of data from various sources, which can be both internal and external to the organization. (Taherdoost, 2022, p. 12)
- **Data Storage**: Information is stored digitally in databases or cloud storage, ensuring that it can be accessed and managed efficiently.
- **Data Processing**: EIS processes data to generate useful insights, reports, and outputs that help in decision-making and operational activities.
- **Real-time Access**: EIS provides real-time or near-real-time access to data, making it easy to retrieve and use when needed.
- **Automation**: EIS often automates repetitive tasks such as data entry, report generation, and workflow management, reducing human intervention and increasing efficiency.
- **Integration**: EIS integrates various components, including software applications, hardware systems, and organizational processes, enabling seamless communication and data flow.
- **Security**: EIS incorporates security measures like encryption, access controls, and backup systems to protect data integrity and prevent unauthorized access.
- **Scalability**: EIS is designed to grow and adapt with the organization's needs, allowing for expansion or modification without compromising performance.
- **User Interface**: It provides an easy-to-use interface, allowing users to interact with the system effectively, regardless of their technical expertise. (Dananjaya, 2024, p. 1090)
- **Collaboration**: EIS supports collaboration by enabling multiple users or departments to access, share, and work with the same information in real-time. (Riemer, 2007, p. 13)

Definition of Management Information Systems

These systems have gained significant popularity due to their features, including the ability to store large and vast amounts of data, process it at high speeds, and provide quick and highly accurate access to the required information. This has led to the widespread use of these systems in various organizations, both public and private sectors. Management Information Systems (MIS) are defined as a type of information system designed to provide organizational managers with the necessary information for planning, organizing, leading, and controlling the activities of the organization, thereby assisting them in decision-making. (Zhang, 2017, p. 181)

Definition of Archival Systems:

This system is defined as an organized interaction consisting of humans, documents, computers, and the software used, all of which are interconnected to achieve specific goals and objectives. The computer is merely a machine that assists in performing various and complex tasks with minimal cost, greater accuracy, and extremely high speed, enhancing the efficiency and speed of traditional systems. (Chiu, 2021)

Definition of Software:

The term software refers to all programs necessary to operate a computer and organize its components. It includes operating systems as well as software prepared by computer manufacturers, which enable users to make the best use of the computer. The definition also encompasses application programs or applications that are used when operating a computer. (hashemi, 2024)

Definition of Archives

The ***Le Petit Larousse*** dictionary defines archives as a collection of documents related to the history of a city, a private family, an institution, an administration, or an individual, as well as the place where these documents are preserved. In the field of information technology, archives also refer to a set of files stored on storage media, whether compressed or not, or a collection of data made available to the public for download via the Internet. Additionally, the dictionary describes archiving as "the process of collecting, organizing, and preserving documents." (Le Petit Larousse , 2024)

Electronic Document:

An electronic document is one whose content is recorded using electronic codes (binary digits), making it unreadable without an intermediary. The content must be decoded to be displayed on a computer screen for human reading. This is one of the fundamental differences between paper-based and electronic formats. The content of the electronic document is stored on a specific electronic medium, such as a hard drive, floppy disk, optical disc, or magnetic tape, among others. (Tournay, 2023)

Administrative Archive

An administrative archive is a collection of media prepared by departments or received from a public or private entity during their daily operations. It is essential to organize and arrange these materials using scientific and technical methods to assess their value. Administrative archives serve as a crucial source for scientific research, offering two main services: the first is directed towards the administrative functions that produced the documents, and the second is aimed at various researchers, subject to specific conditions for accessing the information.

Field framework of the study

General Introduction to the Province of BBA :

Bordj Bou Arreridj is an Algerian province located in the eastern part of the country, within the High Plateaus region. It serves as a link between the east, west, and south of Algeria. Known as the capital of the Biban region, it is one of the newer provinces, having been established following the administrative division law (Law 09/84) dated 04/02/1984, after separating from the parent province of Sétif. The province covers an area of 3,920.42 square kilometers and has a population of approximately 656,199 people. It is bordered to the north by the province of Bejaia, to the south by the province of M'sila, to the east by the province of Sétif, and to the west by the province of Bouira. Bordj Bou Arreridj includes ten (10) districts and thirty-four (34) municipalities.

The province is considered one of the wealthiest in Algeria due to the presence of many businessmen, wealthy individuals, and companies. It is home to a significant industrial zone that employs a large number of local workers as well as people from neighboring provinces, especially those near the borders. The province contributes to the national economy through a variety of products, including food, consumer goods, electronics, and construction materials. Furthermore, it hosts numerous import and export companies, as it is traversed by the national road No. 05, which connects the capital to eastern Algeria. Bordj Bou Arreridj is also home to one of Africa's largest dry ports, positioning it as an important economic hub within the context of Algeria's development. It also houses significant economic and industrial units.

