

OPTIMISING SCHOOL ADMINISTRATION THROUGH AI-DRIVEN RECORDS MANAGEMENT: ENHANCING EFFICIENCY AND TRANSPARENCY

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Abstract

The quick increase of digital information within schools is increasing the complexities associated with the administration of records management. The traditional methods of managing records about students, staffs, financial accounts and institutional reports in schools have been inefficient, error-prone, and easily manipulative. The application of Artificial Intelligence (AI) is revolutionary in the modernization of the administration of school by using automated records management system which increases efficiency and improves transparency of the institution. This paper attempts to explore how the automation of records management using AI can make the administration of schools more efficient through accurate data, automated processes, fast information access, and decision-making. However, obstacles such as technological infrastructure issues, ethics, algorithmic biases, and training needs have been found to be among those that could limit the application of AI technologies for school records management. The paper finds that AI-based records management has the capacity to greatly transform school

administration when the appropriate policy frameworks and infrastructure, as well as staff training are in place. The study has made recommendations to policymakers and education administrators on how to integrate AI technologies within school administrative systems.

Keywords: Artificial Intelligence, Records Management, School Administration, Educational Management, Efficiency, Transparency.

Introduction

Role of school administration in ensuring effective administrative functions within an educational institution is significant. Functions performed by schools in this respect include record keeping of students' information, staff information, financial records, educational records and other policies of an educational institution. Conventional methods used by schools to manage the records have proven to be inefficient and ineffective because of duplication, delays and inaccuracy. Emergence of artificial intelligence (AI) has brought new and innovative ways of performing administrative tasks in the field of education. With capabilities like automation, big data analysis and predictive analysis, AI has gained much prominence in the field of education administration. AI application in the area of education can go past the aspect of teaching and learning to include administration aspects like keeping records, performance evaluation, and planning in institutions. The AI system is capable of automating data processing and managing information storage and providing accurate and accessible records of institutions. Through these, school administrators are enabled to use the resources available to them in an effective manner as well as focusing their time in strategic decision making instead of doing administration work. In the case of keeping records, the use of technologies that include machine learning and natural language processing in AI would be useful in digitizing records, categorizing documents and retrieving data easily for management of data. In light of the growing need for effective

governance in education sector, AI-powered record management system can prove to be a useful approach to optimize school administration. This paper seeks to explore how AI would revolutionize the records management in schools.

Statement of the Problems

Proper records management plays an important role in the successful administration of schools as they depend upon information that is available for decision-making and planning purposes. Many administrative records are produced by the schools, such as student academic records, staff records, financial records, admission records, and policy records. But the fact is that inadequate records management appears to reduce the effectiveness of the administration in many schools, especially developing nations. The manual recording system makes it hard for the school administration to process the large amount of data, which leads to delay in administration decision-making. Moreover, inadequate documentation systems can lead to increased chances of record manipulation, loss of documentation, and administrative errors. With the development of Artificial Intelligence (AI) technologies, there is a chance that these technologies will revolutionize school administration with automated and intelligent systems of records management. Such AI-powered systems can be used to automate records categorization, ensure efficient records storage and retrieval, identify discrepancies within records, and deliver real-time analysis that can inform decision-making processes. However, despite such possible advantages, most schools have not yet adopted AI technologies in their administrative system. This could be due to poor digital infrastructure, lack of knowledge on how to use AI technology, and weak policies. This has led to the realization of the need to investigate the application of AI technologies in records management and its implication in school administration. This paper, therefore, focuses on examining the use of AI technologies in school records management.

Objectives of the Study

The main objectives of this paper are to synthesise empirical evidence on:

- (a) Artificial Intelligence roles in modern/contemporary school administration,
- (b) AI-driven records management as it enhances efficiency in the school administration,
- (c) the contribution of AI-based records systems to school administration and transparency.

Theoretical Lens

The theory underlying this research is The Technology Acceptance Model (TAM) created by Fred Davis (1989). It describes how users adopt and adapt to the usage of new technologies. According to the technology acceptance model, two major factors determine whether a person will decide to accept the new technology. These factors are Perceived Usefulness (PU) and Perceived Ease of Use (PEOU).

