



## Utilization of Management Information System by School Administrators for Administrative Effectiveness in Secondary Schools in Kwara State

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### Abstract

This study examined the use of management information systems by school administrators to enhance administrative effectiveness in secondary schools in Kwara State. The study was guided by four purposes, three research questions, and one hypothesis. The study population comprised all principals of public secondary schools in Kwara State. According to records from the Kwara State Teaching Service Commission (TESCOM, 2024), there are 340 principals across the state's public secondary schools. The sample size for this study was determined using the Taro Yamane (1967) formula, with a 5% margin of error, from a population of 340 principals. The computation yielded a sample size of 184 principals. To ensure fair representation across the state, a stratified random sampling technique was employed, accounting for the three senatorial districts of Kwara State. A 14-item researcher developed instrument titled the Utilization Management Information System School Administrators' Questionnaire (UMISSAQ) was used for data collection. The instrument was validated by three experts: two from the Department of Educational Management and one from the Test and Measurement, Faculty of Education, Al-Hikmah University. Their suggestions and inputs were incorporated into the final draft of the instrument. The instrument's reliability was determined using the Cronbach's Alpha method, which yielded coefficients of 0.85 and 0.79 for Parts I and II of UMISSAQ, respectively, indicating a high level of internal consistency. The study's findings suggest that school administrators moderately use MIS for student personnel administration in secondary schools in Kwara State. One of the recommendations of this study is that Principals should train and encourage their use in areas such as online admissions, electronic attendance, and communication with parents and students.

### Keywords

IT Utilization, Management Information System, School Administrators, Administrative Effectiveness

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## 1. Introduction

Education is one of the most vital sectors for national development, and its success largely depends on the efficiency of school administration. In recent years, the role of information and communication technology (ICT) in enhancing organizational effectiveness has become increasingly pronounced, particularly through the deployment of Management Information Systems (MIS). Secondary schools, among other things, are meant to empower students with essential knowledge, critical thinking skills, and character development to prepare them for future academic pursuits and successful contributions to society. It is expected that, during and just before a student leaves secondary school, they must have acquired adequate knowledge and skills that will make them admissible to higher institutions or employable in the labour market (Etor et al., 2019). In secondary schools, MIS provides administrators with reliable, timely data on student performance, staff records, finance, facilities, and general school operations, thereby ensuring smooth, effective management. Administrative effectiveness refers to their ability to lead schools efficiently while fostering a productive and positive educational

environment. It encompasses setting a clear vision, making informed decisions, managing resources judiciously, and maintaining effective communication with all stakeholders. Administrative effectiveness also involves overseeing curriculum implementation, fostering a safe and inclusive school climate, supporting staff professional development, and ensuring compliance with educational policies and standards. Through these efforts, principals play a crucial role in achieving the school's academic goals and enhancing overall performance. Chidinmachinenye et al. (2019) affirm that administrative effectiveness is characterized by the consistent performance of administrative duties and the timely achievement of set objectives. Effective school managers must carefully and efficiently handle educational resources, particularly finances, materials, machines, computers, instructional technologies, and internal facilities entrusted to them, to ensure proper financial and resource management.