Since the subject of our study concerns electronic information systems in archival institutions and their role in administrative management within the province, we will focus on discussing this institution, which is part of the General Secretariat of the province, according to the organizational structure that outlines the position of the institution or service under study.

Study Methodology:

The study employs the descriptive method because it is the closest approach for describing and analyzing data. This method combines both analysis and interpretation, serving as a way to describe and quantitatively visualize the phenomenon under study through data collection, classification, analysis, and detailed examination.

Sample of the Study:

In this study, we adopted a purposive sample because, in our opinion, it allows for accurate access and control over the information relevant to our research topic. It is not possible to rely on a random sample where questions are posed to individuals who are not specialists, as this would not contribute to our research. Instead, it is necessary to direct the questions to those with full knowledge and expertise in the subject, individuals who have a direct connection to the topic and can provide useful and factual information. The study sample in our research consisted of six (06) individuals: four from the archive department and two from the administrative affairs of the province, specifically:

- Archivist, Head of the Archive Department
- Archivist, Head of the Preservation Office in the Archive Department – Electronic Management Officer
- State Engineer in Information Technology – Electronic Information Systems Officer

- Archivist Assistant
- Employee in the Local Administration Directorate, Administrative Management Office
- State Engineer in Information Technology, Head of the Information Technology Department at the Directorate of Telecommunications

Data Collection and Retrieval Tools

We relied on interviews along with observations to refine the results obtained. This approach was necessary given the nature of the study, which required such tools to understand the true nature of the problem and to assess it in real-world conditions. This method enabled us to provide reliable information by comparing the answers and results of the interviews with the observations made on the ground.

We conducted the interviews with the individuals of the previously mentioned sample, using direct questions that were prepared in advance, in accordance with the hypotheses and objectives of the study.

Data Analysis and Interpretation

Modern Technological Tools Available at the Wilaya Archive Center

What are the technological tools available at the center?

The purpose of asking this question was not to determine whether the center has technological devices, but rather to assess the quantity and quality of the available tools. Based on the response provided and our observations of the available equipment, we concluded that the center possesses the latest technological tools, which are sufficient to operate a modern electronic information system, including internal and external networks, computers, and all the necessary work requirements for the staff in terms of processing, archiving, maintaining, and providing access to information. Some of the key technological tools at the center include:

- Server: It has acceptable technical specifications, including the following:
- Server type: (HP Proliant)
- RAM: (32GB)
- Hard Drive: (XB)
- Operating System: (Windows Server 2020)
- Computers: There are ten (10) new computers, all of which are:
- Micro Ordinateur HPCPU
- OS: (I 13, Windows 11)
- Standard Memory: (16GB)
- Optical Drive: (DVD+/-RW)
- Storage: (2TB)
- Screen: (18.5)
- Scanners: The center has two types of scanners, five (05) designed for books (three small size and one large size) and ten flatbed scanners for documents, with studied and standardized specifications that are compatible with the available archives, supporting A3 to A8 sizes.
- Photocopiers: A new large-sized copier with a copying speed of (30PPM A4/15PPM A3).
- Printers: There are ten (10) printers of type Canon, with a printing speed of up to 18PPM A3.
- Storage Media: In addition to the aforementioned tools, the center has external storage media with a capacity of 2TB, including two large ones and twelve smaller ones with a storage capacity of 32GB.

Does the Center Have an Archiving System for Document Management?

The center has a document management software to keep up with the developments in the field of information technology and modern electronic systems. This software significantly aids in facilitating administrative work and its outputs. It relies heavily on software for the operation of computers within the network, and it contributes to the processing, storage, and retrieval of information.

Based on the responses provided by the sample participants, we found that the center possesses an electronic information system developed by specialized personnel at the provincial level, led by the State Engineer and Head of the Information Technology Department at the Directorate of Telecommunications for the province. Previously, this individual held the position of Head of the Information and Guidance Office at the Archive Center. This modern information system is used to manage the archival documents at the provincial level and operates within an internal network at the center, designed by specialists. Access to the system is restricted and can only be accessed through one of the computers on the center's internal network.

The Main Interface of the Center's Management System

his system is considered an essential tool for the electronic management of archival documents within the Archive Center at the Wilaya. It is programmed in French as the primary language for use, and it features the ability to edit and update data. The system operates on the Windows operating system in its various versions. Data is stored in a dedicated database on a secure and controlled server located within the Archive Center, managed by a Database Management System (SGBD) (System Gestion des Bases de Données).

This server is connected to an internal network with various computers within the center. Access to the database is made through the Mozilla Firefox web browser by entering the software's link on the server, which is typed into the address bar as follows: Localhost/marche/php/entrer.php. The page name displayed is GED BORDJ BOU ARRERIDJ, which refers to the electronic management of documents at the Bordj Bou Arreridj Archive Center.

