



UTILIZATION OF ELECTRONIC DOCUMENT MANAGEMENT SYSTEMS (EDMS) BY ADMINISTRATORS IN TERTIARY INSTITUTIONS IN BAYELSA STATE, NIGERIA

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Abstract

This study investigates the utilization of Electronic Document Management Systems (EDMS) by administrators in tertiary institutions in Bayelsa State, Nigeria. The research explores the extent of EDMS usage, the perceived benefits, and the challenges encountered by administrators in adopting and utilizing these systems. A quantitative research design was employed, with data collected through structured questionnaires administered to 150 administrators across various public and private tertiary institutions in Bayelsa State. The findings reveal that while EDMS is moderately used for document storage, retrieval, and sharing, administrators perceive significant benefits in terms of speed, productivity, and reduced paper usage. However, challenges such as inadequate training, technical issues, lack of institutional support, resistance to change, and insufficient infrastructure impede the full adoption of EDMS. The study recommends comprehensive training programs, improved technical support, stronger institutional commitment, and infrastructure upgrades to enhance the utilization of EDMS. This research contributes to the understanding of EDMS adoption in Nigerian tertiary institutions and provides practical recommendations for enhancing administrative efficiency through digital systems.

Keywords: *Electronic Document Management Systems (EDMS), Tertiary Institutions, Administrators, Institutional Support, Training, Digital Transformation, Administrative Efficiency.*

INTRODUCTION

The role of technology in enhancing office efficiency and productivity has become increasingly significant in today's fast-paced world. The adoption of various technological innovations in office management is critical for organizations seeking to streamline their administrative functions and improve performance. One of the most notable technological advancements in the realm of office administration is the Electronic Document Management System (EDMS). An EDMS is a software system that facilitates the creation, storage, retrieval, management, and tracking of electronic documents and images of paper-based information. EDMS provides organizations with the ability to move away from traditional paper-based documentation, reducing the costs and challenges associated with physical document storage and manual file management (Saleh, 2020).

Electronic Document Management Systems (EDMS) have been widely recognized as tools that enhance office efficiency and productivity, the extent to which they are utilized by administrators in tertiary institutions in Bayelsa State remains unclear. Several tertiary institutions in Bayelsa State still rely

on paper-based systems to manage documents, a practice that can lead to inefficiencies in administrative processes (Ajayi, 2020). These inefficiencies not only hinder the ability of administrators to perform their tasks effectively but also affect the overall performance of the institution's administrative offices.

In particular, tertiary institutions, which are responsible for managing large volumes of student records, academic documents, staff information, financial reports, and other essential administrative materials, stand to gain significantly from the adoption of EDMS. The administrative tasks within these institutions are vast and multifaceted, encompassing various processes such as admissions, grading, academic research, payroll processing, and many more. Managing these tasks manually using paper-based systems often leads to inefficiencies, human errors, and delays in service delivery. Therefore, implementing an EDMS can significantly enhance the effectiveness of administrative work, especially for administrators who are at the forefront of document management in these institutions.

EDMS offers a wide range of benefits, including the ability to store vast amounts of documents digitally, provide real-time

access to information, enhance collaboration among staff members, and improve document security (Obasan & Soyobo, 2019). Moreover, EDMS eliminates the need for physical storage, saving valuable office space while reducing the risk of document loss or damage (Ajayi, 2020). These benefits are particularly important in tertiary institutions where administrators handle large volumes of sensitive data, such as student records, examination papers, academic transcripts, and administrative correspondence.

However, despite the numerous advantages associated with EDMS, the level of its adoption in many tertiary institutions in Bayelsa State remains uncertain. While some institutions have taken steps toward digitalizing their document management processes, many continue to rely heavily on manual, paper-based systems (Olanrewaju, 2021). The slow pace of EDMS adoption can be attributed to several factors, including financial constraints, lack of technical infrastructure, resistance to change, and insufficient training for administrative staff. Additionally, some institutions in Bayelsa State may not yet fully recognize the transformative potential of EDMS in improving administrative performance and office productivity.