School administrators are the professionals entrusted with diverse responsibilities that ensure the smooth operation of schools (Hoy & Miskel, 2008). The concept of school administration applies to the leadership of both private and public educational institutions. In a similar vein, administrative effectiveness refers to the extent to which an organization's managerial and leadership practices successfully and efficiently achieve its stated aims and objectives. A principal's ability to improve school facilities, enhance teachers' instructional effectiveness, and manage human resources effectively serves as a key indicator of administrative effectiveness. Effective principals ensure that the school environment is safe, conducive to learning, and adequately equipped with essential resources. This responsibility includes overseeing maintenance, advocating for funding, and implementing necessary upgrades. Well-maintained facilities not only enhance student engagement but also minimize distractions and support diverse educational activities. This aligns with the view of Obona et al. (2021) that the proper maintenance of school facilities helps buildings and equipment remain in their functional state, thereby making teaching and learning more effective and engaging. Furthermore, when existing educational facilities are efficiently utilized and maintained as needed, it boosts the morale of both staff and students, who are critical stakeholders in sustaining the secondary school system (Obona et al., 2021). The use of Management Information Systems (MIS) has emerged as a powerful tool for improving administrative functions, as it provides timely, reliable, and accurate information to support decision-making, planning, monitoring, and control in schools (Chidinmachinenye et al., 2019; Waheed et al., 2025). Despite these benefits, evidence from Nigeria shows that the utilization of MIS in schools remains inconsistent. For example, studies have shown that while principals tend to apply MIS effectively in managing financial resources, its application in student personnel administration remains relatively limited (Shah, 2014). Similarly, research has indicated that school administrators often do not fully utilize MIS for functions such as admissions processing, student data management, attendance tracking, and information dissemination (Al-Mamary et al., 2014). In Kwara State, where secondary schools play a critical role in preparing students for higher education and employability, the extent to which principals use MIS to enhance administrative effectiveness remains largely underexplored. It is uncertain whether MIS is effectively applied in areas such as financial resource management, student personnel administration, and school facilities management. This gap raises concern about whether school administrators in Kwara State are fully leveraging MIS to enhance accountability, efficiency, and overall school performance. This study, therefore, seeks to investigate the use of Management Information Systems by school administrators to improve administrative effectiveness in secondary schools in Kwara State.

The following research questions guided the study:

1. To what extent do school administrators utilize Management Information Systems for students' personnel administration in secondary schools in Kwara State?
2. To what extent do school administrators utilize Management Information Systems for financial resource management in secondary schools in Kwara State?
3. What is the level of administrative effectiveness in secondary schools in Kwara State?

## **2. Literature Review**

### ***2.1. Concept of Management Information System (MIS)***

A Management Information System (MIS) is a system for systematically collecting, processing, analyzing, and disseminating educational data to school administrators in a timely, reliable, and consistent manner to

support effective and efficient school management. It provides administrators with accurate information needed for planning, monitoring, and decision-making. According to McLeod (1983), a Management Information System is a structured system that employs formalized procedures to supply managers at all levels and across all functions with relevant information. Drawing on both internal and external data sources, MIS enables administrators to make timely, effective decisions for planning, directing, and controlling activities under their responsibility. The adoption of Management Information Systems (MIS) in educational management has grown significantly over the years, serving as a powerful tool that enhances communication among principals, teachers, and students while introducing innovative approaches to school administration and planning (Shah, 2014). MIS has significantly transformed how educational institutions operate by improving access to information and supporting administrative processes (Waheed & Leišytė, 2023). In the school context, principals and administrators who once spent considerable time addressing complex issues such as staff allocation, resource distribution, timetabling, and monitoring of school operations now have more efficient and effective solutions through the use of MIS (Shah, 2014). This demonstrates MIS's capacity to enhance both the effectiveness and efficiency of school management. Furthermore, MIS supports education managers in various administrative functions, including resource management, monitoring, task delegation, student personnel administration, financial management, and record keeping (Al-Mamary et al., 2014). For this study, attention is focused on two critical aspects of school management: financial resource management and student personnel administration.

Management Information Systems (MIS) can be used by school administrators to store and update vital student information, including personal records, parents' contact details, phone numbers, e-mail addresses, and continuous assessment data. According to Chidinmachinenye et al. (2019), the use of MIS also facilitates the online payment and tracking of school fees, thereby reducing financial fraud or payment defaults, and ultimately promoting accountability and effective financial management in schools. Similarly, Hoy and Miskel (2008) emphasized that the success of any organization, including the school system, largely depends on the availability and efficient management of both human and material resources. Empirically, Omenyi and Bosco-Duru (2022) conducted a study to determine how teachers' perceptions of principals' effectiveness in student personnel administration correlate with teachers' job involvement in public secondary schools in Imo State. The study was guided by one research question and one null hypothesis, and it adopted a correlational research design. The population comprised 5,047 teachers, out of which a sample of 2,523 was selected using a proportionate random sampling technique. The findings revealed, among others, a low positive relationship between teachers' perceptions of principals' effective student personnel administration and teachers' job involvement in public secondary schools in Imo State. Effective financial management is critical to an organization's long-term viability and success. Financial management refers to the efficient use of educational institutions' resources to fulfil their aims. The Management Information System (MIS) helps schools make informed financial decisions and improve performance. School administrators use it to handle student fees, acquire equipment, track unremitted cash, and forecast inflows and outflows. Computers and the internet allow students to pay for educational services, including housing, tuition, and transportation, without physically visiting the institution. Using a management information system enables administrators to easily track and pay school fees online, reducing financial fraud and non-payment. This encourages responsibility and effective financial management in the school (Waheed et al., 2021).

