

ADOPTION OF ARTIFICIAL INTELLIGENCE FOR IMPROVING ADMINISTRATIVE EFFICIENCY IN BUSINESS EDUCATION FACULTIES IN PUBLIC UNIVERSITIES IN EDO AND DELTA STATES

UGURU, T. O. Ph.D

Department of Business Education, Faculty of Education, Ambrose Alli University, Ekpoma, Edo State, Nigeria

[Email: traceyobehi@aauekpoma.edu.ng](mailto:traceyobehi@aauekpoma.edu.ng)

Tel: +2347064649848

Abstract

This study examined the adoption of Artificial Intelligence (AI) for improving administrative efficiency in Business Education Faculties of selected public universities in Edo and Delta States, Nigeria. The study was motivated by persistent administrative inefficiencies in Nigerian universities despite global advancements in AI-driven higher education management systems. A descriptive survey research design was adopted. The population comprised academic and administrative staff from Business Education Faculties in the University of Benin (UNIBEN), Ambrose Alli University (AAU), Ekpoma, and Delta State University (DELSU), Abraka. A sample of 180 respondents was selected using stratified random sampling technique. Data were collected using a structured questionnaire titled “Artificial Intelligence and Administrative Efficiency Questionnaire (AIAEQ)”, validated by experts and tested for reliability using Cronbach’s Alpha, yielding a coefficient of .82. Data were analyzed using mean and standard deviation. Findings revealed that the level of AI adoption in administrative tasks is low to moderate, with limited integration of advanced tools such as chatbots, predictive analytics, and data-driven decision systems. However, respondents strongly agreed that AI adoption enhances administrative efficiency by improving service delivery, accuracy of records, communication systems, and reducing workload. The study further identified major constraints to AI adoption, including poor ICT infrastructure, inadequate technical skills, high cost of implementation, resistance to change, and weak institutional policy frameworks. The study concluded that AI adoption in Nigerian Business Education Faculties remains in a transitional stage, characterized by a gap between perceived usefulness and actual implementation. It recommended increased investment in ICT infrastructure, staff capacity building, institutional policy development, and strategic partnerships to enhance sustainable AI integration in university administration.

Keywords: Artificial Intelligence; Administrative Efficiency; Business Education Faculties; Digital Transformation; Higher Education Administration; Nigerian Universities

Introduction

The rapid advancement of digital technologies has continued to reshape the structure, delivery, and management of higher education systems globally. Among these emerging technologies, Artificial Intelligence (AI) has become one of the most transformative forces influencing institutional administration, particularly in areas such as decision-making, data management, workflow automation, and service delivery optimization. In higher education institutions, AI is increasingly deployed to streamline administrative processes through intelligent systems such as machine learning algorithms, predictive analytics, robotic process automation (RPA), and natural language processing tools, thereby enhancing institutional efficiency and responsiveness (Dwivedi et al., 2021; UNESCO, 2023).

In contemporary higher education governance discourse, administrative efficiency has become a critical performance indicator for universities, particularly in an era of increasing student populations, complex academic structures, and rising accountability demands. Administrative

efficiency refers to the extent to which institutions are able to deliver services accurately, promptly, and effectively while minimizing the use of financial, human, and temporal resources. It is reflected in timely processing of academic records, effective communication systems, accurate data management, reduced workload duplication, and improved institutional responsiveness (Okoye & Nwafor, 2022). Within this context, Artificial Intelligence adoption represents the integration and utilization of intelligent digital systems to support or automate administrative functions, thereby improving organizational productivity and decision-making efficiency.

Conceptually, Artificial Intelligence adoption in this study refers to the extent to which AI-driven tools such as chatbots, automated record systems, predictive scheduling platforms, and intelligent data analytics systems are integrated into university administrative processes. These tools are designed to reduce human intervention in repetitive tasks, improve accuracy in record management, and enhance real-time institutional decision-making. Administrative efficiency, on the other hand, is conceptualized as the degree of effectiveness with which Business Education Faculties manage academic and administrative responsibilities, including student records processing, examination coordination, staff workload allocation, and communication flow, with minimal delays and errors.

Despite global advancements in AI integration, the situation in many Nigerian public universities remains largely characterized by partial digitalization rather than full-scale intelligent automation. Empirical evidence suggests that universities in Nigeria still rely heavily on manual administrative systems or semi-digitized platforms that lack intelligent decision-support capabilities (Olorunfemi & Aina, 2023; Eze & Okeke, 2024). In institutions such as the University of Benin (UNIBEN), Ambrose Alli University (AAU), and Delta State University (DELSU), administrative processes within Business Education Faculties are often slowed by inefficiencies such as delayed record processing, duplication of data entry, poor integration of institutional databases, and ineffective communication channels. These challenges are further exacerbated by infrastructural limitations such as unstable electricity supply, inadequate ICT facilities, and insufficient digital literacy among administrative personnel (Akinola & Salawu, 2023).