When we speak about perceived usefulness in the context of AI-based record-keeping for school administration, it means the level of beliefs of school administrators and staff members that these systems would be helpful in improving their job performance and helping them to make decisions faster and more efficiently. If school administrator believes that AI tools would significantly decrease his/her workload, there is high probability that such tools will be adopted. As for perceived ease of use, it refers to how user-friendly the technology is and how easy it is to use it. The TAM theory further indicates that these perceptions affect the behavioral intention to use the system, which in turn affects the actual use of the system. Positive perceptions regarding usefulness and ease of use in AI-based school records management will result in increased adoption and hence better efficiency and transparency. Successful adoption of AI technology in the administration of schools depends on organizational factors like training and infrastructure among others. Thus, TAM forms an appropriate theoretical basis for analyzing the adoption of AI technology in school administration.

The application of the TAM theory in this paper has clearly linked the adoption of AI technology and the benefits associated with efficient school administration.

Conceptual Clarifications

Artificial Intelligence (AI) in Education

AI in education means the application of machines that can execute activities which have been done using human intelligence before, such as processing information, recognition of patterns, predicting events, and decision-making. In school administration, Artificial Intelligence (AI) systems are used to manage large volumes of school data, automate routine processes like student registration and attendance tracking, and support data-driven decision making. AI helps improve the administration of education through minimizing errors, enhancing accuracy and making information available in real time. Moreover, AI makes it possible to have predictions of certain challenges that may be faced including dropout tendencies or inefficiencies in resource allocation. Therefore, AI is a revolutionary aspect of educational administration in terms of enhancing efficiency and responsibility. As far as the school administration is concerned, the use of AI by administrators will help them manage records, predict educational trends, allocate resources and enhance service provision (Holmes et al., 2022; UNESCO, 2023).

AI-Driven Records Management

AI Records Management refers to the incorporation of artificial intelligence technologies into the process of record creation, storage, retrieval, analysis, and protection, as opposed to conventional methods of managing such data through manual processes. AI Records Management employs algorithms, machine learning, and data analytic tools to automate administrative processes and effectively manage institutional data (Holmes, et al., 2022). The techniques include automated document classification, intelligent search, anomaly detection, and predictive analytics for decision making. Within school administration, an AI records management system ensures that all records of students, staff, finances, and

academic performance are efficiently and effectively managed. The system improves the integrity of data and decreases the data redundancy that in turn increases accessibility and compliance to data governance. Therefore, AI Records Management is fundamental in promoting transparency within educational institutions.

School Administration

Administration in schools refers to the process of planning, organising, coordinating and controlling of school resources in order to facilitate the attainment of educational goals and objectives. The administration includes the management of human resource, financial, physical resources, data about students, and academic programs. Administration involves record keeping, implementation of policies, communications and decision-making processes. Due to the integration of ICTs in schools, the administration process has transformed from manual operation to a more advanced and information-oriented system. Efficient administration promotes accountability and transparency in the school administration process. In the situation where the integration of AI occurs, the school administration will be proactive and strategic as the administrators will be in a position to use the intelligent systems to make sound decisions and monitor the performance of the institution as well as improve services at all levels of education.