However, studies such as those by Ezugoh and Ofojebe (2019) highlight significant challenges confronting administrative operations in Colleges of Education in Nigeria. These challenges negatively affect critical administrative functions, including the processing of student results, admissions management, identification of payment defaulters, and maintenance of financial records. Delays and inefficiencies in these areas have been linked to the limited or suboptimal use of Management Information Systems (MIS) within these institutions. Although MIS has been integrated into some administrative processes, gaps remain in its effective utilization. Key challenges include difficulties integrating technology with existing methods, staff resistance to change, inadequate user training, and issues related to data management and security. Such constraints hinder the optimal use of MIS in performing essential tasks such as personnel management, resource allocation, and effective decision-making. In Kwara State, where secondary education plays a critical role in preparing students for higher education and the labour market, administrative effectiveness is paramount. School administrators are expected to manage scarce resources efficiently, maintain accurate records, ensure transparency in decision-making, and foster a conducive learning environment. The utilization of MIS offers an opportunity to strengthen these administrative functions, enhance productivity, and ultimately improve educational outcomes. However,

the extent to which school administrators in Kwara State secondary schools use MIS to enhance administrative effectiveness remains an empirical question. Therefore, this study seeks to examine the use of management information systems by school administrators to enhance administrative effectiveness in secondary schools in Kwara State. The findings are expected to provide insights into the level of adoption, challenges encountered, and the implications of MIS use for effective school administration, thereby contributing to improved educational planning and policy formulation in the state.

### *2.1.1. Empirical review*

In a related study, Owan and Ekaette (2019) examined the relationship between student personnel management and academic effectiveness in the Calabar Education Zone of Cross River State. Academic effectiveness was assessed in terms of punctuality to classes, time management, study habits, record keeping, classroom attitudes, note-taking, attitudes toward assignments, examination results, and participation in co-curricular activities. The study, which adopted a descriptive survey design, was guided by three null hypotheses. Using a proportionate sampling technique, a sample of 1,934 students (representing 20% of the population of 9,672 students) was selected. Data were collected with the Students' Personnel Management and Academic Effectiveness Questionnaire (SPMAEQ), which yielded reliability estimates of .86 and .93 for the independent and dependent variables, respectively, using the Split-half technique. The null hypotheses were tested at the .05 level of significance using the Pearson Correlation Matrix in SPSS v25. Findings revealed a statistically significant moderate positive relationship between student personnel management and academic effectiveness. Ayoro et al. (2023) define financial resource management as all activities involved in raising funds and utilizing them judiciously, prudently, and efficiently to achieve an organization's goals and objectives. In the school system, principals, as administrators, are primarily responsible for financial management practices. They collaborate with accounting staff to oversee the school's finances and are accountable for reporting how funds are utilized to achieve institutional objectives. When properly managed, financial resources can significantly enhance effective service delivery within the school system. This underscores the need for principals to be knowledgeable about financial management policies and practices. One vital tool that can help them ensure the meaningful and efficient use of funds is the Management Information System (MIS).