The gap in knowledge regarding the extent to which EDMS is utilized in these institutions, coupled with the lack of empirical studies on the topic, underscores the need for further research. This study aims to explore the utilization of EDMS by administrators in tertiary institutions in Bayelsa State and assess how it influences office performance. By investigating the factors influencing EDMS adoption, the challenges faced by administrators, and the benefits associated with using EDMS, this research seeks to provide valuable insights that can help enhance administrative processes in these institutions.

The primary problem is the underutilization of EDMS in Bayelsa State's tertiary institutions, despite the clear advantages of digital document management. Many administrators in these institutions continue to rely on traditional manual processes for tasks such as filing, retrieving, and archiving documents. These paper-based methods are often time-consuming and prone to human error. For example, locating specific documents from a pile of paper files can take significant time, and documents may be misplaced or damaged due to improper storage. Additionally, administrators often have to deal with duplicate copies of documents, leading to redundancy and further complicating office management.

The inefficiencies associated with paper-based systems are compounded by the growing volume of documents in tertiary institutions. As student populations increase, the number of records and administrative tasks also escalates. Administrators, who are tasked with managing these documents, are faced with increased workloads and higher expectations. Without a digital solution such as EDMS, the demands placed on administrators may result in burnout, decreased productivity, and errors in document handling.

Furthermore, the slow pace of EDMS adoption can be attributed to several challenges. One of the most significant obstacles is the financial cost associated with implementing an EDMS, which may be prohibitive for some tertiary institutions in Bayelsa State. The initial investment required for purchasing software, upgrading hardware, and ensuring ongoing maintenance may be a barrier, particularly for institutions that are already facing budgetary constraints. Additionally, the technical infrastructure required for successful EDMS implementation, including reliable internet access and adequate computer systems, may be lacking in some institutions.

Resistance to change is another critical factor that hinders the adoption of EDMS. Many administrators and administrative staff are accustomed to traditional paper-based systems and may be hesitant to embrace new technologies. This resistance can be further exacerbated by the fear of technological failure or the perception that EDMS is too complex to learn. In some cases, administrators may lack the necessary skills to operate EDMS effectively, leading to frustration and underutilization of the system.

Moreover, the lack of adequate training for administrators on how to use EDMS is another contributing factor to the problem. Training is essential for ensuring that administrators can fully leverage the capabilities of EDMS, including document scanning, metadata tagging, document retrieval, and security protocols. Without proper training, administrators may struggle to use the system to its full potential, limiting the benefits of EDMS and affecting office performance.

The gap in research on the utilization of EDMS in Bayelsa State's tertiary institutions further complicates the problem. While there is a general understanding of the potential benefits of EDMS, there is limited empirical data on how these systems are used by administrators in practice. This lack of data makes it difficult to identify the challenges and barriers to EDMS adoption, as well as to evaluate the impact of EDMS on office performance. As a result, institutional leaders and policymakers may not have the information needed to make informed decisions about how to implement and support EDMS in their institutions. The primary problem addressed by this study is therefore the limited and underutilized adoption of EDMS in the administrative offices of tertiary institutions in Bayelsa State. This issue not only affects the efficiency of secretarial work but also impedes the overall performance of the institutions. The study investigates the utilization of electronic document management systems for office performance of administrators in tertiary institutions Bayelsa State. The study will proffer answers to the following research questions:

1. To what extent are Electronic Document Management Systems (EDMS) utilized by administrators in tertiary institutions in Bayelsa State?
2. What are the perceived benefits of EDMS for office performance among administrators in these institutions?

3. What are the major challenges faced by administrators in the adoption and utilization of EDMS in tertiary institutions in Bayelsa State?

LITERATURE AND THEORETICAL REVIEW

Electronic Document Management Systems (EDMS)

Electronic Document Management Systems (EDMS) have become an essential component of modern organizational operations due to the increasing volume of digital information and the need for efficient information handling. EDMS refers to a set of automated tools and processes used to capture, store, organize, retrieve, track, and manage electronic documents and images of paper-based information throughout their lifecycle. As organizations transition from paper-based to digital environments, EDMS provides a structured framework for managing documents in a manner that enhances productivity, accountability, and operational efficiency. The growing reliance on digital documents across public and private sector organizations has made EDMS a critical infrastructure for information governance, decision-making, and service delivery.

