Educational Administration: Theory and Practice
2024, 30(7), 1123-1133
ISSN: 2148-2403
https://kuey.net/

Research Article

The Role Of Digital Document Management And Preservation In Improving Service Quality, A Case Study Of MOBILIS Mobile Company In Ghardaia Governorate In Algeria

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Citation: Abdallah Adjila et al, (2024), The Role Of Digital Document Management And Preservation In Improving Service Quality, A Case Study Of MOBILIS Mobile Company In Ghardaia Governorate In Algeria, *Educational Administration: Theory and Practice*, *30*(7), 1123-1133
Doi: 10.53555/kuey.v30i7.7123

ARTICLE INFO
Received:16/05/2024
Accepted; 06/07/224

ABSTRACT

This study aims to explore the impact of document management and preservation in the digital environment on the quality of services provided by the Algerian mobile phone company "Mobilis." In the rapid development of digital technology, digitization, automation, and speed of access to digital data have become crucial elements in improving the efficiency and quality of services provided to customers. This study focuses on analyzing the relationship between these factors and service quality through a statistical study of a sample of 158 customers in the Ghardaia Governorate in Algeria, using SPSS_26 software.

The analysis was conducted using a variety of dimensions, including reliability, responsiveness, Tangibility, assurance, and empathy. The results showed that digitization and automation have a positive and tangible impact on some aspects of service quality, while data accuracy and integrity are significant influencing factors. On the other hand, the speed of access to digital data did not show a significant overall impact on service quality.

This study highlights the importance of relying on digital technology to improve customer experience, emphasizing the necessity of achieving data accuracy as a fundamental component of service quality. In conclusion, this study provides practical recommendations to enhance service quality by promoting the use of digital technologies, ensuring data accuracy and speed of access, and efficiently training employees in using these technologies.

Keywords: Digitization; Document Management; Digital Document Preservation; Quality; Mobilis; Service.

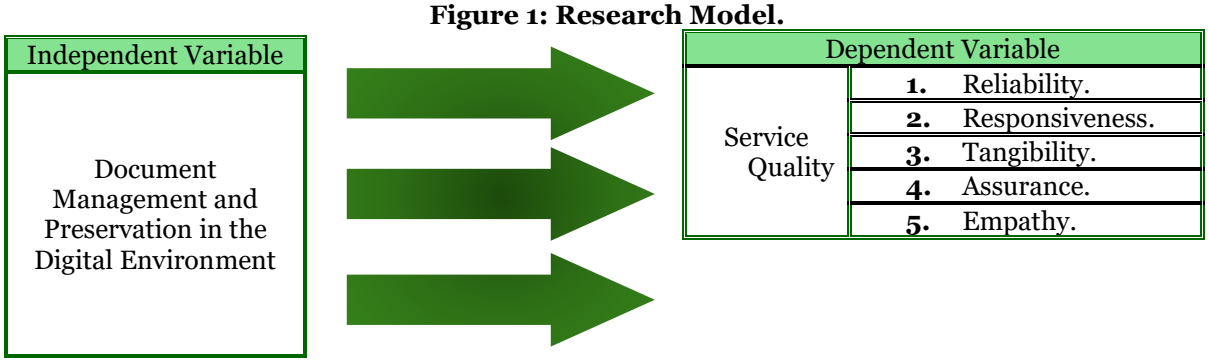
I. Introduction:

The digital environment is witnessing continuous development and increasing importance over time, necessitating the development of comprehensive policies and principles for document management and preservation in this context. Document management is one of the fundamental pillars that ensure business continuity, information security, and protection from loss or damage. In the midst of this digital transformation, there is a growing need to adopt innovative strategies to ensure the effective and efficient preservation and management of digital documents.

As a leading telecommunications company in Algeria, “MOBILIS” Mobile Company represents an ideal model for studying document management and preservation policies and principles in the digital environment in Algeria. This research reflects the importance of these policies in supporting the organizational performance of the company and ensuring the sustainability of its information resources. Through this study, theoretical foundations and practical principles of document management and preservation in the digital environment will be reviewed, with a focus on MOBILIS' experience as a case study, aiming to extract lessons and insights that can benefit other institutions seeking to excel in this field.

This study will rely on theoretical research and qualitative analysis of the policies and procedures implemented at MOBILIS, based on a questionnaire directed at customers.

Figure 1: Research Model.



Source: Prepared by researchers based on previous studies.

I.1- Research Problem: This study is based on the following problem: To what extent does document management and preservation in the digital environment impact the quality of services provided by MOBILIS company?

Subsidiary problems of the study: Under this main problem, several subsidiary questions are presented:

1. To what extent does document management and preservation in the digital environment affect the reliability followed in improving the quality of service provided by the company MOBILIS?
2. To what extent does document management and preservation in the digital environment affect the response followed in improving the quality of service provided by the company MOBILIS?
3. To what extent does document management and preservation in the digital environment affect the tangibility followed in improving the quality of service provided by the company MOBILIS?
4. To what extent does document management and preservation in the digital environment affect the reliability followed in improving the quality of service provided by the company MOBILIS?
5. To what extent does document management and preservation in the digital environment affect the empathy followed in improving the quality of service provided by the company MOBILIS?