In a recent study, Ironkwe et al. (2024) investigated the relationship between financial management practices and the administrative effectiveness of secondary school principals in Anambra State, Nigeria. The study was guided by three specific purposes, research questions, and hypotheses, and it adopted a correlational research design. The entire population of 266 principals from public secondary schools in the state was included in the sample. Data were collected using two structured questionnaires, which were validated by experts and tested for reliability. Analysis was conducted using the Pearson Correlation Coefficient, with significance tested at the 0.05 level. The findings revealed a significant relationship between principals' financial management strategies and their administrative effectiveness. Similarly, Ayoro et al. (2023) investigated the relationship between principals' educational resource management and teachers' job performance in private secondary schools in Delta State. The study was guided by two research questions and two corresponding hypotheses, adopting a correlational survey design. The population consisted of 15,951 participants (1,177 principals and 14,774 teachers), from which a sample of 390 respondents (29 principals and 361 teachers) was drawn using stratified random sampling, with the Taro Yamane minimum sample size formula applied. Findings revealed that financial resource management had a strong positive relationship with teachers' job performance and significantly enhanced their effectiveness. According to Edim et al. (2024), a study investigated the use of Management Information Systems (MIS) for administrative effectiveness among principals of public secondary schools in the Ogoja Education Zone of Cross River State, Nigeria. Using a descriptive survey design, data were collected from 90 principals with a validated 16-item questionnaire (reliability coefficient = 0.84). Findings showed that principals employed MIS for financial resource management through spreadsheet record-keeping, centralized budgeting, Remita online fee payments, data storage, and report generation with learning management systems. The study concluded that MIS enhances administrative effectiveness and recommended training school administrators on specialized MIS applications to improve financial accuracy and accountability. According to Chidinmachinenye et al. (2019), a study was conducted to examine secondary school administrators' use of Management Information Systems (MIS) for administrative effectiveness in the Enugu Education Zone. Using a descriptive survey design, data were collected from all 31 public secondary school principals using a 14-item validated questionnaire (SAMISQ), yielding a reliability coefficient of 0.82. Data were analysed with mean and standard deviation. Findings

revealed that administrators did not effectively utilize MIS for student personnel administration, as they failed to implement practices such as online admissions, spreadsheet-based result processing, attendance management, dissemination of information via school websites, use of e-mail for assignments, and multimedia instructional delivery. The study recommended that the State Ministry of Education should organize seminars and workshops to train secondary school administrators on the effective use of MIS for student personnel administration.

H<sub>0</sub>: There is no significant relationship between the utilization of the Management Information System and administrative effectiveness in secondary schools in Kwara State.



Figure 1. Structural Model

### 3. Methodology

The study adopted a descriptive survey design, which was deemed appropriate because it sought to gather respondents' opinions and perceptions on how school administrators utilize Management Information Systems (MIS) to enhance administrative effectiveness in secondary schools. The study population comprised all principals of public secondary schools in Kwara State. According to records maintained by the Kwara State Ministry of Education, approximately 340 principals serve across the state's public secondary schools. The sample size was determined using the Taro Yamane (1967) formula, with a 5% margin of error, resulting in a sample of 184 principals. To ensure fair representation, a stratified random sampling technique was employed, taking into account the three senatorial districts of Kwara State. Data were collected using the Utilization Management Information System School Administrators' Questionnaire (UMISSAQ). The instrument employed a four-point Likert scale: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD) weighted 4, 3, 2, and 1, respectively. Validation of the instrument was carried out by three experts: two from the Department of Educational Management and one in Test and Measurement from the Faculty of Education, Al-Hikmah University, whose suggestions were incorporated into the final version. Reliability was determined using Cronbach's Alpha, yielding coefficients of 0.85 and 0.79 for Parts I and II of the UMISSAQ, indicating a high level of internal consistency. The questionnaire was administered by the researcher with the assistance of two trained research assistants, who were briefed on appropriate procedures for approaching respondents. Collected data were analyzed using mean and standard deviation. For interpretation, a mean score of 2.50 or higher was considered indicative of agreement, whereas scores below 2.50 were interpreted as disagreement.