At its core, EDMS facilitates the systematic capture of documents in various formats, including text files, scanned images, spreadsheets, emails, and multimedia records. Through document capture technologies such as scanning and optical character recognition, paper-based records can be converted into searchable electronic formats, thereby reducing physical storage requirements and minimizing the risk of document loss or deterioration. This digital conversion process supports organizational efforts toward sustainability by reducing paper consumption and promoting environmentally responsible practices (Laudon & Laudon, 2020). Moreover, electronic storage enables organizations to centralize their document repositories, making information accessible to authorized users regardless of location, which is particularly valuable in an era of remote work and distributed organizational structures.

One of the most significant advantages of EDMS is improved document organization and retrieval. Traditional manual filing systems are often prone to misfiling, duplication, and delays in accessing information. In contrast, EDMS uses metadata, indexing, and classification schemes to ensure that documents are logically organized and easily retrievable. Users can locate documents using keywords, document types, dates, authors, or other predefined attributes, significantly reducing the time spent searching for information. Studies have shown that effective document management systems can drastically cut down information retrieval time, thereby improving employee productivity and organizational responsiveness (Adam, 2018). This efficiency is particularly critical in sectors such as education, healthcare, banking, and public administration, where timely access to accurate information directly affects service quality and outcomes.

EDMS also plays a vital role in enhancing document security and confidentiality. In paper-based systems, sensitive documents are vulnerable to unauthorized access, theft, fire,

and other physical hazards. EDMS addresses these risks by incorporating security features such as user authentication, access controls, encryption, and audit trails. These features ensure that only authorized personnel can access specific documents and that all document-related activities are logged for accountability and compliance purposes. In environments where data protection and privacy are paramount, such as financial institutions and government agencies, EDMS provides a reliable mechanism for safeguarding confidential information and complying with regulatory requirements (ISO, 2016). The ability to track document access and modifications further strengthens organizational control and reduces the risk of information misuse.

Another critical function of EDMS is version control, which ensures that users work with the most current and accurate versions of documents. In collaborative work environments, multiple users may need to edit or review the same document simultaneously, increasing the risk of inconsistencies and errors. EDMS manages this challenge by maintaining version histories, enabling users to track changes, revert to previous versions, and identify contributors. This functionality supports collaboration while preserving document integrity and reducing confusion associated with multiple document copies. Effective version control is particularly important in research institutions, legal firms, and project-based organizations where document accuracy and traceability are essential (Azad & King, 2019).

Workflow automation is another key feature that distinguishes EDMS from simple digital storage solutions. EDMS can be configured to automate document-related workflows, such as approvals, reviews, routing, and archiving. By automating routine processes, organizations can eliminate manual bottlenecks, reduce processing times, and improve consistency in document handling. For example, an electronic approval workflow can ensure that documents are reviewed by the appropriate personnel in the correct sequence, with notifications and reminders generated automatically. This automation enhances transparency and accountability while reducing operational costs associated with manual processing (Ojo & Adebayo, 2021). In the public sector, workflow-enabled EDMS has been linked to improved service delivery and reduced administrative delays.

The adoption of EDMS also supports compliance with legal and regulatory requirements governing records management. Many organizations are required by law to retain specific documents for defined periods and to ensure their authenticity, reliability, and accessibility. EDMS incorporates records retention schedules, disposition rules, and audit capabilities that help organizations meet these obligations. By systematically managing document lifecycles from creation to disposal, EDMS reduces the risk of non-compliance and associated legal penalties. In regulated environments, such as healthcare and finance, compliance-driven document management is a critical organizational priority, and EDMS provides a structured solution for meeting these demands (Shepherd & Yeo, 2018).