In contrast, universities in developed economies have successfully integrated AI-enabled Enterprise Resource Planning (ERP) systems that support real-time analytics, automated workflow management, and intelligent student service delivery systems. These systems significantly enhance institutional responsiveness, reduce administrative burden, and improve data-driven decision-making processes (Holmes et al., 2022). The widening gap between developed and developing higher education systems therefore highlights a critical challenge for Nigerian universities in achieving global competitiveness and operational efficiency.

Empirical studies have shown that while awareness of Artificial Intelligence is increasing among academic and administrative staff in Nigerian universities, actual implementation remains limited. For instance, Bali et al. (2024) observed that although AI has the potential to transform higher education administration in Nigeria, its adoption is still in early stages due to infrastructural and policy constraints. Similarly, Olorunfemi and Aina (2023) found that while university staff demonstrate moderate awareness of AI tools, their practical usage remains low due to inadequate institutional support and limited training opportunities. These findings suggest a significant disconnect between technological potential and institutional reality. Furthermore, Mtebe and Kondoro (2022) argued that digital transformation in African higher education is constrained by systemic barriers including poor ICT infrastructure, limited funding, and insufficient human capacity development. In Nigeria, Okoye and Nwafor (2022) emphasized that institutional readiness—including leadership commitment, policy frameworks, and technical capacity—is a key determinant of successful technology adoption in universities. These studies collectively highlight that the adoption of AI in higher education is not solely a technological issue but also an organizational and structural challenge.

Despite the growing body of literature on Artificial Intelligence in education, a significant knowledge gap still exists. First, most existing studies focus primarily on pedagogical applications of AI, such as teaching, learning analytics, and student engagement, with limited attention to

administrative applications within higher education institutions. Second, there is a paucity of empirical studies specifically examining AI adoption within Business Education Faculties, despite their high administrative complexity and data-intensive operations. Third, existing Nigerian studies tend to address general ICT adoption rather than focusing specifically on Artificial Intelligence as a distinct technological innovation with unique capabilities and implications.

Additionally, there is limited empirical evidence on the relationship between AI adoption and administrative efficiency in Nigerian public universities, particularly using structured quantitative approaches that measure adoption levels, perceived efficiency outcomes, and implementation barriers simultaneously. This creates a critical gap in understanding how AI technologies are actually utilized within university administrative systems and the extent to which they contribute to operational effectiveness.

The justification for this study therefore lies in its relevance to contemporary higher education transformation and policy development. In an era where universities are increasingly expected to operate as efficient, data-driven, and technologically enabled institutions, understanding the role of Artificial Intelligence in improving administrative efficiency becomes imperative. The study provides empirical evidence that can inform university administrators, policymakers, and ICT stakeholders on how to effectively integrate AI into administrative systems to enhance service delivery and institutional performance. Moreover, the study contributes to addressing the digital divide between developed and developing higher education systems by providing context-specific insights into the challenges and opportunities of AI adoption in Nigerian universities. It also offers practical recommendations for improving institutional readiness, strengthening ICT infrastructure, and enhancing staff capacity for effective AI utilization. Ultimately, this study is significant in advancing the discourse on digital transformation in African higher education and promoting sustainable administrative efficiency through intelligent technologies.

Theoretical and Empirical Review

This study is anchored on two interrelated theoretical frameworks: the Technology Acceptance Model (TAM) and the Diffusion of Innovation Theory (DOI). The Technology Acceptance Model, originally developed by Davis (1989), posited that an individual's intention to adopt and use a technology is primarily determined by perceived usefulness and perceived ease of use. Within the context of higher education administration, TAM provides a useful lens for understanding how administrative staff in Nigerian universities perceive and adopt AI-based systems. When AI tools are perceived to enhance productivity, reduce workload, and simplify administrative tasks, their likelihood of acceptance increases significantly.

Complementarily, Rogers' Diffusion of Innovation Theory explains the process through which new technologies are communicated and adopted within a social system over time. The theory identifies categories of adopters—innovators, early adopters, early majority, late majority, and laggards—and emphasizes the role of communication channels, social systems, and perceived innovation characteristics in shaping adoption rates. In Nigerian universities, AI adoption remains largely within the early adopter stage, primarily due to infrastructural constraints, institutional inertia, and limited exposure to advanced digital systems (Rogers, 2003; Ojo & Babalola, 2022). Empirical literature increasingly highlights the transformative potential of Artificial Intelligence in higher education administration globally. Dwivedi et al. (2021) observed that AI significantly enhances decision-making accuracy, reduces operational delays, and improves institutional responsiveness in higher education systems. Similarly, UNESCO (2023) reported that AI-driven systems are increasingly being used to improve data management, student engagement, and institutional governance structures across global universities.

