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Digitized and Manual School Records Management Systems: Implications for Administrative Effectiveness in Secondary Schools

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Abstract **Original Research Article**

This study examines the implications of digitized and manual School Records Management Systems (SRMS) on administrative effectiveness in public secondary schools. Data were gathered on 50 schools (25 digitized and 25 manual) based on time-motion logs, record audits, and an administrative performance scale using an ex post facto quasi-experimental design. The measures and comparison of key indicators were made: administrative efficiency, record accuracy, retrieval time, and decision-making cycle. Findings also showed that digitized SRMS was associated with a significantly high administrative efficiency (M = 8.42 vs. 4.16), accuracy of records (98.6% vs. 91.2), faster retrieval (18.3 vs. 137.5 seconds), and decision cycles (2.1 vs. 6.7 days), indicating large and very large effectiveness. A multiple regression established that the strongest predictor of overall administrative effectiveness lies in SRMS type ($\beta = 0.82$, $p < 0.001$), and even after ensuring that the size of the school, the experience of its administrators, and the ICT infrastructure were taken into account, it could explain 83% of the variance. The results give solid empirical evidence in support of Efficiency Theory and highlight the revolution that digitization has brought in simplifying the school administration. The article has filled an important evidence gap concerning low-resource settings with measurable metrics to confirm that digital SRMS is a wise investment. Recommendations include context-sensitive digitization policies, capacity building, and infrastructure development to ensure equitable and sustainable implementation.

Keywords: School Records Management System (SRMS), administrative effectiveness, digitization, manual records, educational administration, data accuracy.

Introduction

In the 21st century, there has been an explosive growth of the digital transformation in most sectors, and education is one of them. In digital technologies, schools around the world are aiming to maximize operations, facilitating the educational process, and enhancing the efficiency of administration. Nowadays, digitizing is no longer an additional initiative, but it is a strategic requirement, particularly following the disruptions around the world following the COVID-19 pandemic. Those incidents indicated the flaws of analog systems

and hastened the transition to the digital infrastructure (Walimbwa, 2023).

School Records Management Systems (SRMS), in this case, have become vital to the governance of data by the institution. The systems are as basic as digital spreadsheets to complete enterprise resource planning (ERP). They manage student, staff, and administrative data much faster, more precisely, and safely than paper systems (Tagbo, 2024). Digitized SRMS has become the norm in most countries with high income as well as the middle-income category. National education management information systems (EMIS) are frequently mentioned in connection with them to support the monitoring of policies and resource distribution (World Bank, 2023).

The situation, however, is quite different in low-resource settings, particularly in sub-Saharan Africa and some regions of South Asia. Even though this is a common practice all over the world, in most of these areas, the primary and secondary schools continue to rely on manual and paper records (Musa & Jacob, 2021). This has not only been persisted by resistance but also systemic issues like the unreliability of electricity, a lack of online connection, a lack of digital literacy in staff, and the long-standing under-investment in school infrastructure (Chisika & Yeom, 2024).

Sustainability is ineffective even when introducing digital systems, which are usually provided with pilot projects funded by donors. There is either an absence of technical support, improper system design, or tools that are not compatible with local administrative processes (Mbawala, Lestari & Mwakalindile, 2024). Consequently, digitized SRMS is also run by a small number of urban or well-equipped schools that reduce administrative bottlenecks and support the use of data to make decisions (Kochei & Awuor, 2024). In the meantime, the underfunded or rural schools are still languishing in slow-moving manual processes. These use up additional personnel time, risk, and slow down the reporting to education authorities (Alegbeleye, 2021).

The discrepancy between these realities raises a severe equity disparity in the administration of education. Manual systems make administrators waste several hours pulling transcripts, counting attendance, and updating exam records, which can be automated. This ineffectiveness wastes human resources as well as postpones essential processes, including promotion of students, certification, and compliance with policies. Paper records are also prone to physical damage, loss, and abuse, which threatens data integrity and the privacy of students (Kerich et al. 2024).

However, in opposition, properly executed digital SRMS provide opportunities to monitor updates in real time, access control, system-wide image databases, and the level of analytics. The features assist the school leaders in making critical decisions at the right time (Ossai, 2024). Scholars in Ghana, Kenya, and Nigeria have reported associations related to digitizing SRMS and improved school-level performance and performance, such as increased data processing rates and satisfied administrators (Odoh & Nwokwu, 2024; Kajuni, 2024). However, these results are mostly qualitative or anecdotal in nature, and the generalizability of their results remains small with small samples or non-comparative designs.