### 4. Results

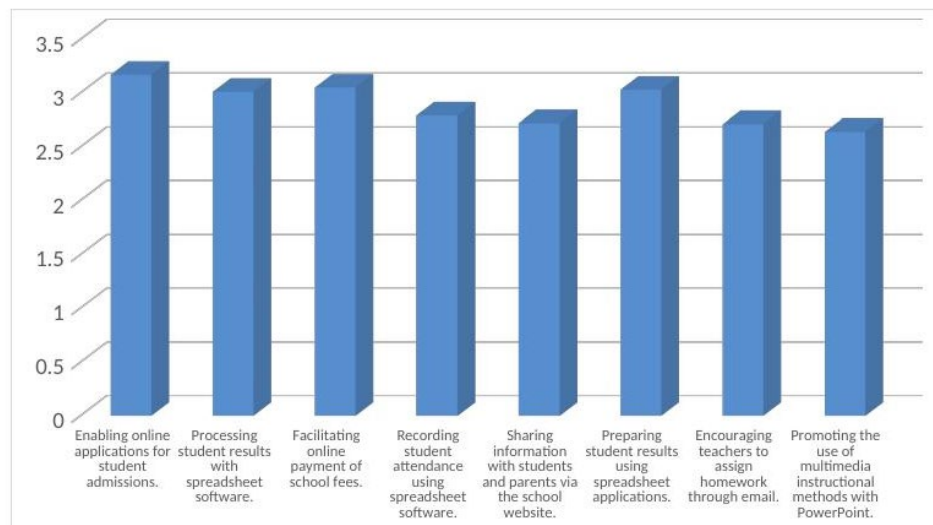
Research Question 1: To what extent do school administrators utilize Management Information Systems for students' personnel administration in secondary schools in Kwara State?



**Table 1. Results showing that school administrators utilize Management Information Systems for students' personnel administration in secondary schools in Kwara State**

| S/N | Items                                                                  | Mean | SD   | Remarks |
|-----|------------------------------------------------------------------------|------|------|---------|
| 1   | Enabling online applications for student admissions.                   | 3.17 | 0.86 | Agree   |
| 2   | Processing student results with spreadsheet software.                  | 3.01 | 0.86 | Agree   |
| 3   | Facilitating online payment of school fees.                            | 3.05 | 0.95 | Agree   |
| 4   | Recording student attendance using spreadsheet software.               | 2.79 | 0.78 | Agree   |
| 6   | Preparing student results using spreadsheet applications.              | 3.03 | 0.85 | Agree   |
| 7   | Encouraging teachers to assign homework through e-mail.                | 2.71 | 0.93 | Agree   |
| 8   | Promoting the use of multimedia instructional methods with PowerPoint. | 2.64 | 0.92 | Agree   |
|     | Total                                                                  | 2.89 | 0.88 | Agree   |

Table 1 shows a mean score of 2.98. The findings indicate that school administrators moderately utilize MIS for students' personnel administration in secondary schools in Kwara State. The strongest areas of use are admission processing, fee payment, and student result management. However, the relatively lower means of communication through websites, the use of e-mail for homework, and multimedia instructional support suggest that these areas need further improvement and encouragement to achieve better adoption. This utilization is evident in several areas, such as enabling students to apply for admission online, processing results with spreadsheet software, managing attendance records electronically, disseminating information to students and parents through the school website, encouraging teachers to assign homework via e-mail, and promoting multimedia instructional delivery via PowerPoint.