I.2- Hypotheses of the study: The main hypothesis: "There is a statistically significant impact of document management and preservation in the digital environment on the quality of service provided by MOBILIS in Ghardaia, Algeria", from which the following hypotheses are derived:

1. There is a statistically significant impact of document management and preservation in the digital environment on the reliability used to improve the quality of service provided by MOBILIS.
2. There is a statistically significant effect of DAM on responsiveness in improving the quality of service provided by MOBILIS.
3. There is a statistically significant effect of DAM on the tangibility used to improve the quality of service provided by MOBILIS.
4. There is a statistically significant impact of DAM on the reliability of service quality improvement by MOBILIS.
5. There is a statistically significant effect of DAM on empathy in improving the quality of service provided by MOBILIS.

I.3- Importance of the topic: It is manifested in several aspects, which can be summarized as follows:

- Understanding how to manage documents and preservation in the digital environment to ensure their protection and sustainability.
- Identify best practices to improve operational efficiency.
- Protect digital documents from cyber threats.
- Assess customer satisfaction with current policies and identify areas for improvement.
- Adopting modern technologies in document management.
- A case study of MOBILIS as a model for document management and preservation in the digital environment.
- Aligning policies with international standards.
- Recommendations for improving document management policies and principles based on data analysis.

Therefore, this research is of great importance not only to MOBILIS but to all organizations seeking to improve their digital document management and preservation in the context of rapid digital transformation.

I.4- Research Limitations:

A. Spatial Limits: The study was based on the entire territory of Ghardaia Governorate in Algeria, due to the ease of access to the study sample of MOBILIS customers in Ghardaia Governorate.
B. Temporal Limits: The theoretical study and the field study were at the beginning of the current year 2024.

II. Previous studies:

II.1-Study 01: Hryshyn Vitalii,Filipova Liudmyla. **"TRENDS IN THE DEVELOPMENT OF DIGITALISATION OF DOCUMENT MANAGEMENT SYSTEMS AND SERVICES IN PUBLIC AUTHORITIES".**
Бібліотекознавство. Документознавство. Інформологія. 2023. № 3. Ukraine
This study examines the current state of electronic document management systems in public administration, focusing on local government level improvements. It employs comparative analysis and Internet monitoring methodologies. The research highlights trends in local public administration document management and emphasizes the need for integrating administrative services to meet citizens' needs. It identifies future directions including smart technologies and digital services. The study concludes that Ukraine has the necessary prerequisites for developing electronic document management in government structures. Benefits include improved information management, enhanced citizen-government interaction, and more efficient decision-making. The existing legal and theoretical framework is considered adequate for implementing and improving electronic services in local authorities. This research contributes to understanding the evolution of digital document management in public administration.

II.2- Study 02: Andreas Schmitz · Jan R. Riebling. **Data Quality of Digital Process Data**. Köln Z Soziol (2022) (Suppl 1) 74: 407–430. Germany.
This study addresses the growing importance of digital process data in social science research, highlighting neglected data quality issues. It adopts a process perspective, arguing that data from socio-technical systems are subject to the same error-inducing mechanisms as traditional data, including biases in design, generation, and processing stages. Due to limited access to data production processes, the study proposes a post-hoc quality assessment strategy, integrating simulation and exploratory techniques. The research uses bot activity as an illustrative example, employing agentbased modeling to simulate datasets affected by this issue. Finally, it demonstrates the possibilities and challenges of post-hoc control using geometric data analysis as an exemplary technique for identifying data quality problems. This approach offers a novel method for assessing and improving the quality of digital process data in social science research, addressing a critical gap in current methodologies.

II.3- Study 03: Sandra Jordana & al. **Document Management System – A Way to Digital Transformation**. NAŠE GOSPODARSTVO / OUR ECONOMY 68 (2) 2022.
Slovenia.
This paper examines the crucial role of document management systems (DMS) in modern businesses. It highlights how traditional document management falls short in meeting the needs of agile companies, necessitating electronic solutions. The study explores how DMS impacts workflow efficiency, cost savings, and digital transformation. It also addresses the environmental benefits of reducing paper usage. The research aims to define the advantages and disadvantages of DMS implementation, provide an overview of the implementation process, and analyze future trends in this field. The authors include case studies from Slovenian companies to illustrate practical applications. The paper concludes that DMS is essential for companies seeking to remain competitive and digitalize their processes, while also contributing to environmental sustainability. This comprehensive analysis offers valuable insights for businesses considering DMS adoption as part of their digital transformation strategy.

III.Conceptual framework:

II.1. The concept of document management and preservation in the digital environment and its importance: Considering the great shift towards the digital environment and the widespread spread of digital documents within organizations, there is an urgent need to manage these digital documents effectively and securely. Therefore, it is important to know its concept and importance for modern companies and organizations.

II.1.1. Definition and management of digital documents: Digital documents are "documents created, transmitted, and maintained by computer technology. They may consist of any combination of text, data, graphics, audio, video, and related software to manage them": (Franks, Records and Information Management, 2013, p. 82)
Document management and preservation in the digital environment is defined as "the systematic and organized control of the creation, receipt, preservation, use, distribution, storage, retrieval, preservation, or disposal of digital documents"(Smallwood R. F., Information Governance: Concepts, Strategies, and Best Practices, 2014, p. 143)

II.2.1. The importance of document management and preservation in the digital environment in modern organizations and companies: (Hawkins, 2019, pp. 28-30)

- Compliance with laws and regulations regarding the preservation and confidentiality of digital records and documents.