Efficiency in School Administration

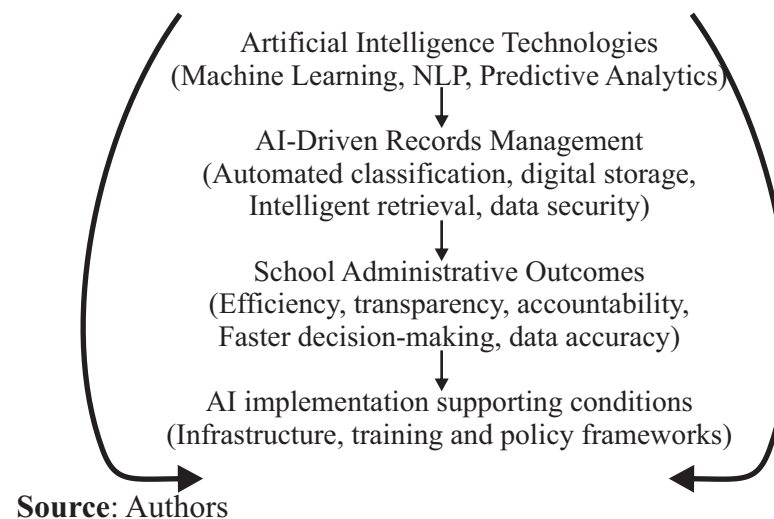
Efficient school administration means using the available resources (time, labour, money, and technology) to accomplish the institution's goals with minimum wastage and maximum productivity. In conventional systems of administration, there tend to be problems related to inefficiency, owing to the manual nature of the activities involved, the duplication of records, the delay in retrieving information and possible mistakes made by people. The use of AI technologies improves efficiency since the technologies automate many of the routine activities, such as data entry, reporting, and record retrieval. It leads to faster processing of information,

reduction of the administrative load, and hence makes it possible for the staff members to engage in strategic activities. In addition, it enables efficient use of information through its real-time access and analysis.

Transparency in School Administration

Transparency in the administration of schools is associated with the openness, accountability, and transparency of institutional processes and decision-making. Transparency includes the provision of reliable information about institutional processes such as financial transactions, performance of students, and implementation of policies in schools. Records management powered by AI increases the degree of transparency by ensuring accuracy, traceability, and easy accessibility of data. Automation of audit trails and provision of real-time reporting and data security decrease the possibility of manipulating or losing records. In this way, all parties such as students, parents, teachers, and regulators have access to accurate data. Information systems powered by AI increase the level of transparency due to provision of accurate digital records, automation of audit trails, real-time reporting, and information management.

Figure 1: Conceptual Framework



Model- AI technologies drive school administration through effective records management systems. AI tools can automate documentation, classification and retrieval processes to greatly enhance the speed and accuracy of administrative tasks. This can improve transparency, accountability and efficiency in school administration in particular. However, and especially in Nigeria schools, the successful artificial intelligence (AI) adoption is influenced by inadequate ICT infrastructure, lack of teachers training and reluctance to change [29].

That being said, the use of AI may also require enablers such as infrastructure, training, and policy, without which the promise of AI in records management may not be fulfilled.

Methodology

Using systematic research design, the existing information on the effects of AI-powered records management in school administration can be reviewed in a transparent and reproducible manner (Shaked et al., 2023). The study employs systematic literature review (SLR) and qualitative content analysis to ensure its accuracy, rigor, and reliability. It provides a full evidence base on the effects of AI-powered records management on school administration and tea as well as supporting any policy or practice recommendations. To identify relevant databases, use Scopus, Web of Science or Google Scholar (free). You conduct searches using the following keywords: “artificial intelligence” OR school administration OR records management OR educational data systems AND efficiency AND transparency. Inclusion criteria are empirical and theoretical works, which pay attention to the topic of implementation of AI technologies in the process of administration, for the exclusion criteria there were excluded non-academic materials like press materials or practical reports. Systematic review, descriptive surveys, case studies and qualitative research are the most prevalent types of methodology in the literature analyzed. Such type of research allows gaining insight into the benefits of use of AI technologies in the process of

records management, however, the number of studies, which used longitudinal or experimental methodologies to prove causal relation is rather small.

So, future studies will have to include more robust quantitative and mixed-method designs to ensure that little is known of the long-run consequences of AI for transparent school administration. Analysis of the findings was based on codes, which identified themes related to administrative efficiency, data quality/accuracy and/or availability (or lack thereof), accountability for care delivery decisions made without appropriate care, and so on. The findings were integrated across studies utilising thematic synthesis, while maintaining their consistency and comparability. Screening is performed more than once on many occasions through peer-requested cross-validation of sources to enhance reliability, and validity comes from selecting situations showing significant impact and credible publication.

Results and Discussions

This section focused on analysis and synthesis of empirical evidence on the role, efficiency and transparent of AI-driven records in school record management. The outcome is reported in accordance with the research objectives and relevant empirical literature.