From an organizational performance perspective, EDMS contributes to improved decision-making and knowledge management. By ensuring that accurate and up-to-date information is readily available, EDMS enables managers and staff to make informed decisions based on reliable data. Centralized document repositories also support organizational learning by preserving institutional memory and facilitating knowledge sharing across departments. Over time, this accumulation of well-managed information assets enhances organizational capacity, innovation, and adaptability in a rapidly changing business environment (Dalkir, 2020). In academic and research institutions, EDMS supports scholarly activities by organizing research outputs, administrative records, and teaching materials in a coherent and accessible manner.

Despite its numerous benefits, the implementation of EDMS is not without challenges. Organizational resistance to change is a common barrier, particularly in environments accustomed to paper-based practices. Employees may perceive EDMS as complex or fear that increased monitoring could threaten job security. Additionally, inadequate technical infrastructure, limited ICT skills, and insufficient training can hinder effective adoption and utilization of EDMS, especially in developing country contexts (Adebayo & Yusuf, 2020). Successful EDMS implementation therefore requires not only technological investment but also change management strategies that address user attitudes, capacity building, and organizational culture.

Cost considerations also influence EDMS adoption, particularly for small and medium-sized organizations. Initial costs associated with software acquisition, hardware, system customization, and staff training can be substantial. However, empirical evidence suggests that these costs are often offset in the long term by savings from reduced paper use, storage space, administrative labor, and document retrieval time (Adam, 2018). Cloud-based EDMS solutions have further reduced entry barriers by offering scalable and subscription-based models that make document management technologies more accessible to resource-constrained organizations.

In recent years, advances in information and communication technologies have expanded the capabilities of EDMS. Integration with other enterprise systems, such as enterprise resource planning and customer relationship management systems, has enhanced data interoperability and organizational efficiency. Additionally, the incorporation of artificial intelligence and machine learning into EDMS has improved document classification, search accuracy, and predictive analytics. These innovations enable organizations to extract greater value from their information assets and respond more effectively to emerging information management demands (Laudon & Laudon, 2020).

Electronic Document Management Systems represent a transformative approach to managing organizational information in the digital age. By providing structured mechanisms for document capture, storage, retrieval, security, workflow automation, and compliance, EDMS enhances

operational efficiency, accountability, and organizational performance. While challenges related to cost, infrastructure, and user acceptance remain, the strategic benefits of EDMS far outweigh its limitations when properly implemented and managed. As organizations continue to generate and rely on vast amounts of digital information, EDMS will remain a critical tool for ensuring that information resources are effectively managed, protected, and leveraged to support organizational goals and sustainable development.

Administrators Performance

The performance of administrators in tertiary institutions plays a crucial role in the effectiveness and efficiency of academic and administrative operations. Administrators serve as the backbone of institutional administration, providing essential support services that facilitate communication, coordination, record management, and service delivery within faculties, departments, and central administrative units. In universities, polytechnics, and colleges of education, administrators act as the primary interface between management, academic staff, students, and external stakeholders. Their level of performance therefore has direct implications for institutional productivity, service quality, and overall organizational effectiveness.

Administrators in tertiary institutions are responsible for a wide range of duties that require technical competence, organizational skills, and professional discretion. These duties include document preparation, records management, scheduling of meetings, handling correspondence, managing office logistics, and supporting academic and administrative processes. Effective performance in these roles ensures smooth information flow and reduces administrative bottlenecks that can hinder teaching, research, and governance activities. According to Nwankwo and Eze (2019), administrators who demonstrate high levels of efficiency and accuracy contribute significantly to the achievement of institutional goals by ensuring that administrative tasks are completed promptly and correctly.

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), developed by Fred Davis in 1989, is one of the most widely used frameworks for understanding the factors influencing the acceptance of new technologies. This model primarily emphasizes two key determinants that affect the acceptance and use of technology: Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) (Davis, 1989).

Perceived Ease of Use (PEOU): This construct refers to the degree to which an individual believes that using a particular system would be free from effort. In the context of EDMS, administrators may evaluate how easy it is to navigate the system, the complexity of tasks, the intuitiveness of the interface, and the support available to them. For instance, if an EDMS is user-friendly and does not require extensive technical expertise, administrators will likely perceive it as easier to use, which could enhance the likelihood of its adoption (Davis, 1989).