- Providing quick and efficient access to digital information vital to decisionmaking and optimizing business processes.
- Reduce costs by eliminating physical storage space for documents and rationalizing search and retrieval processes.
- Protect the organization's reputation, intellectual assets and confidential information from leakage or loss.
- Manage the risks associated with digital documents such as data loss or the inability to retrieve data.
- Help improve the efficiency of business processes and decision-making by providing reliable and accurate information.

II.3.1. Key benefits of effective document management and preservation in a digital environment: (Zhou, Digital Records Management: An Implementation Guide, 2021, pp. 22-24)

- Improve the efficiency of business processes: By providing quick and efficient access to necessary information, effective DRM helps accelerate decisionmaking processes and minimize the time and effort spent searching for information.
- Maintain the integrity and completeness of information: Effective DAM ensures that the integrity and completeness of an organization's vital information is maintained, protecting it from damage, loss, or unauthorized changes.
- Compliance with laws and regulations: Effective DAM helps organizations comply with laws and regulations related to digital records and documents and avoid potential penalties and fines.
- Protect intellectual property and confidentiality of information: By implementing strict security measures, effective DAM protects an organization's intellectual property and confidential information from leakage or unauthorized access.

Rationalize costs and improve efficiency: Effective DAM in a digital environment helps rationalize costs by reducing physical storage space requirements and increasing the efficiency of search and retrieval processes.

II.4.1. The lifecycle of a digital document and the requirements for each stage: They are: (Stephens, 2016, pp. 37-45)

1. Digital Document Creation: The process of creating a new digital document using different programs and applications, and their requirements:
   - Determine the readability and documentation requirements for digital documents.
   - Selecting the appropriate programs and formats for creating digital documents.
2. **Using a digital document (Use):** It is the process of accessing and using digital documents for various purposes, and its requirements are:
   - Facilitate and control access to digital documents.
   - Ensure the security and stability of digital documents during their use.
3. **Storage:** It is the process of saving and storing digital documents securely on different media, and its requirements are:
   - Choosing the appropriate storage media for digital documents.
   - Develop policies and procedures to ensure the security and integrity of stored digital documents.
4. **Preservation:** It is the process of preserving digital documents of long-term value so that they remain retrievable and usable, and its requirements are:
   - Evaluate the value of digital documents to determine what should be preserved.
   - Choosing appropriate strategies and techniques for long-term preservation of digital documents.
5. **Retrieval:** It is the process of searching for and returning the required digital documents from the place of storage, and its requirements:
   - Develop effective systems to retrieve digital documents easily and efficiently. ☐ Ensure the readability and usability of retrieved digital documents.
6. **Disposition:** The process of securely disposing of unneeded or obsolete digital documents and their requirements:
   - Establish policies and procedures for the secure disposal of unnecessary digital documents.
   - Ensure secure deletion of documents

II.5.1. Digital Document Management Systems (DDMS): It is "a software system that enables systematic management of the lifecycle of digital documents, from their creation, storage, use, retrieval, preservation or disposal according to defined policies and procedures."(Smallwood F. R., 2014, p. 155),

A. Components of digital document management systems: These are as follows: (Reed, 2017, pp. 112-115)

- A database or repository for digital documents: Digital documents and their metadata are stored in a centralized database or repository.
- User Interface: A software interface that allows users to enter, retrieve, and manage documents and archives in the digital environment.

Search Engine: Allows searching and retrieving digital documents through various criteria such as keywords, author, or date.

- Access Control Management: Functionality to define access permissions to digital documents according to user levels.
- Document Lifecycle Management Tools: Tools to manage the lifecycle stages of digital documents from creation to disposal.
- Archiving and Preservation Tools: Functions to permanently preserve digital documents of long-term value.
- Integration tools and interfaces: Software interfaces to integrate with other systems such as content management systems or database management systems.

B. Functions of digital document management systems: These can be derived from the components of digital document management systems and are as follows: (Franks, Records and Information Management, 2013, pp. 181-184)

- Recording and storing digital documents: This function enables the systematic and secure recording and storage of digital documents in a central repository.
- Managing the document lifecycle: This function manages all stages of the digital document lifecycle from creation to disposal.
- Access control and security: This function ensures control over access to digital documents according to user permissions.
- Document search and retrieval: This function facilitates quick and efficient search and retrieval of digital documents.
- Tracking changes and versions: This function tracks all changes and different versions of digital documents.
- Secure preservation of documents: This function ensures the permanent and secure preservation of long-term valuable digital documents.
- Integration with other systems: This function allows integration with other systems such as content management systems or databases.

C. Challenges in implementing and operating digital document management systems: Implementing digital document management systems requires several challenges, including: (Saffady, 2011, pp. 193197)

- Integration with the current technical infrastructure: Integrating digital document management systems with the current technical infrastructure of the organization may be difficult, such as database systems and content management systems.
- Change management and training: Employees may struggle to adapt to the changes imposed by digital document management systems on their daily operations, requiring significant training and awareness efforts.
- Compatibility and portability issues: Problems may arise in compatibility and portability between digital document management systems and other software applications, leading to difficulties in exchanging data and documents.