Roles of Artificial Intelligence in Modern School Administration

The studies that were reviewed all showed that Artificial Intelligence has become an important catalyst for improving modern school administration by stating that AI makes a significant contribution to administrative effectiveness through the automation of routine administrative tasks, the improvement of communication systems, better institutional planning, more accurate records management, and a greater ability to make decisions based on evidence. It was further shown by the studies that AI reduces the administrative workload of school leaders by

cutting down on repetitive clerical work and thus allows administrators to focus on instructional supervision and strategic leadership. Plus, the results show that AI has been shown to increase productivity by providing quick access to accurate information, predictive analytics, and intelligent decision-making systems. These findings echo those of UNESCO (2023), who stated that AI is an important tool in education governance.

Zawacki-Richter et al. (2023) noted that AI has been particularly useful in enhancing school administration such as admission, course scheduling, exams, evaluation of staff, communication, and plan development. As Kamal et al. (2026) indicate, the application of digital technology in the improvement of educational administration management results in better records of students, increased accessibility of academic services, increased participation of students, efficiency, transparency, good decision-making processes, and better learning. In spite of the above-mentioned benefits, but school managers continue encountering certain challenges such as inadequate ICT, inadequate financing, inadequate digital competencies, cybersecurity and privacy issues. These issues are particularly noticeable in many developing countries as technological preparedness in them remains relatively low (Feng & Li, 2024). Overall, it can be said empirically that AI plays an important role in modern school administration because of its ability to automate routine administrative tasks, better planning in institutions, evidence-based decision-making, better communication and optimal resource utilization. However, the successful deployment of AI is contingent upon the availability of sufficient infrastructure, the dedication of leadership, training of the employees, ethical considerations, cybersecurity issues, and policies of the institution. In this way, AI becomes the most efficient decision-making tool that complements, rather than replaces, educational leadership. Holmes et al., (2022); Alaoui (2023); Madan & Ashok (2023).

It should be noted that the reviewed studies demonstrate a high

degree of methodological diversity, which includes systematic reviews, literature reviews, survey research, and mixed-method studies. Despite different education contexts and methods employed in the research process, all the studies demonstrate positive administrative outcomes achieved through the introduction of AI. The common benefits identified include reduced administrative burden, enhanced efficiency in the organization, better decision making using data and enhanced organizational performance. This indicates that technological innovations alone are not sufficient. Equally critical are the preparedness of the institution, the ability of its leadership and ethics in case of the integration of AI in the school administration. It is thus clear that the effective implementation of AI can have a huge influence on the efficiency of administration, institutional effectiveness and provision of educational services. It is for this reason that educational policy makers should consider it essential to invest in technology and AI governance structures in order to benefit from AI in school administration.

AI-driven records management enhance efficiency in school administration

Various studies have demonstrated the importance of AI in records management in improving school administration efficiency. In some schools, records systems with AI automate routine administrative tasks, simplify paperwork, improve accuracy of data, and make it easier for admins to retrieve information about schools at the right time. This helps school administrators do their job more efficiently while also reducing delays and administrative costs. AI has also shown that by allowing quick decision making, communication among all parties, better handling of student information, simpler administration of personnel, and integrating a range of administrative functions onto one digital platform, there is better coordination and efficient utilization of resources across the school system.

As George and Wooden (2023) elaborated, AI-powered systems

also increase transparency as they keep digital records of who accessed and modified the records. According to Madan and Ashok (2023), AI-driven records management also improves organizational efficiency by way of automated document processing, workflow automation, electronic records classification, and predictive analytics. According to UNESCO (2023), AI-driven records management boosts efficiency through automating repetitive administrative tasks such as admissions, attendance, timetable and report generation, and academic records.

All of the empirical findings show that, when implemented to manage school records with AI, schools become more efficient by having more accurate records and data, documenting more routine processes, reducing administrative burden, gaining access to information faster, communicating and coordinating with the organization, making decisions based on facts, reducing costs, and improving productivity. Yet this benefit can only be achieved with adequate funding, technological infrastructure, a high level of digital literacy, leadership, and an institutional willingness to embrace technological change. Because of these factors, it is apparent that the administration of records could benefit enormously from the use of AI. To realize such benefits, education authorities should invest in digital infrastructure, invest in staff training, create a data governance strategy, and fund the use of AI-enabled education technologies.