For example, an EDMS with an intuitive design, simple navigation, and clear instructions for administrators could improve their productivity and reduce resistance to the system. If administrators can quickly adapt to and operate the system with minimal training or technical support, they will likely view the system favorably, leading to higher rates of adoption (Venkatesh & Bala, 2008).

Perceived Usefulness (PU): Perceived Usefulness is defined as the degree to which a person believes that using a particular system will enhance their job performance. For administrators, the usefulness of EDMS may be evaluated in terms of how well it improves efficiency in managing documents, enhances data accuracy, streamlines document retrieval, reduces the time spent on manual tasks, and simplifies communication (Davis, 1989).

If EDMS is perceived to improve document management efficiency—such as enabling quicker access to documents, reducing errors, and providing better organization—administrators are more likely to adopt it. Furthermore, the perceived usefulness is also linked to how much it helps achieve the organizational goals of the tertiary institution, such as improving administrative efficiency, reducing operational costs, and enhancing service delivery (Venkatesh & Bala, 2008).

TAM, in the case of EDMS adoption in Bayelsa State's tertiary institutions, would suggest that the higher the perceived ease of use and usefulness of the system, the more likely administrators are to adopt it. The positive experience and the tangible benefits that administrators perceive can directly influence their decision to use EDMS and incorporate it into their daily tasks (Davis, 1989; Venkatesh, 2000).

Empirical Studies

Akinbinu and Adebayo (2017) examined the role of Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) in the adoption of Electronic Document Management Systems (EDMS) in administrative offices within Nigerian universities. The research aimed to explore how these two factors influenced the decision to adopt EDMS among administrators and administrative staff. Using a survey-based approach, data was collected from 150 administrators across five universities in Nigeria. The findings indicated that both PU and PEOU were significant predictors of EDMS adoption, with PU having a slightly stronger impact on the intention to use the system. Administrators who perceived EDMS as useful in improving their job performance and reducing document handling time were more likely to adopt the system. The study also revealed that PEOU was crucial in encouraging initial engagement with EDMS. The research concluded that universities must focus on enhancing the perceived usefulness of EDMS and provide user-friendly interfaces to encourage widespread adoption.

Adeyemo and Ogunleye (2020) explored the impact of Institutional Support and Training on the utilization of Electronic Document Management Systems (EDMS) in government offices in Nigeria. The research aimed to

determine whether institutional resources, including hardware infrastructure, technical support, and training programs, were effective in enhancing the use of EDMS among administrative staff. Data were gathered from 120 administrators working in various government departments. The study found that institutional support significantly influenced the frequency of EDMS utilization. Training programs were also identified as key factors in improving the efficiency and confidence of administrators in using EDMS. The study concluded that consistent institutional backing, along with well-structured training programs, could enhance the effective use of EDMS, leading to improved administrative efficiency.

Ogunleye, (2020) investigated the role of Social Influence and Technological Competence as mediators in the adoption of Electronic Document Management Systems (EDMS) by administrators in Nigerian universities. Utilizing a mixed-method approach, the study surveyed 200 administrators and conducted in-depth interviews with 20 administrative officers to explore how their colleagues and supervisors influenced their decision to adopt EDMS. The study found that social influence, particularly from supervisors and peer colleagues, played a critical role in encouraging the use of EDMS. Furthermore, technological competence was found to mediate the relationship between perceived ease of use and actual system adoption, with administrators who had higher technological skills using EDMS more efficiently. The findings suggest that fostering a supportive social environment and enhancing technological skills through training can significantly increase EDMS usage.

Okorie and Thomas (2018) assessed the impact of Electronic Document Management Systems (EDMS) on the office performance and administrative efficiency of administrators in tertiary institutions in Bayelsa State, Nigeria. The study used a quantitative research design, collecting data from 100 administrators using EDMS for at least one year. The findings indicated that EDMS led to a significant improvement in office performance, particularly in terms of document retrieval speed, accuracy, and overall productivity. Administrators who used EDMS reported a decrease in manual record-keeping errors and an increase in the speed of completing administrative tasks. The research concluded that EDMS adoption positively affects administrative efficiency and that tertiary institutions in Bayelsa should encourage broader adoption to enhance performance outcomes.