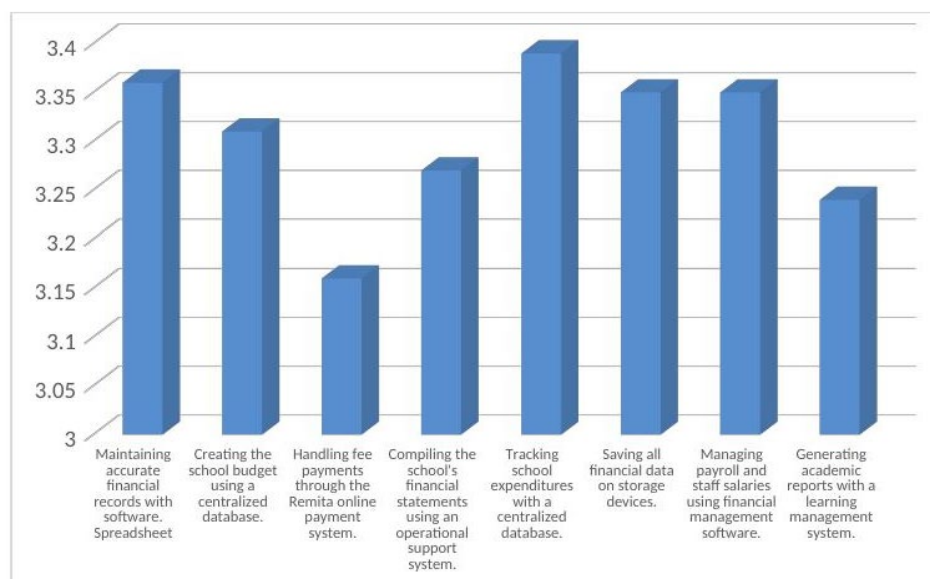
**Figure 2. Mean scores for utilization of MIS for students' personnel administration**

**Research Question 2: To what extent do school administrators utilize Management Information Systems for financial resource management in secondary schools in Kwara State?**

**Table 2. Results showing that school administrators utilize Management Information Systems for financial resource management in secondary schools in Kwara State**

| S/N | Items                                                                            | Mean | SD   | Remarks |
|-----|----------------------------------------------------------------------------------|------|------|---------|
| 9   | Maintaining accurate financial records with spreadsheet software.                | 3.36 | 0.65 | Agree   |
| 10  | Creating the school budget using a centralized database.                         | 3.31 | 0.64 | Agree   |
| 11  | Handling fee payments through the Remita online payment system.                  | 3.16 | 0.68 | Agree   |
| 12  | Compiling the school's financial statements using an operational support system. | 3.27 | 0.58 | Agree   |
| 13  | Tracking school expenditures with a centralized database.                        | 3.39 | 0.53 | Agree   |
| 14  | Saving all financial data on storage devices.                                    | 3.35 | 0.54 | Agree   |
| 15  | Managing payroll and staff salaries using financial management software.         | 3.35 | 0.61 | Agree   |
| 16  | Generating academic reports with a learning management system.                   | 3.24 | 0.65 | Agree   |
|     | Total                                                                            | 3.30 | 0.61 | Agree   |

Table 2 shows a mean score of 3.30. The findings reveal that school administrators in Kwara State make extensive use of MIS to manage financial resources. The tools are particularly effective for tracking expenditures, budgeting, payroll, and financial reporting. However, areas like online fee payments may require further improvement to enhance efficiency and adoption. This is reflected in practices such as drafting the school budget using a central database, utilizing the Remita online payment gateway for fee payments, preparing school statements of account using operational support systems, and storing financial information on storage devices.

**Figure 3. Mean scores for utilization of MIS for financial resource management**

Research Question 3: What is the level of administrative effectiveness in secondary schools in Kwara State?

**Table 3. Result showing the level of administrative effectiveness in secondary schools in Kwara State**

| S/N | Items                                                                                                          | Mean | SD   | Remarks |
|-----|----------------------------------------------------------------------------------------------------------------|------|------|---------|
| 17  | An effective conflict resolution leads to an amicable and harmonious environment among teachers & students.    | 3.22 | 0.65 | High    |
| 18  | It's important to sustain a strong connection between people by resolving issues through mutual understanding. | 3.45 | 0.55 | High    |
| 19  | Excellent & timely resolution enhances cooperation & coordination.                                             | 2.83 | 0.97 | High    |
| 20  | In order to resolve individuals' conflicts, administrators require expertise in counselling.                   | 2.90 | 0.99 | High    |
| 21  | Conflict must be resolved by trying to ensure that parties reach a mutual understanding.                       | 3.35 | 0.56 | High    |
| 22  | Accurate record-keeping helps in preventing misappropriation of funds & mismanagement.                         | 3.52 | 0.52 | High    |
| 23  | Officials collaborating ensure task completion when needed in an organization.                                 | 3.48 | 0.55 | High    |
| 24  | The institution's capacity to use step-by-step effective record-keeping procedures is strong.                  | 3.32 | 0.66 | High    |
| 25  | Incompetence and a lack of resources/training negatively impact administrative effectiveness.                  | 3.20 | 0.65 | High    |
| 26  | To record/organize required materials effectively, administrators must keep proper records.                    | 3.28 | 0.65 | High    |
|     | Total                                                                                                          | 3.26 | 0.68 | High    |