The contributions of AI-based records systems to transparency in school administration

Transparency has emerged as a key hallmark of effective school administration in the twenty-first century. It fosters openness, accountability, integrity, and builds trust among stakeholders in the administrative process. The rise of Artificial Intelligence (AI) in records management systems is increasingly seen as a smart approach to bolstering transparency by ensuring that educational records are not only accurate and secure but also traceable and easily accessible to authorized users. As established by the research

conducted by Ofem et al. (2022), AI records systems significantly contribute towards improving transparency in school administration. The studies indicate that AI technology increases transparency and accountability because of accurate, secure, traceable, and accessible administrative records. The technology minimizes the risk of manipulation, fraud, and administrative corruption due to the use of technologies such as automated documentation, electronic audit trails, and digitized record keeping systems.

It is argued that the application of AI technology improves institutional accountability through real-time reporting and evidence-based decision-making. Furthermore, the technology instills confidence in stakeholders through the provision of accurate records on areas such as student records, finance management, personnel administration, and academic achievement. The same findings are also supported by UNESCO (2023), as AI-driven school information systems improve transparency through real-time access to data and communication among stakeholders while fostering good governance in education. Furthermore, as highlighted by the research by Arias Hernández and Rockembach (2025), AI technology makes an invaluable contribution to document indexing, creation of metadata, and automated classification, thus increasing records accessibility and accountability.

Despite the numerous benefits offered by AI technology, there is a series of challenges related to high expenses, inadequate digital infrastructure, lack of knowledge and skills, data protection, algorithmic biases, and privacy problems (Feng and Li, 2024). Based on Igboke (2023), schools in developing nations struggle to utilize AI because they do not have the required financing, ICT infrastructure, and even teacher training. The benefits of AI in the area of transparency include the automation of record keeping, ensuring accuracy of data, improving accountability, decision-making, and rapid access to institution records. While manual approaches may be prone to inaccuracies, delays, duplication, and

even human error, the use of AI for record keeping provides an effective digital medium that may enhance transparency in schools (Dogaru, 2026; Buame et al., 2025). The research indicates that AI increases transparency through access to information. Access to information is necessary for school administration, teachers, students, parents, and policy-makers to run the schools. With the record keeping system in school through the use of AI, they will be able to efficiently find out information related to students, their test scores, financial records, attendance records, and personnel records under controlled conditions. With the ability to access information instantly, it will promote better communication between the various parties and build the level of trust in the administration. Developed nations have schools that benefit from advanced ICT framework, internet availability, and good governance structure for effective implementation of AI.

In conclusion, the research shows that the adoption of AI systems for record keeping will improve transparency because of accuracy, accessibility, and accountability. It is important to put the necessary infrastructure in place, follow the best ethics in governance, build up institutional capabilities, and ensure the existence of appropriate government policies.

Conclusion

One major step towards modernizing the education system is through integration of the Artificial Intelligence (AI) technology in the school administration. The integration of AI recording management systems would bring about great opportunities for increasing the efficiency, accuracy, and transparency in school administration. AI could help automate routine processes, speed up the process of searching for information, and assist in evidence-based decision making. However, there are certain barriers that have to be overcome including poor digital infrastructure, ethical challenges, and training of the staff. There should be a strategic adoption of AI in school administration by the school administration officials and administrators. Once implemented

properly, AI recording management systems could significantly contribute to increasing efficiency and transparency in schools. In order to make the most out of AI integration in school administration and recording management, it is necessary to take into account the following recommendations:

1. Clear policies and guidelines need to be put in place to define and highlight the role of AI in these areas.
2. Governments and educational authorities should invest in robust technological infrastructure to back AI-driven administrative systems.
3. Training programs should be developed to boost administrators' skills in digital and AI-based record systems, ensuring transparency in school administration.

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