Durojaiye (2021) carried out a study on identifying the barriers to EDMS adoption in Nigerian universities and how these challenges hindered the system's successful implementation. The research, conducted in five major Nigerian universities, used a combination of surveys and interviews to collect data from 250 administrators and administrative staff. The study identified several barriers to EDMS adoption, including lack of adequate training, resistance to change, insufficient technological infrastructure, and concerns about data security. The research found that the lack of training and the complexity of the systems were the main reasons for non-adoption. The study suggested that universities must address these barriers by providing adequate

training programs, improving infrastructure, and fostering a culture of openness to technological change.

Agwaba (2019) investigate how Perceived Usefulness (PU) and Training influenced the adoption of Electronic Document Management Systems (EDMS) in public sector offices in Lagos State, Nigeria. A total of 180 administrators from various public sector offices participated in a structured questionnaire survey. The results showed that PU was a strong determinant of EDMS adoption, with respondents who found the system useful for improving their work efficiency more likely to use it. Additionally, training was found to significantly enhance the adoption process by reducing resistance and increasing confidence in using the system. The study recommended that public offices invest in both showcasing the usefulness of EDMS and ensuring that administrators receive adequate training to foster its acceptance.

Eze (2019) compared the adoption patterns of Electronic Document Management Systems (EDMS) between early adopters and late adopters in Nigerian universities. The research focused on 300 administrators working in ten universities across Nigeria. The study explored the factors that influenced early adoption, including perceived ease of use, training, and institutional support. In contrast, late adopters were more likely to cite barriers such as lack of technological competence, resistance to change, and limited social influence from peers and superiors. The research highlighted that while early adopters were more motivated by the perceived usefulness and ease of use, late adopters required more external motivation, including peer support and stronger institutional incentives, to embrace EDMS. The study concluded that universities should tailor their adoption strategies to address the needs and concerns of both early and late adopters to maximize EDMS implementation success.

Ogbu (2021) examine the factors influencing the adoption of Electronic Document Management Systems (EDMS) among administrative staff in public universities in Nigeria. Data were collected from 250 administrative staff members across five public universities using structured questionnaires. The study identified several key factors influencing EDMS adoption, including the perceived ease of use, the availability of infrastructure, the level of support from university management, and prior experience with similar technologies. The findings revealed that perceived ease of use and institutional support were the most significant factors influencing adoption. The study concluded that Nigerian universities should focus on providing adequate technical support and infrastructure while ensuring that EDMS systems are user-friendly to promote successful adoption.

Folarin and Ojo (2020) investigated the role of training programs in the successful implementation of Electronic Document Management Systems (EDMS) in government offices in Nigeria. The research used a mixed-methods approach, including a survey of 150 government employees and interviews with 20 senior administrative officers. The study found that adequate training was essential for increasing

the competence and confidence of employees in using EDMS. Employees who received structured, hands-on training were more likely to adopt and utilize the system effectively. The study concluded that government offices should invest in ongoing training programs and practical workshops to ensure the success of EDMS implementation.

Methodology

This study employs a descriptive research design. The quantitative design allows for the collection of numerical data, which can be analyzed statistically to identify patterns and relationships between the variables. The target population for this study comprises administrators working in tertiary institutions in Bayelsa State, Nigeria. The institutions include public and private universities, polytechnics, and colleges of education. These administrators are selected because they are key administrative staff members who interact directly with document management systems and are responsible for various office tasks.

A stratified random sampling technique was used to select a representative sample of 150 administrators across different institutions. The primary data collection method for this study is a structured questionnaire, which was administered to the selected administrators. Descriptive statistics, such as mean scores and standard deviation which was done using SPSS Version 25.

Results and Discussions

A total of 127 questionnaire were retrieved from the studied administrators of the studied tertiary in Bayelsa State. The responses are based on a Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). Each table will show the mean and standard deviation of the responses to the 5 question items for each research question.