Security and privacy challenges: Digital document management systems must provide strong security measures to protect the confidentiality of digital documents and comply with privacy and protection laws.

- Long-term preservation issues: Institutions may face challenges in preserving digital documents in the long term due to changes in technologies and software over time.

II .6.1.Future Trends in Document Management and Preservation in the Digital Environment: There are several promising options that can be highlighted in the future, including:(Smallwood R. F., Emerging Trends in Digital Records Management, 2020, pp. 15-20)

- Cloud Computing: It is expected that organizations will increasingly rely on cloud computing services for storing and retrieving digital documents, with a focus on ensuring data security and compliance with regulations.
- Artificial Intelligence and Big Data Analytics: AI and big data analytics techniques will be used more extensively to improve document management and preservation in the digital environment, such as automated document classification and data discovery.
- Blockchain Technology: This is a decentralized and distributed digital ledger system used to record transactions across multiple devices in a network of contracts, and it is expected to play an increasing role in ensuring the safety and security of digital documents by providing an immutable record for all interactions with the documents.
- Records Management as a Cloud Service: Organizations may move towards adopting cloud-based models for document management and preservation, including Software as a Service (SaaS) and Platform as a Service (PaaS), instead of implementing internal systems.
- Interoperability and Portability: There will be a growing focus on achieving portability and interoperability for digital document management and preservation systems across organizations, to facilitate the exchange of data and documents.

II .2.Service definition: "Any work or performance that one party can offer to another, essentially intangible and does not result in the ownership of anything. Its production may or may not be related to a tangible

product" .(Philip Kotler &al, 2008, p. 269) **II .3.Service quality definition:** "The overall assessment of the benefit of the service, or the extent to which the perceived level of service exceeds the expected level of service" .(Valarie A. Zeithaml, 2006, p. 117)

II .4.Service quality dimensions: Defined as follows: (Parasuraman, 1988, p. 23)

- Reliability: "The ability to provide the promised service dependably and accurately".
- Responsiveness: "The willingness to help customers and provide prompt service".
- Empathy: "The individual attention and personal care provided by the organization to its customers".

Assurance: "The knowledge and courtesy of employees and their ability to inspire trust and confidence".

- Tangibility: "The physical appearance of facilities, equipment, employees, and communication materials".

Field Study: The role of document management and preservation in the digital environment in improving the quality of services provided at MOBILIS company, from the perspective of customers in the state of Ghardaia Governorate in Algeria:

I.1 Study Methodology: The adopted approach to address the study problem is the descriptive method, which relies on data collection, classification, documentation, interpretation, and analysis, with the aim of measuring and understanding the impact process on the phenomenon under study. This is done using the Likert scale questionnaire tool and processing the obtained results through the SPSS 26 program.

I.2Study Population and Sample: The study population refers to all individuals involved in the phenomenon being studied. It consists of individuals who own and use MOBILIS mobile phone services in the Ghardaia, Algeria province. A random sample of 158 customers was selected from the study population.

II.3 Presentation of Results:

Firstly, Measurement of Study Validity and Reliability: The value of the Cronbach's alpha coefficient for all questionnaire items was 0.901, indicating a very high level of statistical reliability.

Secondly, Testing the Impact of the Independent Variable (document management and preservation in the digital environment) on the dimensions of service quality: Using the SPSS_26 statistical program to test the study's sub-hypotheses, the outputs are presented in Table 01.

Table 01

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
01- Corrected Model	Reliability	682,011[a]	54	12,630	2,834	,000	,598
	Responsiveness	628,553[b]	54	11,640	2,913	,000	,604
	Empathy	652,347[c]	54	12,081	2,536	,000	,571
	Assurance	635,704[d]	54	11,772	2,513	,000	,569
	Tangibility	547,661[e]	54	10,142	2,400	,000	,557
02- Intercept	Reliability	2991,607	1	2991,607	671,196	,000	,867
	Responsiveness	2794,438	1	2794,438	699,236	,000	,872
	Empathy	2776,227	1	2776,227	582,775	,000	,850
	Assurance	2963,608	1	2963,608	632,680	,000	,860
	Tangibility	3239,596	1	3239,596	766,490	,000	,882
03- Digitization and automation are integrated into most of the services provided by MOBILIS to its customers.	Reliability	10,872	3	3,624	,813	,489	,023
	Responsiveness	17,807	3	5,936	1,485	,223	,041
	Empathy	35,228	3	11,743	2,465	,067	,067
	Assurance	38,885	3	12,962	2,767	,046	,075
	Tangibility	15,048	3	5,016	1,187	,319	,033
04- My data is identified through fingerprint or by using the automated card reader	Reliability	54,849	2	27,424	6,153	,003	,107
	Responsiveness	36,810	2	18,405	4,605	,012	,082
	Empathy	23,789	2	11,894	2,497	,087	,046
	Assurance	27,621	2	13,810	2,948	,057	,054