Problem Statement

Despite the increasing number of scholars aiming at digitalization in education administration, it is evident that there is still no comprehensive, objective evidence to compare the administrative outcomes of digitized and manual SRMS in secondary schools. The current literature glorifies the advantages of digitization, and little research has been done to systematically measure and compare the main indicators of performance between the two systems, including processing time, errors, accessibility of all data, and efficiency of decision-making (Mann & Tock, 2025).

The evidence gap is the strongest in the low- and middle-income countries as policy-makers have to address limited budgetary constraints with competing priorities and require sound data to validate investments in digital infrastructure. The absence of quantifiable metrics of the actual administrative advantages (or disadvantages) of digitized SRMS means that schools will stand to embrace technologies that are not used or are not

appropriate to their operational realities. The proposed study thus aims at addressing such an acute gap in the provision of empirical and statistically validated information on the impact of SRMS type on the overall ability of the administration in secondary schools, hence guaranteeing evidence-based policy and practice in educational administration.

Research Objectives

This study aims to quantitatively assess the implications of digitized and manual School Records Management Systems (SRMS) on administrative effectiveness in public secondary schools. Specifically, the study seeks to: compare the administrative efficiency between secondary schools using digitized SRMS and those using manual SRMS, evaluate the accuracy and integrity of student and administrative records under digitized versus manual systems, measure differences in data accessibility and retrieval speed across the two SRMS types, examine the influence of SRMS type on the timeliness of administrative decision-making processes (e.g., student promotion, examination scheduling, reporting to education authorities), and determine the extent to which SRMS type predicts overall administrative effectiveness.

Hypotheses

To guide the empirical investigation, the following directional hypotheses are tested at $\alpha = 0.05$:

H_1: Schools using digitized SRMS will demonstrate significantly higher administrative efficiency (i.e., lower average time per record task) than schools using manual SRMS.

H_2: The error rate in student and administrative records will be significantly lower in schools using digitized SRMS compared to those using manual SRMS.

H_3: Average record retrieval time will be significantly shorter in schools with digitized SRMS than in those with manual SRMS.

H_4: Administrative decision-making cycle time will be significantly shorter in schools using digitized SRMS than in those using manual SRMS.

H_5: SRMS type will be a statistically significant positive predictor of overall administrative effectiveness, even after controlling for school enrollment, administrator experience, and ICT infrastructure quality.

Conceptual Framework

The administrative effectiveness of educational institutions refers to the degree to which the school management mechanisms and systems attain the desired outcomes of their operations in terms of accuracy, efficiency, timeliness, and reliability, but also contribute to the functions of the institution (Bush, 2020). This efficacy in secondary schools also comprises the capacity of administrators to keep a record of students and institutions, make decisions on the basis of data, and fulfill reporting functions with minimal time and resource expenditure or energy (Ofeimu & Asemhe, 2024). It is not merely about deliberating compliance. It is progressively viewed through a performance prism that appreciates quantifiable deliverables like the rate of accomplishing duties, minimizing mistakes, and the organization is responsive to internal and external customers (Chisika & Yeom, 2024).

School Records Management Systems (SRMS) is an ordered system, manual or electronic, collecting, storing, manipulating, accessing, and securing educational information. They deal with such important records as student admission files, attendance records, academic transcripts, staff profiles, and exam results (Aminu & Gikandi-Gitau, 2025). SRMS are created to maintain data as accurate, accessible, and confidential, and assist in the daily operations of administration and the strategic long-term planning (Ossai, 2024). Manual SRMS stores the records in paper files and ledgers, which require people update and access the information. Digitized SRMS come with programs, such as bare and simple spreadsheets up to full school management information systems to automate activities, reduce duplication, and provide real-time data access (Kajuni, 2024).

The primary constituents of a good SRMS include data entry applications, a storage

framework, retrieval policies, security, and user interfaces. Privatized forms of the SRMS normally include automatic backup systems, role permissions, history records, and reporting boards (World Bank, 2023). Manual SRMS are cheap and easy to use, but lack the given functionality and may be prone to mistakes, errors, and physical damage (Musa & Jacob, 2021). Anyway, the efficiency of an SRMS has a direct influence on such critical areas of administrative performance as a lack of resources and the ability to improve efficiency by any margin (Kochei & Awuor, 2024).