This software is characterized by its ease of use, flexibility, and exceptional speed. However, one drawback is the lack of privacy and security, as once connected to the server, the working window opens without the need for a username and password for each employee. When questioned about this, the response indicated that this issue is being worked on, and access to the server is only available within the center's internal network (Intranet).

When the Firefox web browser is opened, the main window of the software appears, allowing the user to select the tasks they wish to perform. This window displays the name of the Archive Center in bold at the top, followed by a series of links below that define the type of archives or collections available within the department, listed in French from left to right as follows:

- **HISTORIQUE**: Historical archive prior to 1962.
- **SECRETARIAT**: General Secretariat of the Wilaya.
- **DRAG**: Directorate of Organization and Public Affairs.
- **CABINET**: Governor’s Office.
- **DAL**: Directorate of Local Administration.
- **INSPECTION**: General Inspection of the Wilaya.
- **CONTACTS**: Contacts for internal departments of the Wilaya with the Archive Center.

How is Data Entered into this Software?

Based on the response obtained from the archivists responsible for processing and registering the data of the collections in the electronic information system, we concluded that the data entry process occurs after the archival document is digitized, preserved, and its scientific, administrative, and historical value is determined. The next step involves determining how it will be retrieved based on the needs of the user or the public. All relevant information about the document is recorded, such as the producing entity, document title, subject, production date, size, keywords, and related attachments, etc. Afterward, it is electronically saved in the server for future reference.

The data entry process is also illustrated with images and diagrams that explain the functioning of the archiving system or the electronic document management application at the Archive Center of Bordj Bou Arreridj.

The archivist works on this electronic system to manage the archive and enter data for retrieval when needed, simplifying the search process. For historical archives dating back to the colonial period, the user clicks on the **HISTORIQUE** icon, which provides a range of options: **Mise à jour** (Update), **Recherche par** (Search by), or **Afficher par** (Display by). Each of these options includes additional sub-options: **Ajouter** (Add), **Modifier** (Modify), or **Supprimer** (Delete), simply by hovering the mouse pointer over one of these options.

When the user wants to add data for a new document, they hover over the **Mise à jour** (Update) option, then click on **Ajouter** (Add). A set of data fields appears, which must be filled out as follows:

- **Code**: A sequential code that starts from 01. Each time a document's data is entered, it automatically takes a new sequential number.
- **Division**: The archival documents are divided into three geographical areas according to the administrative divisions established by the colonizer at that time (East, Center, and West).
- **Objet**: The subject of the document.
- **Intitule**: A brief description of the document's content.
- **Provenance**: The source or producer of the document.
- **Date**: The date of issue of the document.
- **Num boîte**: The box number containing the document.
- **Position boîte**: The code for the box's location. Each storage location has a unique code, which is known only to the archivist.

After entering the above data, the user saves it by pressing the **Enregistrer** (Save) button, as shown in the following diagram.

Method of Entering Historical Archive Data into the System

Regarding the process of modification or deletion, the user hovers the mouse pointer over the **Mise à jour** (Update) option, then selects either **Modifier** (Modify) or **Supprimer** (Delete) from the menu that appears, depending on the task to be performed. For example, when modifying data, a window will appear with a field to enter the file number the user wishes to modify, which is the same process followed for deleting data. The only difference between them is the **Enregistrer** (Save) button for modifications and the **Supprimer** (Delete) button for deletion.

Method of Searching for a File or Document

After the user selects the desired search method, a list appears showing the search results in the form of a detailed table. This table contains data representing the information that was entered during the initial data entry phase, as illustrated in the following diagram.

Search Result After Entering the Required Information

This process applies to the historical archive, i.e., documents prior to independence in 1962. Meanwhile, the data for the records of the **SECRETARIAT** (General Secretariat), including project files, public procurement contracts, consultation files, and agreements, are entered into this software by clicking on the **SECRETARIAT** icon. A set of options appears representing the types of records related to the General Secretariat, such as **Marché public** (public procurement) for state projects and **Cahiers des charges** (specifications) along with the contracts signed between the Wilaya and external parties.

The user then selects what they wish to do regarding the archival file data. For instance, if a file related to public procurement is chosen, the user hovers over the **Marché public** field, which provides a set of additional options, such as **Liste des contrats** (list of contracts), **Recherche** (search), and **Mise à jour** (update). The user selects the **Mise à jour** (update) option, which then shows further choices, including **Insertion contrat** (add contract), **Modification contrat** (modify contract), and **Suppression contrat** (delete contract). The user selects the first option, **Insertion contrat** (add contract), and a window appears containing a set of fields that must be filled out, including:

- Contract number.
- Contract parties.
- Subject of the contract or addendum.
- Amount of the contract or addendum.
- Completion deadlines.
- Visa date and number.
- Box number.
- Box location.