technology or QR_Code.	Tangibility	35,161	2	17,581	4,160	,018	,075
05- At MOBILIS, all my information and transactions are processed and stored digitally and automatically.	Reliability	28,337	2	14,169	3,179	,046	,058
	Responsiveness	28,400	2	14,200	3,553	,032	,065
	Empathy	19,413	2	9,707	2,038	,136	,038
	Assurance	21,019	2	10,510	2,244	,111	,042
	Tangibility	21,405	2	10,703	2,532	,084	,047
06- My data is kept accurately at MOBILIS, and I have not faced any mixup with others' data.	Reliability	46,545	3	15,515	3,481	,019	,092
	Responsiveness	5,349	3	1,783	,446	,721	,013
	Empathy	5,323	3	1,774	,372	,773	,011
	Assurance	29,626	3	9,875	2,108	,104	,058
	Tangibility	5,217	3	1,739	,411	,745	,012
07- My digital data at MOBILIS can be accessed by employees in moments.	Reliability	11,808	3	3,936	,883	,453	,025
	Responsiveness	18,937	3	6,312	1,579	,199	,044
	Empathy	5,489	3	1,830	,384	,765	,011
	Assurance	2,573	3	,858	,183	,908	,005
	Tangibility	19,159	3	6,386	1,511	,216	,042

Source: Prepared by the student based on the outputs of the statistical program SPSS_26.

☐ Analysis and Interpretation of Data (Hypothesis Testing):

Before starting the analysis and interpretation of the results, we will discuss several tools, including:

- Type III Sum of Squares: Represents the variance explained in the dependent variable by the model.
- Mean Square: The average variance.
- Type III Sum of Squares: Represents the total variance in the dependent variable explained by the model.
- df (Degrees of Freedom): The degrees of freedom associated with the model, indicating the number of estimated parameters.
- Mean Square: The average variance (the result of dividing the Type III Sum of Squares by the df).

1- The corrected model: This part of the table indicates the overall effect of the model that includes all independent variables on each dimension of service quality.

2- 1-1- Reliability: The results were Type III Sum of Squares: 682.011, df: 54, Mean Square: 12.630, F: 2.834, Sig .000, Partial Eta Squared: .598. This explains that the corrected model has a significant effect on reliability, as the probability value (Sig.) is less than 0.05, indicating statistical significance. Partial Eta Squared indicates that the model explains 59.8% of the variance in reliability.

2-2- Responsiveness: The results were Type III Sum of Squares: 628.553, df: 54, Mean Square: 1.640, F: 2.913, Sig .000, Partial Eta Squared: .604. This explains that the corrected model has a significant and statistically significant effect on responsiveness, as the probability value is less than 0.05. Partial Eta Squared indicates that the model explains 60.4% of the variance in responsiveness.

2-3- Tangibility: The results were Type III Sum of Squares: 652.347, df: 54, Mean Square: 12.081, F: 2.536, Sig .000, Partial Eta Squared: .571. This explains that the corrected model has a significant and statistically significant effect on tangibility, as it explains 57.1% of the variance in tangibility.

2-4- Reliability: The results were Type III Sum of Squares: 635.704, df: 54, Mean Square: 11.772, F: 2.513, Sig .000, Partial Eta Squared: .569. This explains that the corrected model has a significant and statistically significant effect on reliability, as it explains 56.9% of the variance in reliability.

2-5- Empathy: The results were as follows: Type III Sum of Squares: 547.661, df: 54, Mean Square: 10.142, F: 2.400, Sig: 0.000, Partial Eta Squared: .557. This indicates that the corrected model significantly and statistically affects empathy, explaining 55.7% of the variance in empathy.

The corrected model, including all independent variables, also significantly affects all dimensions of service quality (reliability, responsiveness, Tangibility, assurance, and empathy). These effects suggest that the model explains a significant proportion of the variance in these dimensions, reflecting the importance of the independent variables used in the model.

These results indicate that using advanced technology in document management and preservation in the digital environment can significantly enhance service quality by improving reliability, responsiveness, Tangibility, assurance, and empathy.

3- Intercept: This section refers to the effect of the intercept (the basic rate) for each dimension of service quality. All values related to the intercept for all dimensions of service quality indicate very high statistical significance (Sig. = .000), meaning that the basic rate for each dimension is statistically significant. The high

values of Partial Eta Squared indicate that the intercept explains a large part of the variance in each dimension, with proportions ranging from 85% to 88.2%.
Based on these results, it can be said that the fundamental and fixed factors in this model play a significant role in determining service quality in document management and preservation in the digital environment. It is important to utilize these results in improving and developing service delivery strategies to ensure achieving high levels of quality in all dimensions.