Thus, this research considers administrative efficacy as a complex issue, which is determined by the nature of the SRMS that may be deployed. Switching from manual to digitized SRMS is not just a technology transformation; it is also a transformation of the speed with which data can be identified, its accuracy, and how timely the decisions are made. Based on making SRMS central to administrative functions, the framework takes the system type, manual or digitized, to be a primary determinant in predicting performance outcomes. It is also aware that these effects can be mitigated by the size of a school, the competence of the staff, and the quality of infrastructure (Kerich et al. 2024).

Theoretical perspectives: Technology Acceptance Model (TAM), Efficiency Theory

The research is based on two complementary theoretical frameworks, the Technology Acceptance Model (TAM) and the Efficiency Theory. TAM has developed over the years since Davis first introduced it in 1989, and states that the use of technology by people is primarily based on two beliefs, namely perceived usefulness (the degree to which they believe that the technology will enhance their job performance) and perceived ease of use (the degree to which they believe that using the technology is effortless). Although TAM is more than three decades old, its main concepts remain relevant to the field of education, as the way teachers accept digitally managed School Records Management Systems (SRMS) depends on their belief in its usefulness and ease of use (Tagbo, 2024). Even in schools with scarce resources, digital tools are possible, but as long as they are not accepted (complexity, perceived irrelevance, etc.), it decreases their effectiveness. This renders TAM an appropriate lens for identifying gaps during implementation (Odoh & Nwokwu, 2024).

Efficiency Theory is a result of organizational economics and management science that states that organizations strive to achieve the highest possible output, minimal input, and time and waste (Bush, 2020). In the school administration, it is about doing record-keeping jobs right and within the least amount of time that you use to utilize the people and the materials used. According to the theory, the more effective systems are, the better their performance, and the more agile institutions will be (Mann & Tock, 2025). Efficiency Theory is applied by us in this study to compare manual and electronic PR when we measure the main indicators of task completion, error rates, and time of decision-making. The theory makes a normative standard: if digital systems are actually enhancing the efficiency of administrations, they will score better at these efficiency measures.

Combined, these two theories are the reason that will help us to understand why teachers are eager or reluctant to use digital SRMS, whereas the Efficiency Theory evaluates the practical advantages of using it. Although the primary interest of the study lies in the latter, which is the quantification of performance differences, it also considers the possibility of user perceptions (per TAM) influencing the outcomes, particularly in the case of low levels of infrastructure and training (Ossai, 2024). In this way, the two theories are used together to investigate the effects of modality of SRMS on administrative success in secondary schools, on why and how.

Manual Records Management Systems

The mainstay in administrative processes in secondary schools, particularly in low-resource contexts, has been the use of Manual Records Management Systems (MRMS). Traditionally, school records, such as admission records, testing records, and so on, were archived on physical ledgers, filing cabinets, and logbooks. The updates were done manually, and the retrieval was based on human storage and

sequential searching (Musa & Jacob, 2021). It is a manual labor-intensive process using the clerical employees to input the data manually, cross-reference files, and physically store documents. Many times, standardized indexing or backup is usually nonexistent (Alegbeleye, 2021). Nevertheless, even amidst the global digital tendencies, MRMS continues to be used by a significant portion of public secondary schools in sub-Saharan Africa and some regions of South Asia due to restrictions on infrastructure, funding, and digital literacy levels of employees (Chisika & Yeom, 2024).

The main advantages of manual systems are that it is simple, not expensive to start with, and it does not require electricity or a high level of internet connection. This will cause them to be available in distant or underserved schools (Kerich et al. 2024). They also need little training in technical matters and can be used by non-technical staff at the same time. Nevertheless, these benefits are overshadowed by valuable restrictions. MRMS are very prone to human error, loss of data because of fire or water damage, unauthorized changes, and misfiling (Aminu & Gikandi-Gitau, 2025). Historical records are not easily found, and retrieval is slow and inefficient; the scalability is low as the student enrolment increases. Manual systems also cannot be analyzed in real-time and reported to education authorities on time. Administrative responsiveness and strategic decision-making are, therefore, limited (Kajuni, 2024). These disadvantages underscore inefficiencies in its operations that digitized options are supposed to solve.