Table 3 shows the mean scores of the individual items and the overall mean score of 3.26. It can be concluded that the principals in public senior secondary schools in Kwara State exhibit a high level of administrative effectiveness. This suggests that principals play a crucial role in ensuring the smooth running of schools and the achievement of institutional goals.



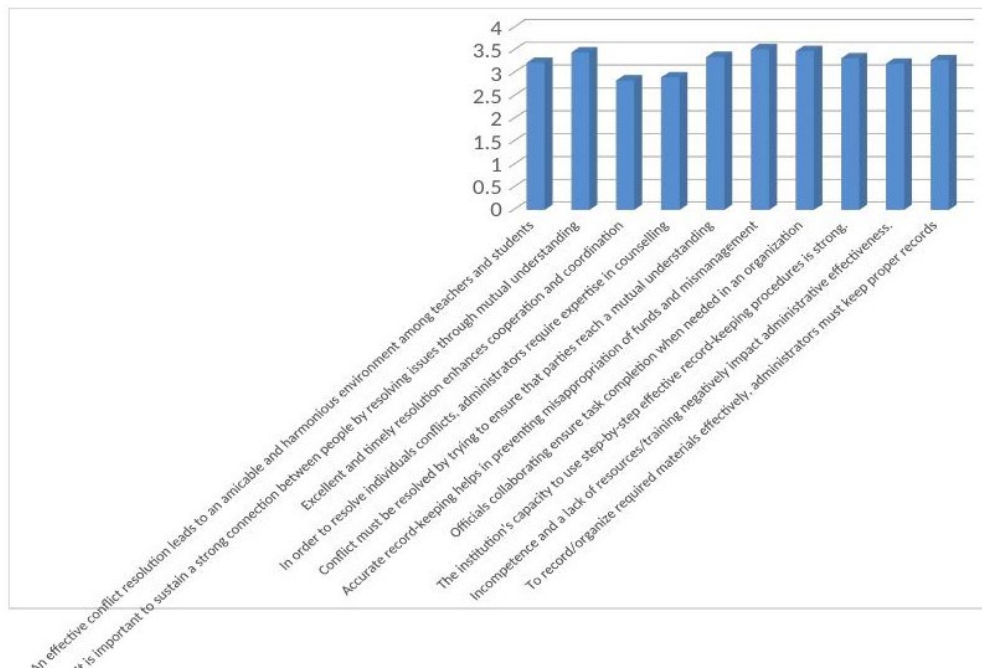


Figure 4. Mean scores for the level of administrative effectiveness

Research Hypothesis 1: There is no significant relationship between the utilization of the Management Information System and administrative effectiveness in secondary schools in Kwara State.

**Table 4. Pearson Product-Moment Correlation on utilization of Management Information System and administrative effectiveness in secondary schools in Kwara State**

| Variable                                      | Mean | SD   | N   | Df  | R     | P    | Decision |
|-----------------------------------------------|------|------|-----|-----|-------|------|----------|
| Utilization of Management Information Systems | 49.5 | 3.67 | 184 | 182 | 0.280 | .000 | Rejected |
| Administrative effectiveness                  | 32.5 | 3.25 |     |     |       |      |          |

Significant level = 0.05. The result of Table 4 shows the p-value obtained was 0.000, which was less than the alpha value of 0.05 at 182 degrees of freedom. The finding indicated a positive correlation between the two variables, which was statistically significant ( $r = 0.280$ ). The null hypothesis, which states that there is no significant relationship between the utilization of the Management Information System and administrative effectiveness in secondary schools in Kwara State, was therefore rejected, and the alternative hypothesis upheld. Thus, there is a significant relationship between the utilization of Management Information Systems and administrative effectiveness in secondary schools in Kwara State. As the use of management information systems increases, administrative effectiveness tends to increase too.