4- Digitization and Automation in MOBILIS Services: This section refers to the impact of digitization and automation on the dimensions of service quality.
3-1- Reliability: Where the results were: F: 6.153, Sig .003, Partial Eta Squared .107: This explains that digitization and automation have a significant impact on reliability (strong statistical significance), explaining 10.7% of the variance.
3-2- Responsiveness: Where the results were: F: 4.605, Sig .012, Partial Eta Squared .082: This explains that digitization and automation have a significant impact on responsiveness, explaining 8.2% of the variance.
3-3- Tangibility: Where the results were: F: 2.497, Sig .087, Partial Eta Squared .046: This explains that the impact of digitization and automation on tangibility is not statistically significant (Sig. > 0.05), but it explains 4.6% of the variance.
3-4- Reliability: Where the results were: F: 2.948, Sig .057, Partial Eta Squared .054: This explains that the impact of digitization and automation on reliability is close to statistical significance (Sig. close to 0.05), explaining 5.4% of the variance.
3-5- Empathy: Where the results were: F: 4.160, Sig .018, Partial Eta Squared .075: This explains that digitization and automation have a significant impact on empathy, explaining 7.5% of the variance.
We can conclude that for the dimensions of reliability, responsiveness, and empathy, digitization and automation have a significant and statistically significant impact on them, indicating that the application of digitization and automation in MOBILIS services significantly enhances these aspects of service quality.
Regarding tangibility: The impact of digitization and automation on tangibility lacks statistical significance, indicating that digitization and automation alone may not be sufficient to improve this dimension of service quality. Additional factors or improvements may be required to achieve statistical significance.
As for reliability: The impact of digitization and automation on reliability is close to statistical significance, suggesting the possibility of an effect that requires further research and confirmation. This means that digitization and automation may contribute to improving reliability, but further effort is needed to reassure customers and build trust in digital transactions.
Based on these findings, it can be said that the application of digitization and automation in MOBILIS services has a tangible positive impact on several dimensions of service quality, particularly reliability, responsiveness, and empathy. However

4- Recognition and Verification Technologies: This section refers to the impact of using advanced technology in identifying customer data on service quality dimensions.
4-1- Reliability: Where the results were: Type III Sum of Squares: 10.872, df: 3, Mean Square: 3.624, F: 0.813, Sig: 0.489, Partial Eta Squared: .023: This explains that the impact of using advanced technology in identifying data on reliability is not statistically significant (Sig. > 0.05), and only explains 2.3% of the variance.
4-2- Responsiveness: Where the results were: Type III Sum of Squares: 17.807, df: 3, Mean Square: 5.936, F: 1.485, Sig: 0.223, Partial Eta Squared: .041: This explains that the impact of using advanced technology in identifying data on responsiveness is not statistically significant (Sig. > 0.05), and explains 4.1% of the variance.
4-3- Tangibility: Where the results were: Type III Sum of Squares: 35.228, df: 3, Mean Square: 11.743, F: 2.465, Sig: 0.067, Partial Eta Squared: .067: This explains that the impact of using advanced technology in identifying data on tangibility is close to statistical significance (Sig. = .067), and explains 6.7% of the variance.
4-4- Reliability: Where the results were: Type III Sum of Squares: 38.885, df: 3, Mean Square: 12.96, F: 2.767, Sig: 0.046, Partial Eta Squared: .075: This explains that the impact of using advanced technology in identifying data on reliability is statistically significant (Sig. < 0.05), and explains 7.5% of the variance.
4-5- Empathy: Where the results were: Type III Sum of Squares: 15.048, df: 3, Mean Square: 5.016, F: 1.187, Sig: 0.319, Partial Eta Squared: .033: This explains that the effect of using advanced technology in data recognition on empathy is not statistically significant (Sig. > 0.05), and explains 3.3% of the variance.
We can conclude that there is a non-statistically significant effect on reliability, responsiveness, and empathy: as recognition and verification techniques do not significantly affect reliability, responsiveness, and empathy. The interpretive impact of these techniques on these dimensions is very weak, as they only explain a small proportion of the variance in these dimensions. This is due to the policy followed by MOBILIS, where despite having an image of the customer's identity in MOBILIS' databases, he is forced to present his identity at every meeting with a MOBILIS employee, which causes complaints and congestion. To avoid this problem, it would have been better for MOBILIS to use one of the modern electronic verification methods, such as (email verification; two-factor authentication; customer face verification; fingerprint verification; artificial intelligence verification ...). As for data entry, it is done within MOBILIS' official agencies, despite the use of

scanners, it is still done manually, and what happens at the point of sale follows pre-technology methods and relies on paper and pen, resulting in serious errors and poor service.
MOBILIS could have resorted to "Optical Character Recognition" (OCR) technology, which enables the extraction of text from scanned images and documents and converts it into editable and processable digital text by computer systems.
The impact on tangibility is close to statistical significance: the impact of technologies on tangibility is close to statistical significance.
As for reliability, there is a statistically significant impact: where recognition and verification technologies have a statistically significant impact on reliability, explaining a greater proportion of variance compared to other dimensions. This indicates that the use of advanced technology in data recognition contributes significantly to improving service quality reliability. MOBILIS should capitalize on this advantage.