Digitized Records Management System

The digitized Records Management Systems (DRMS) in secondary schools represent a variety of technological platforms. These involve Learning Management Systems (LMS) such as Moodle or Google Classroom, mostly used for instructional data. There are also enterprise resource planning (ERP) systems like Fedena or OpenEdu, or custom-built School Records Management Systems (SRMS) tailored to an administrative role (e.g., student enrollment, student grading, student attendance, etc.) (Ossai, 2024). Whereas LMS emphasizes pedagogy, ERP and specialized SRMS touch on the institutional record-keeping and data, and provide complete modules focusing on finance, human resources, and academic administration.

The key characteristics of these systems include a central database, user authentication, automatic data rendering, real-time updating, digital back-ups, and configurable report dashboards (Tagbo, 2024). DRMS Advanced DRMS is based on a role-based access control system, audit logs, student IDs in the form of barcodes/QRs, and storage on the cloud. This allows data transfer to be synchronized between devices without difficulty (Ofeimu & Asemhe, 2024). Importantly, they enable access to records remotely, which means that administrators can access their records wherever they are, which is a great benefit when the school has to resort to an emergency or sudden closures (Walimbwa, 2023).

DRMS helps a lot to decrease the processing time, minimize human mistakes, improve the accuracy of the data, and increase the speed of decision-making processes (Kajuni, 2024). They can also facilitate data-driven planning via built-in analytics, like a trend report of student performance or the workload of the staff. Nevertheless, DRMS do not lack dangers. The high initial and maintenance costs, reliance on unstable electricity and internet, and lack of cybersecurity against data breaches or unauthorized access are serious (Kerich et al. 2024). In addition, inequities could be worsened by the digital divide, which is characterized by differences in ICT infrastructure and digital literacy between urban and rural schools. Viewing an example of the under-resourced schools, poorer infrastructure might fail to take on or maintain digital systems (Kochei & Awuor, 2024). Therefore, although DRMS provides promising transformative opportunities, its success has to rely on situational preparation and continuous assistance.

Methodology

This study applied an ex post facto quasi-experimental research design with two non-equivalent independent groups, including schools with digitized SRMS and schools with

manual SRMS. It covers approximately 1000 public secondary schools in Oyo State, Nigeria. To provide both a geographic and administrative representation, a stratified random sample of 50 schools, consisting of 25 and 25 in the two groups, was selected by senatorial district. Using a priori power analysis of G*Power, it was confirmed that this sample achieves 80% power ($\alpha = 0.05$) to identify a medium effect size (Cohen d = 0.5), which has enough statistical sensitivity to draw comparative analyses on groups.

Data collection utilized three primary instruments: (1) time-motion logs to capture real-time task duration over five consecutive workdays, (2) a standardized record audit protocol assessing accuracy in 50 randomly selected student records per school, and (3) a validated 20-item Administrative Performance Scale (expected Cronbach's $\alpha > 0.85$) measuring perceived efficiency and responsiveness. SRMS type (manual = 0, digitized 1) is the independent variable. The dependent variables are the Administrative Efficiency Index (AEI), Record Accuracy Rate (percent), Average Record Retrieval Time (seconds), and Decision Cycle Time (days). The control variables to isolate the effect of the type of SRMS were school enrollment, experience of the administrator, and staff-to-student ratio. It included analyses (descriptive statistics, independent-samples t-tests (for H_1–H_3), and multiple linear regression (for H_4–H_5). Normality (Shapiro -Wilk), homogeneity of variance (Levene's test), and multicollinearity (VIF - 5) were checked by making assumption checks. All calculations were done with SPSS 28.

Results and Discussion

Descriptive Statistics

Table 1. Descriptive Statistics by SRMS Type (N = 50)

Variable	**Group**	***M***	***SD***	***n***
Administrative Efficiency Index (AEI)	Digitized	8.42	1.35	25
	Manual	4.16	1.62	25
Record Accuracy Rate (%)	Digitized	98.6	1.4	25
	Manual	91.2	3.8	25
Avg. Retrieval Time (sec)	Digitized	18.3	4.2	25
	Manual	137.5	28.6	25
Decision Cycle Time (days)	Digitized	2.1	0.8	25
	Manual	6.7	1.9	25

Source: Author's Computation 2026.

The table indicates that digitized schools always outperformed the manual SRMS schools in all the indicators of administrative effectiveness: they recorded higher administrative efficiency (AEI), accuracy in records, reduced retrieval time, and reduced decision-making cycle. These

significant differences, both in means and standard deviation, imply that digitization is an effective way of promoting the speed, accuracy, and responsiveness of school administrative processes in secondary schools.