After completing the data entry in these fields and verifying them, the user clicks the **Registrer** (Save) button to finalize the saving of the archival file data. This process is illustrated in the following diagram.

The Process of Entering Data Related to Public Procurement Transactions

When entering data for the specifications documents prepared by the Wilaya, the process follows nearly the same steps. The user hovers over the Cahiers des charges tab, which then provides additional options, including Liste des cahiers (List of Specifications Documents), Recherche (Search), and Mise à jour (Update). The user selects the Mise à jour (Update) option, which presents three further choices:

- **Insertion Cahier** (Add Contract)
- **Modification Cahier** (Modify Contract)
- **Suppression Cahier** (Delete Contract)

At this stage, the user selects the first option, **Insertion Cahier** (Add Contract), which opens a window containing several fields that must be filled out:

- Specifications Document Number
- Subject of the Specifications Document
- Contracting Authority
- Visa Number
- File Box Number
- File Box Location

Once all the required data is entered and verified, the user clicks the **Confirm** button to finalize and save the archival record. The process is illustrated in the following figure.

The Process of Entering Data Related to Specifications Documents

The process of searching for and retrieving information through this system is carried out using various search options. Users can search for archived documents related to public procurement transactions by entering the contract number, contract title, or relevant keywords.

For retrieving information specifically related to specifications documents, the search is conducted by entering either the document number or its subject.

Searching for a Specifications Document by Subject

Regarding the other directorates Directorate of Regulation and General Affairs (DRAG), the Governor's Office (CABINET), the Directorate of Local Administration (DAL), and the General Inspectorate of the Wilaya (INSPECTION) the system administrator has informed us that the software is still in the testing phase and requires some modifications to meet archiving needs and requirements.

However, in general, the data entry and search processes remain consistent with those used for the historical records and the General Secretariat archives of the Wilaya. The primary difference lies in the type and subject matter of the archival documents specific to each directorate.

The Role of Electronic Information Systems in Enhancing Administrative Performance

Based on the previously discussed points and illustrations, it is evident that electronic information systems play a positive role in improving the administrative performance of public institutions in Algeria in general, and in the Wilaya of Bordj Bou Arréridj in particular. These systems enhance efficiency and speed in executing administrative tasks and delivering services to citizens by automating processes and reducing human errors, thereby increasing accuracy and transparency.

Moreover, these systems support decision-making by providing accurate data and analyses that assist managers in strategic planning and final report writing. They also facilitate communication and coordination between different departments, which significantly improves productivity.

Beyond these benefits, electronic systems also contribute to reducing operational costs by minimizing reliance on paper-based and traditional processes, making administration more efficient and flexible in addressing challenges.

Furthermore, they play a crucial role in improving citizen services by offering electronic platforms that enable easy access to government and private sector services without requiring in-person visits, thus saving time and effort. These systems accelerate administrative procedures, such as obtaining official documents, paying bills, and booking appointments, which reduces bureaucracy and enhances the citizen experience.

Additionally, electronic systems promote transparency and accountability by enabling electronic tracking of transactions, thereby minimizing administrative corruption and human errors. They also enhance coordination between different institutions, making public administration more efficient and responsive to citizens' needs with greater speed and accuracy.

General Results of the Study

1.Based on the theoretical and practical aspects discussed, our study has led to several key findings, including :

2. The availability of material and financial resources is one of the most critical factors for establishing electronic information systems in both public and private institutions.

3. One of the main reasons for adopting electronic archiving ystem sis to preserve archival records under optimal conditions.

4. A qualified workforce is essential for implementing electronic document management projects. However, the Archive Center of the Wilaya of Bordj Bou Arréridj lacks sufficient skilled personnel in this area.

5. Relying on archiving and integrated electronic information systems in public institutions facilitates faster and easier access to information, benefiting users by saving time, effort, and cost.

6. Electronic information systems enhance administrative performance by improving efficiency and reducing the workload for employees.

7. One of the primary reasons for adopting modern information systems in public administration is to enhance administrative services for citizens.

8. A lack of expertise and training in the use of modern technologies for archival services can lead to technical issues when operating devices and software.

Conclusion:

This study highlights the significant role of electronic information systems in enhancing administrative performance, improving public services, and optimizing archival management within public institutions. The adoption of electronic archiving facilitates document preservation and accessibility, thereby reducing bureaucracy and increasing operational efficiency.

However, the successful implementation of these systems depends on the availability of resources, the qualification of personnel, and continuous training, which remains a challenge, as seen in the Archive Center of the Wilaya of Bordj Bou Arréridj. Moreover, standardizing electronic systems at the national level is essential to ensure data integration and seamless information exchange across institutions.

In conclusion, digital transformation is a fundamental step toward modernizing public administration in Algeria, fostering efficiency, transparency, and improved citizen services.

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