5- Digital Processing and Storage in MOBILIS: This section refers to the impact of digital processing and automatic storage of data on the dimensions of service quality.
5-1- Reliability: Where the results were: Type III Sum of Squares: 28.337, df: 2, Mean Square: 14.169, F: 3.179, Sig.:.046, Partial Eta Squared: .058: This explains that the digital processing and automatic storage of data have a statistically significant effect on reliability (Sig. < 0.05), and explains 5.8% of the variance.
5-2- Responsiveness: Type III Sum of Squares: 28.400, df: 2, Mean Square: 14.200, F: 3.553, Sig.:.032, Partial Eta Squared: .065: This explains that the digital processing and automatic storage of data have a statistically significant effect on responsiveness (Sig. < 0.05), and explains 6.5% of the variance.
5-3- Tangibility: Where the results were: Type III Sum of Squares: 19.413, df: 2, Mean Square: 9.707, F: 2.038, Sig.:.136, Partial Eta Squared: .038: This explains that the digital processing and automatic storage of data does not have a statistically significant effect on tangibility (Sig. > 0.05), and explains 3.8% of the variance.
5-4- Reliability: Where the results were: Type III Sum of Squares: 21.019, df: 2, Mean Square: 10.510, F: 2.244, Sig.:.111, Partial Eta Squared: .042: This explains that the digital processing and automatic storage of data does not have a statistically significant effect on reliability (Sig. > 0.05), and explains 4.2% of the variance.
5-5- Empathy: Where the results were: Type III Sum of Squares: 21.405, df: 2, Mean Square: 10.703, F: 2.532, Sig.:.084, Partial Eta Squared: .047: This explains that processing and storing data digitally and automatically has no statistically significant effect on empathy (Sig. > 0.05), and explains 4.7% of the variance.
We can conclude that there is a statistically significant effect on reliability and responsiveness: as processing and storing data digitally and automatically has a statistically significant effect on them, where this process explains a proportion of the variance in these two dimensions (5.8% and 6.5% respectively). This indicates that this process positively contributes to improving these aspects of service quality.
There is also a statistically non-significant effect on tangibility, reliability, and empathy: as there is no statistically significant effect of processing and storing data digitally and automatically on them. The interpretive impact of this process on these dimensions is minimal (the proportion of explained variance ranges from 3.8% to 4.7%) and is statistically non-significant.

6- Data Accuracy and Integrity: This section refers to the impact of data accuracy and the absence of mixing with others' data on the dimensions of service quality.
6-1- Reliability: Where the results were: Type III Sum of Squares: 46.545, df: 3, Mean Square: 15.515, F: 3.481, Sig: 0.019, Partial Eta Squared: .092: This explains that data accuracy and the absence of mixing with others' data have a statistically significant effect on reliability (Sig. < 0.05), and explains 9.2% of the variance.
6-2- Responsiveness: Where the results were: Type III Sum of Squares: 5.349, df: 3, Mean Square: 1.783, F: 0.446, Sig: 0.721, Partial Eta Squared: .013: This explains that data accuracy and the absence of mixing with others' data do not have a statistically significant effect on responsiveness (Sig. > 0.05), and explains 1.3% of the variance.
6-3- Tangibility: Where the results were: Type III Sum of Squares: 5.323, df: 3, Mean Square: 1.774, F: 0.372, Sig: 0.773, Partial Eta Squared: .011: This explains that data accuracy and the absence of mixing with others' data do not have a statistically significant effect on tangibility (Sig. > 0.05), and explains 1.1% of the variance.
6-4- Reliability: Where the results were: Type III Sum of Squares: 29.626, df: 3, Mean Square: 9.875, F: 2.108, Sig: 0.104, Partial Eta Squared: .058: This explains that data accuracy and the absence of mixing with others' data do not have a statistically significant effect on reliability (Sig. > 0.05), and explains 5.8% of the variance.
6-5- Empathy: Where the results were: Type III Sum of Squares: 5.217, df: 3, Mean Square: 1.739, F: 0.411, Sig: 0.745, Partial Eta Squared: .012: This explains that the accuracy of data retention and the absence of confusion between it and the data of others has no statistically significant effect on empathy (Sig. > 0.05), and explains 1.2% of the variance.
We can infer the presence of a precise and significant effect on reliability: as the accuracy of data retention and the absence of confusion between it and the data of others have a statistically significant effect on it, where this process explains a considerable proportion of the variance in this dimension (9.2%).
There is also a statistically non-significant effect on the remaining dimensions: where the accuracy of data retention and the absence of confusion between it and the data of others has no statistically significant effect on responsiveness, tangibility, reliability, and empathy. The effect of this process on these dimensions is small

and does not explain a large proportion of the variance in them (the explained variance ratios range from 1.1% to 5.8%).

7- The speed of access to customer data at Mobilis: This part reflects the impact of employees' access speed to digital data on service quality.

7-1- Reliability: The results were: $F(3, 143) = 0.883$, $p = 0.453$, $\eta^2 = 0.025$. There is no statistically significant effect of employees' access to digital data on reliability, with a very small effect size, explaining only 2.5% of the variance in reliability. This indicates that the speed of employees' access to digital data does not have a significant impact on the company's ability to provide promised services reliably and accurately.

7-2- Responsiveness: The results were: $F(3, 143) = 1.579$, $p = 0.199$, $\eta^2 = 0.044$. Although this dimension shows a relatively larger effect, it is still not statistically significant, explaining 4.4% of the variance in responsiveness, with a small effect size. This suggests that the speed of data access may contribute slightly to improving the responsiveness to customers, but the impact is not significant enough to be statistically meaningful.

7-3- Empathy: The results were: $F(3, 143) = 0.384$, $p = 0.765$, $\eta^2 = 0.011$. There is no statistically significant effect, and the effect size is very small (explaining only 1.1% of the variance). This indicates that the speed of employees' access to digital data almost does not affect their ability to provide personal attention to customers.