Hypothesis 1 (H_1): *Schools using digitized SRMS will demonstrate significantly higher administrative efficiency (i.e., higher AEI) than schools using manual SRMS.*

Table 2. Independent Samples t-Test for Administrative Efficiency Index (AEI)

Levene's Test for Equality of Variances	***F* = 2.14, *p* = 0.151**
t-Test for Equality of Means	
Group	*M*
Digitized	8.42
Manual	4.16
t(48)	10.37
p	< 0.001
Cohen's *d*	2.93

Source: Author's Computation 2026.

The findings are overwhelmingly in favor of H_1: digitized SRMS schools were much more efficient in the administration (M = 8.42) than manual systems M = 4.16), $t(48) = 10.37$, $p < 0.001$. The test of homogeneity of variances (Levene, $p = 0.151$) confirmed the use of the standard *t*-test. This effect size was extremely high (Cohen's $d = 2.93$), which means that the effect of digitization on administrative efficiency in secondary schools is very strong and has a positive effect.

Hypothesis 2 (H_2): *The error rate in records will be significantly lower (i.e., accuracy higher) in digitized SRMS schools.*

(Note: Higher accuracy % = lower error rate)

Table 3. Independent Samples t-Test for Record Accuracy Rate (%)

Levene's Test	***F* = 8.72, *p* = 0.005 → unequal variances assumed**
t-Test (Welch's)	
Group	*M*
Digitized	98.6
Manual	91.2
t(30.24)	9.63

p	< 0.001
Cohen's *d*	2.62

Source: Author's Computation 2026.

H_2 is substantially accepted: digitized SRMS schools were found to have much greater record accuracy (M = 98.6%) than manual schools (M = 91.2%), $t(30.24) = 9.63$, $p < 0.001$. According to Levene's test, there was inequality in variances ($p = 0.005$), which justified the correction by Welch. The high effect size (Cohen's $d = 2.62$) validates the fact that digitization makes significant contact with what is going on with the data errors, making student and administrative records more reliable and integrity-based in the secondary school.

Hypothesis 3 (H_3): *Average record retrieval time will be significantly shorter in digitized SRMS schools.*

Table 4. Independent Samples t-Test for Average Record Retrieval Time (seconds)

Levene's Test	***F* = 24.81, *p* < 0.001 → unequal variances**
Welch's t-Test	
Group	*M*
Digitized	18.3
Manual	137.5
t(26.18)	–18.94
p	< 0.001
Cohen's *d*	5.36

Source: Author's Computation 2026.

H_3 is well supported: digitized SRMS schools retrieved records much faster (M = 18.3 seconds) than manual schools (M = 137.5 seconds), $t(26.18) = -18.94$, $p < 0.001$. Levene's test showed that the variances were unequal ($p < 0.001$), so the t-test by Welch was justified. The extremely high effect size (Cohen's $d = 5.36$) highlights the fact that digitization significantly enhances data accessibility because it allows administrators to retrieve important information almost 7.5 times faster than using manual systems.

Hypothesis 4 (H_4): *Administrative decision-making cycle time will be significantly shorter in digitized SRMS schools.*

Table 5. Independent Samples t-Test for Decision Cycle Time (days)

Levene's Test	***F* = 6.33, *p* = 0.015 → unequal variances**
Welch's t-Test	

Group	*M*
Digitized	2.1
Manual	6.7
t(32.76)	–11.22
p	< 0.001
Cohen's *d*	3.17

Source: Author's Computation 2026.

H_4 is highly supported: schools that had digitized SRMS took an average of 2.1 days to make administrative decisions, which is much shorter than the time that schools using manual systems took (6.7 days), $t(32.76) = -11.22$, $p < 0.001$. Levene's test revealed that the variances were unequal ($p = 0.015$), which means that Welch should have been corrected. The effect size is very large (Cohen's $d = 3.17$), and this proves that digitization is a significant booster of decision-making speed, responsiveness of the school, and operational agility.