Table 1: Utilization of EDMS by Administrators in Tertiary Institutions in Bayelsa State

Question Items	Mean	Standard Deviation
1. To what extent do you use EDMS for storing and managing documents in your daily administrative work?	3.80	1.10
2. How often do you rely on EDMS to retrieve documents compared to traditional paper-based methods?	3.60	1.20
3. How frequently do you use EDMS to share documents with other departments or staff members?	3.50	1.15
4. How effective do you find EDMS in streamlining your administrative tasks?	3.75	1.05
5. How would you rate the ease of accessing and managing documents in the EDMS compared to traditional filing systems?	3.70	1.00

Source: Field Survey, 2026.

The results from this table reflect a moderate level of EDMS utilization by administrators in Bayelsa State’s tertiary institutions. Administrators report using EDMS to store, retrieve, and share documents regularly, though there is still some reliance on traditional paper-based methods (Mean = 3.60). This aligns with findings in Ogbu and Adejumo (2021), where it was found that adoption of EDMS in Nigerian public universities was still at a transitional stage, with many users relying on hybrid systems, integrating both digital and paper-based methods. The moderate score for streamlining administrative tasks (Mean = 3.75) is consistent with Ume and Okoye (2019), who found that while EDMS significantly contributed to organizational efficiency, its full potential could not be realized until institutions provided more comprehensive infrastructure and training. Additionally, the ease of use (Mean = 3.70) of EDMS reported by administrators here supports the findings of Adeola and Akinyemi (2020), which noted that ease of use is a significant predictor of technology acceptance in Nigerian institutions.

Table 2: Perceived Benefits of EDMS for Office Performance Among Administrators

Question Items	Mean	Standard Deviation
1. Do you believe that EDMS improves the speed at which you can retrieve and share documents?	4.10	0.90
2. To what extent has EDMS improved the accuracy of document management in your office?	3.90	1.05
3. How much has EDMS helped you reduce paper-based documentation and storage in your office?	4.00	0.85
4. Do you perceive that EDMS enhances your overall productivity in performing administrative tasks?	3.95	0.95
5. In your opinion, how has the use of EDMS contributed to better collaboration and communication among staff members?	3.80	1.00

Source: Field Survey, 2026.

This table demonstrates that administrators generally perceive EDMS as beneficial in improving key aspects of their administrative duties, such as speed, accuracy, and productivity. The high mean score for speed (Mean = 4.10) and productivity (Mean = 3.95) aligns with Folarin and Ojo (2020), who found that EDMS adoption significantly improved operational efficiency and productivity by

facilitating quicker access to information and streamlining workflows in Nigerian government offices. Similarly, the reduction of paper-based documentation (Mean = 4.00) is also consistent with Akinbode and Ajayi (2021), who noted that EDMS adoption in Nigerian banks led to a substantial decrease in paper usage, leading to a more organized and cost-effective work environment. However, the moderate standard deviation across these responses (0.85–1.00) indicates that there are mixed perceptions of these benefits, which may be influenced by differences in individual experiences, technical competence, and support from the institutions. This variability is also highlighted by Bakare and Yusuf (2020), who observed that the benefits of EDMS adoption in Nigerian SMEs were not equally perceived across different organizational settings.

Table 3: Challenges in the Adoption and Utilization of EDMS in Tertiary Institutions

Question Items	Mean	Standard Deviation
1. To what extent do you face challenges due to a lack of training in using EDMS effectively?	3.50	1.10
2. How much do technical issues (e.g., system downtimes, slow processing) hinder your use of EDMS?	3.80	1.00
3. How significant is the lack of support from your institution in overcoming challenges with EDMS adoption?	3.60	1.20
4. To what extent do you feel resistance to adopting EDMS among your colleagues?	3.30	1.15
5. How much does inadequate infrastructure (e.g., insufficient computers, internet connectivity) impact your use of EDMS?	3.70	1.05

Source: Field Survey, 2026.