7-4- Assurance: The results were: $F(3, 143) = 0.183$, $p = 0.908$, $\eta^2 = 0.005$. This dimension shows the least impact, explaining only 0.5% of the variance. The result indicates that the speed of data access almost does not affect the employees' ability to instill confidence and assurance in customers.

7-5- Tangibility: Where the results were: $F(3, 143) = 1.511$, $p = 0.216$, $\eta^2 = 0.042$, the second largest effect after responsiveness, but still not statistically significant, accounting for 4.2% of the variance in tangibility. This may indicate that the speed of accessing data may slightly affect the tangible aspects of the service, such as equipment quality or professional appearance of employees, but the effect is not significant.

The results indicate that there is no statistically significant effect on any of the dimensions, which may suggest that the speed of employees' access to digital data is not a crucial factor in determining service quality at MOBILIS.

☐ Results:

Based on the analysis of the study data, we can draw some key findings:

- ☐ Digitization and automation have a positive and statistically significant impact on reliability, responsiveness, and empathy, emphasizing the importance of digital transformation in improving certain aspects of service quality.
- ☐ Limited impact of advanced technologies on data recognition on dimensions of service quality, except for their impact on reliability, indicating the need to improve these technologies or integrate them better into daily operations.
- ☐ Positive impact on reliability and responsiveness, indicating the importance of automation in improving service efficiency and reliability.
- ☐ Significant impact on reliability, indicating that data accuracy and safety are crucial factors in enhancing customer trust in the service.
- ☐ No significant impact on service quality, indicating that other factors may be more important in improving customer experience.

IV. Conclusion:

Finally, this study titled "The Role of Digital Document Management and Preservation in Improving Service Quality: A Case Study of MOBILIS Mobile Company in Ghardaia Governorate in Algeria" has yielded significant results that enhance our understanding of how digital technologies impact the quality of services provided by MOBILIS. The findings indicate that digitization and automation have a positive and tangible effect on various aspects of service quality, highlighting data accuracy as a crucial influencing factor. Although the speed of access to digital data did not show a significant overall impact on quality, the research underscores the necessity of leveraging digital technology to enhance customer experience and deliver more effective and efficient services.

The results of this study underscore the urgent need to adopt digital document management technologies within the telecommunications sector to ensure continuous improvement in service quality. They also emphasize that focusing on data accuracy and maintaining its integrity is essential for achieving customer satisfaction and building trust in the services provided. We hope this study will help guide future company strategies towards adopting more digital solutions to achieve higher levels of service quality and customer satisfaction.

V. Recommendations:

Based on the results of this study, we can make the following recommendations:

- ☐ Continuously develop digital systems for processing and storing data automatically and accurately, due to their positive impact on reliability and responsiveness according to the results.
- ☐ Focus on enhancing the accuracy of customer data storage and avoiding mixing it with others' data, as it is crucial for ensuring reliability in service delivery.
- ☐ Adopt advanced recognition and verification technologies such as facial recognition, fingerprint, and electronic verification, as the results have shown their positive impact on service quality reliability.
- ☐ Develop a comprehensive strategy to improve tangibility and reliability aspects, as the studied factors did not show a significant impact on them, requiring additional measures and solutions.
- ☐ Invest in advanced technologies such as Optical Character Recognition (OCR) to extract data from scanned documents and convert it into processable digital text.
- ☐ Provide continuous training for employees on using new digital systems and document and data management techniques effectively to ensure high-quality service delivery to customers.
- ☐ Conduct continuous follow-up studies and monitoring to evaluate the effectiveness of the adopted digital strategy and identify strengths and weaknesses regularly for continuous improvement.

Implementing these recommendations comprehensively will help MOBILIS to maximize the benefits of modern technologies in document management and storage, and significantly improve the quality of services provided to customers.

VI. The references:

1. Franks, P. C. (2013). *Records and Information Management*. Chicago: Neal-Schuman Publishers, Inc.
2. Hawkins, K. (2019). *A Strategic Approach to Managing Digital Records*. Cambridge, Massachusetts: A Bradford BOOK.
3. Parasuraman, A. Z. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing, 64(1), 12-40*, 23.
4. Philip Kotler &al. (2008). *Principles of Marketing*. United Kingdom: Pearson Education Limited.
5. Reed, B. (2017). *Records Management for Museums and Galleries: An Introduction*. Oxford: Chandos Publishing.
6. Saffady, W. (2011). *Records and Information Management: Fundamentals of Professional Practice*. Overland Park, Kansas: Arma International.
7. Smallwood, F. R. (2014). *Information Governance: Concepts ،Strategies ،and Best Practices*. New Jersey: John Wiley & Sons ،Inc: Hoboken.
8. Smallwood, R. F. (2014). *Information Governance: Concepts, Strategies, and Best Practices*. Hoboken: New Jersey: John Wiley & Sons.
9. Smallwood, R. F. (2020). *Emerging Trends in Digital Records Management*. Overland Park, Kansas: Arma International.
10. Stephens, D. O. (2016). *The Challenges of Digital Records Management*. Chicago: The Society of American Archivists.
11. Valarie A. Zeithaml, M. J. (2006). *Services Marketing*. United States: McGraw-Hill.
12. Zhou, C. (2021). *Digital Records Management: An Implementation Guide*. New York: Routledge.