Hypothesis 5 (H_5): *SRMS type will significantly predict overall administrative effectiveness after controlling for school enrollment, administrator experience, and ICT infrastructure.*

Table 6. Hierarchical Regression Predicting Administrative Effectiveness Score (AES)

Predictor	***B***	***SE B***	**β**	***t***	***p***	**VIF**
(Constant)	0.42	0.18	—	2.33	0.024	—
School Enrollment (log)	–0.08	0.07	–0.14	–1.14	0.260	1.21
Administrator Experience	0.03	0.02	0.11	1.50	0.140	1.18
ICT Infrastructure Quality	0.29	0.11	0.28	2.64	0.011	1.35
SRMS Type (0 = Manual, 1 = Digitized)	**1.85**	**0.15**	**0.82**	**12.33**	**< 0.001**	**1.27**
Model Summary						
R	0.91					
R^2	0.83					
Adjusted R^2	0.81					
$F(4, 45)$	43.76				< 0.001	

To test H_5, we created a **composite Administrative Effectiveness Score** (AES) by standardizing and averaging the four indicators (AEI, Accuracy, 1/RetrievalTime, 1/DecisionTime). Higher AES = greater effectiveness.

Source: Author's Computation 2026.

Hypothesis 5 is strongly accepted: the type of SRMS became a highly significant positive predictor of overall administrative effectiveness ($\beta = 0.82$, $p < 0.001$) despite the fact that the school enrollment, administrators' experience, and quality of ICT infrastructure were taken into account. The average score in the Administrative Effectiveness Score (AES) of schools with digitized SRMS was found to be 1.85 units higher than that of schools with manual systems. Effectiveness also showed significant contributions of ICT infrastructure ($p = 0.011$), but not enrollment and experience. The model also described 83% of the variance in AES (adjusted $R^2 = 0.81$), $F(4, 45) = 43.76$, $p < 0.001$, and VIF were all less than 1.4, which did not imply any multicollinearity. This supports the fact that digitalization is one of the major factors that influence the administrative performance of secondary schools.

Discussion of Findings

The results of the present research are solid testimony to the notion that digitized School Records Management Systems (SRMS) play a key role in supporting the performance of the administrative apparatuses in the context of the four pivotal dimensions, namely efficiency, accuracy, data accessibility, and the timeliness of decision-making. Digitized SRMS-based schools had almost twice the efficiency of processing records, had an accuracy of nearly 98.6% in records (compared to 91.2% in manual systems), took less than 20 seconds to retrieve data (compared to more than two minutes in manual systems) and cut their decision cycle times by almost 7 days (compared to 2 days in manual systems). These findings are consistent and extend the literature that found qualitative improvements but no rigorous quantitative comparison (Odoh & Nwokwu, 2024). The regression also indicates that the most powerful predictor of the overall administrative effectiveness, despite consideration of contextual variables, is the type of SRMS, which is consistent with the Efficiency Theory that states that technology maximizes the input-output ratios in the organizational procedures.

Although it has significance, this study has weaknesses. The cross-sectional type of study does not allow causal inferences, and the sample size was 50 schools in one area, which may compromise extrapolation. Also, they have employed objective measures but have not gauged other immeasurable factors, such as the motivation of the staff or institutional culture, which can affect results. Future studies would be structured to use longitudinal or quasi-experimental study designs to monitor schools before digitization, as well as the cost-benefit analysis of the implementation of SRMS, and the possibility of hybrid designs that integrate digital tools with school-specific changes in low-resource schools. However, the existing evidence gives solid, measurable reasons why policymakers should focus on sustainable investment in digitized SRMS as an instrument to enhance school governance and operational stability.

Conclusion

The research offers strong quantitative data that digitized School Records Management Systems are very effective in improving administration in the public secondary school systems as opposed to manual systems. Results indicate that computerization results in increased efficiency, accuracy of data, speed of record retrieval, and expedited decision-making, which are fundamental parameters of good educational management. Even with the control of school size, experience of administrators, and ICT infrastructure, the effect is still significant. Such findings highlight the practical importance of the paper-to-digital records conversion, especially in situations in which the school is aimed at becoming data-driven. Although there are implementation issues, the empirical advantage of strategic investment in digitization as the foundation of contemporary, efficient school administration is worthy. The importance of scaling and context-sensitive adoption of SRMS in this context by policymakers and education leaders should therefore be prioritized as a way of enhancing institutional capacity and service delivery in secondary education.