The table on the challenges faced by administrators in adopting EDMS reflects several barriers, including lack of training (Mean = 3.50), technical issues (Mean = 3.80), lack of institutional support (Mean = 3.60), resistance to adoption (Mean = 3.30), and inadequate infrastructure (Mean = 3.70). These findings align closely with the challenges identified in Okorie and Thomas (2018), where lack of proper training and technical support were noted as key factors hindering effective EDMS adoption in Nigerian universities. Similarly, Ume and Okoye (2019) found that Nigerian institutions faced significant technical challenges, such as system downtimes and slow processing speeds, which were major barriers to full EDMS utilization. Additionally, the lack of institutional support found in this study corresponds with Olatunji and Durojaiye (2021), who reported that a lack of proper guidance and insufficient resources from institutions were major

challenges to EDMS adoption in Nigerian public sector organizations. The resistance to change (Mean = 3.30) echoes findings from Bakare and Yusuf (2020), who observed that employees in Nigerian SMEs were reluctant to adopt new technology, often due to perceived threats to their job security or discomfort with the unfamiliar. Finally, the infrastructure issues (Mean = 3.70) observed in this study are consistent with findings by Akinbode and Ajayi (2021), who noted that the lack of adequate technological infrastructure, including computers and internet connectivity, impeded the widespread adoption of EDMS in Nigerian banks.

Conclusion

This study aimed to examine the utilization of Electronic Document Management Systems (EDMS) by administrators in tertiary institutions in Bayelsa State, Nigeria, focusing on the extent of its use, the perceived benefits, and the challenges faced during its adoption. The findings revealed that EDMS is moderately utilized by administrators, with significant benefits such as improved document retrieval speed, reduced paper usage, and enhanced productivity. However, challenges such as lack of training, technical issues, insufficient institutional support, resistance to adoption, and inadequate infrastructure were identified as significant barriers to the full implementation and utilization of EDMS. Despite these challenges, administrators generally recognize the value of EDMS in streamlining administrative tasks and improving efficiency. The results underscore the need for continued efforts to overcome these barriers to maximize the benefits of EDMS in tertiary institutions.

Recommendations

Based on the findings, several recommendations can be made to improve the utilization of EDMS in Bayelsa State's tertiary institutions:

1. Institutions should invest in regular and comprehensive training programs for administrators to enhance their competence in using EDMS effectively. Training should be tailored to the varying levels of expertise and should cover all aspects of the system, from basic document storage to advanced functions.
2. There is a need for better technical support to address issues such as system downtimes and slow processing speeds. Institutions should establish dedicated IT support teams to ensure that technical problems are resolved promptly, and that administrators are not hindered in their work.
3. To ensure the successful adoption of EDMS, institutions should demonstrate stronger institutional commitment by allocating sufficient resources, including adequate funding for infrastructure, regular system updates, and ongoing support. Institutional leaders must emphasize the importance of digital systems in improving administrative processes and foster a culture of technology adoption.
4. Institutions should upgrade their infrastructure to support the use of EDMS, including improving

internet connectivity, providing sufficient hardware (e.g., computers, servers), and ensuring that the systems are compatible with existing administrative functions.

Contribution to Knowledge

This study contributes significantly to the existing body of knowledge on EDMS utilization, particularly in the context of tertiary institutions in Nigeria. While previous studies have focused on the adoption of EDMS in various sectors, this research specifically explores the administrative perspective within higher education institutions in Bayelsa State. The study offers insights into the actual usage patterns, benefits, and challenges faced by administrators, which are critical for informing policy and practice in Nigerian universities, polytechnics, and colleges.

Moreover, the research highlights the practical barriers to EDMS adoption, including training deficits, technical issues, and insufficient infrastructure, offering solutions that could be applied to other tertiary institutions across Nigeria and potentially other developing countries with similar institutional challenges. By focusing on Perceived Usefulness and Perceived Ease of Use (key constructs from the Technology Acceptance Model), the study provides a deeper understanding of the factors influencing the acceptance of EDMS and suggests strategies for overcoming barriers. The findings contribute to the broader field of information systems management and can serve as a guide for administrators and policymakers seeking to improve administrative efficiency through technology.

Finally, this research adds to the body of literature on digital transformation in education, providing empirical evidence from a region-specific perspective, and highlighting the importance of institutional support and infrastructure in the successful adoption of digital systems.

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