## 5. Conclusion and Implications of the Study

This study examined the utilization of Management Information Systems (MIS) and administrative effectiveness in secondary schools in Kwara State. The findings established that MIS is moderately used by school administrators in the management of student personnel administration, particularly in areas such as online admissions processing, result preparation, and communication with students and parents. In addition, the study revealed that administrators make significant use of MIS in financial resource management, including budgeting, fee collection, and financial reporting. Furthermore, the findings showed that principals in secondary schools in Kwara State demonstrate a high level of administrative effectiveness, reflecting their ability to plan, coordinate, and supervise school activities effectively. Importantly, the study confirmed a significant relationship between MIS use and administrative effectiveness, indicating that greater use of MIS contributes positively to the efficiency and effectiveness of school administration. The study underscores the

vital role of MIS in enhancing administrative processes and outcomes in secondary schools. Strengthening MIS infrastructure, training, and support for school administrators is therefore recommended to maximize its benefits and further improve administrative effectiveness across secondary schools in Kwara State. The findings of this study have several implications. In practice, the use of MIS for student personnel administration suggests that schools should invest in MIS infrastructure, provide training for administrators, and implement systems for online admissions, attendance tracking, and result processing to improve efficiency and transparency for students and parents. Theoretically, the study supports the idea that technology adoption enhances organizational performance and contributes to understanding how MIS affects school management, offering a basis for developing models linking MIS utilization to teacher performance, student outcomes, and community engagement. Policy-wise, education authorities could make MIS adoption mandatory, establish training programs for administrators, and provide funding for digital infrastructure to improve administrative effectiveness. Finally, for future research, studies should investigate barriers to MIS adoption, compare utilization across private and public schools, and examine the long-term impact of MIS on student academic outcomes.

## 6. Limitations and Future Research

This study is limited in scope, focusing solely on secondary schools in Kwara State, which may limit the generalizability of the findings to other states or regions within Nigeria and beyond. The sample is limited to the selected schools, and the perspectives captured are primarily those of school administrators, which may not fully reflect those of teachers, students, or parents. Additionally, the study relied mainly on quantitative data collected through structured questionnaires, which may be subject to self-reporting bias and may not capture the full depth of administrators' experiences or challenges in utilizing Management Information Systems (MIS). Future research could address these limitations by expanding the study to include a larger, more diverse sample and by incorporating schools from different states, regions, and types (public vs. private) to enhance generalizability. Researchers could also use mixed-methods approaches, combining surveys with interviews, focus group discussions, or direct observations to provide richer, more nuanced insights into MIS utilization and its impact on administrative effectiveness. Further studies may explore additional factors that influence administrative effectiveness, such as teacher competence, school culture, leadership styles, funding, or infrastructural capacity, and investigate the long-term effects of MIS adoption on both administrative outcomes and student academic performance. By addressing these areas, future research can provide more substantial evidence to guide policy, training, and investment in school technology infrastructure.

## 7. Recommendations

Based on the findings of this study, the following recommendations are made:

- Principals should train and encourage MIS use in areas such as online admissions, electronic attendance, and communication with parents and students.
- Schools should enhance the systems by upgrading to more secure, user-friendly, and transparent platforms for budgeting, online fee payments, and financial reporting.
- Principals should maintain and improve MIS competence through continuous professional development, mentorship programs, and regular performance reviews.
- The Ministry of Education and school owners should prioritize integrating MIS across all aspects of school administration, with adequate ICT infrastructure, funding, and technical support.

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