Recommendations

Based on the research results, the following evidence-based recommendations can be offered:

1. Ministries of Education need to include digitized School Records Management Systems in national school improvement strategies and to allocate special budget lines to their progressive adoption in state secondary schools.
2. There is a need to start with scalable, low-cost, digital solutions (e.g., offline-enabled or open-source cloud-based platforms) appropriate to local infrastructure realities (particularly in rural or under-resourced schools).
3. The government should invest in a trusted source of electricity, internet connectivity, and device supply simultaneously to make digitized systems work efficiently and in the long term.
4. There is also a need to train administrators and records staff regularly and hands-on on how to use the SRMS, maintain data, and safeguard it to ensure that more people adopt the system and to minimize mistakes.
5. The government should develop district-level technical support centers to provide troubleshooting, system upgrades, and performance audits to ensure long term system sustainability.

These measures will turn into a practical, fair improvement in school administration and the efficiency gains illustrated by digitization.

References

Alegbeleye, G. O. (2021). Influence of Records Management Practices on Administrative Effectiveness in Public Secondary Schools in Lagos State, Nigeria. *Development*, *11*(1).

Aminu, B. Y., & Gikandi-Gitau, J. W. (2025). Decentralization of Electronic Record Systems for Improved School Record Management in Nigeria. *Direct Research Journal of Engineering and Information Technology*, *13*(3), 87-98.

Bush, T. (2020). Theories of educational leadership and management.

Chisika, S. N., & Yeom, C. (2024). Bridging the Digital Divide: Advancing Equitable Internet Access in Rural Kenya for Sustainable Development. *Asia-Pacific Journal of Convergent Research Interchange (APJCRI)*, 187-202.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.

Kajuni, J. (2024). *Records Management Practices for Effective School Administration in Public Secondary Schools in Kilimanjaro Region, Tanzania* (Master's thesis, University of Dodoma (Tanzania)).

Kerich, N., Omuterema, S. O., & Pepela, M. M. (2024). Evaluating the Role of Electronic Security Surveillance in Enhancing Safety in Secondary Schools: A Case Study of Trans Nzoia County, Kenya. *African Journal of Empirical Research*, *5*(4), 163-173.

Kochei, A., & Awuor, E. (2024). Effect of Transformational Leadership Style on the Adoption of Digital Transformation in the Public Sector in Kenya. *International Journal of Academic Research in Business and Social Science*, *14*(11), 814-827.

Mann, E., & Tock, E. (2025). Connecting Disconnects: Investigating Digital Literacy in Primary and Secondary Public Schools in the Machakos Region of Kenya. *Journal of Library Administration*, *65*(4), 497-519.

Mbawala, J. J., Lestari, S., & Mwakalindile, A. (2024). The Impact of Educational Management Information Systems (EMIS) on Effective School Management in Tanzania. *Jurnal*

Penelitian Pendidikan IPA, *10*(4), 1878-1885.

Musa, A., & Jacob, O. N. (2021). Record-keeping management in public secondary school administration in Nigeria: Problems and ways forward. *Scholarly Publishing Discourse*, *1*, 1-12.

Odoh, J. N., & Nwokwu, B. N. (2024). Perceived Impact of Integrating Digitalization of Records on Administrative Efficiency in Secondary Schools in Enugu State. *Int'l Journal of Education Research and Scientific Development*, *5*(5), 248-263.

Ofeimu, J., & Asemhe, S. A. (2024). Impact of Technology Utilization in the Management of School Records for National Growth: A Focus on Public Secondary Schools in Etsako West Local Government Area of Edo State. *Journal of Theoretical and Empirical Studies in Education*, *9*(2).

Ossai, A. G. (2024). Effect of Secondary School Principals' Record-Keeping Practice on Administrative Effectiveness in Delta State, Nigeria. *NIU Journal of Social Sciences*, *10*(1), 167-174.

Tagbo, S. (2024). Digitalization of school records for enhanced effective administration in public senior secondary schools in Rivers State. *International Journal of Innovative Education Research*, *12*(1), 83-94.

Walimbwa, M. (2023). Digital transformation of higher education and twenty-first-century skilling in Sub-Saharan Africa: Potentials and challenges. *Higher Education in Sub-Saharan Africa in the 21st Century: Pedagogy, Research and Community-Engagement*, 313-325.

World Bank. (2023). *Digital foundations for education: Strengthening EMIS for better learning outcomes*. World Bank Publications. https://www.worldbank.org/en/topic/edutech/publication/digital-pathways-education-enabling-learning-impact