Within the African context, digital transformation in higher education remains uneven. Mtebe and Kondoro (2022) argued that many African universities face persistent barriers to AI adoption, including inadequate ICT infrastructure, insufficient funding, and limited digital competence among staff. Their findings emphasize that while policy frameworks exist in some institutions, implementation gaps remain substantial. In Nigeria specifically, empirical studies have begun to

document the gradual emergence of AI awareness within tertiary institutions. Olorunfemi and Aina (2023) found that administrative staff in Nigerian public universities demonstrate moderate awareness of AI tools but exhibit low levels of actual implementation due to inadequate institutional support and lack of structured training programmes. Similarly, Eze, Nwosu, and Chukwu (2024) observed that although universities are increasingly digitizing administrative processes, AI integration remains minimal and largely restricted to basic automation systems rather than advanced intelligent platforms.

Furthermore, Adeoye and Okoli (2024) highlighted that AI-enabled systems such as automated grading software, intelligent scheduling tools, and digital record management systems significantly reduce administrative workload and enhance efficiency in Nigerian tertiary institutions. However, they caution that ethical concerns, including data privacy risks, algorithmic bias, and unequal access to digital infrastructure, pose significant challenges to sustainable AI adoption. In addition, Okoye and Nwafor (2022) emphasized that institutional readiness remains a critical determinant of AI adoption in Nigerian universities. Their study shows that leadership commitment, funding availability, and staff digital literacy collectively influence the successful integration of intelligent systems into administrative processes. Hence, the literature demonstrates a consistent pattern: while the potential benefits of Artificial Intelligence in higher education administration are widely acknowledged, actual adoption—particularly within Business Education Faculties in Nigeria—remains uneven, constrained, and at a formative stage. This gap between potential and practice underscores the relevance of the present study in contributing empirical evidence to guide policy, institutional planning, and technological investment in Nigerian universities.

Research Questions

The following research questions were answered in this study:

1. What is the level of AI adoption for administrative tasks in Business Education Faculties in public universities in Edo and Delta States?
2. What are the perceived effects of AI adoption on administrative efficiency in Business Education Faculties?
3. What are the major challenges limiting the adoption of AI in administrative processes in Business Education Faculties?

Methods

This study adopted a descriptive survey research design, considered appropriate for eliciting systematic, factual, and quantifiable information on existing conditions without manipulating variables. The design is particularly suitable for this investigation as it enables the researcher to obtain the perceptions, experiences, and evaluations of academic and administrative staff regarding the adoption of Artificial Intelligence (AI) and its influence on administrative efficiency in Business Education Faculties. In line with established educational research traditions, the descriptive survey design provides a robust framework for examining relationships and trends within real-life institutional settings, especially in contexts where experimental control is impracticable (Cohen et al., 2022).

The population for this study comprised all academic and administrative staff in the Business Education Faculties of selected public universities in Edo and Delta States, Nigeria, namely the UNIBEN, AAU, Ekpoma, and DELSU, Abraka. These institutions were purposively selected based on their relevance to business and teacher education as well as differences in ICT infrastructure and digital readiness, which provide a suitable context for examining Artificial Intelligence (AI) adoption in administrative processes. The target population included lecturers, faculty officers, departmental secretaries, examination officers, and administrative support staff involved in academic and administrative operations. These groups were considered appropriate due to their direct involvement in record management, student administration, and institutional decision-making processes where AI applications are increasingly relevant. A stratified random sampling

technique was adopted to ensure proportional representation of academic and administrative staff across the three universities. From the accessible population, a total sample size of 180 respondents was selected. Respondents within each stratum were then randomly selected using simple random sampling to ensure equal chance of participation and reduce selection bias. This approach enhanced the representativeness and reliability of the study findings.

A structured questionnaire titled “Artificial Intelligence and Administrative Efficiency Questionnaire (AIAEQ)” was developed by the researcher as the primary instrument for data collection. The instrument was carefully constructed based on extensive literature review on Artificial Intelligence adoption, educational technology integration, and administrative efficiency indicators. The questionnaire was designed using a 4-point scale ranging from Strongly Agree (4), Agree (3), Disagree (2), to Strongly Disagree (1), ensuring the elimination of a neutral midpoint and encouraging decisive responses from respondents.

To ensure content validity, the instrument was subjected to rigorous scrutiny by experts in Business Education, Educational Technology, and Measurement and Evaluation. These experts assessed the clarity, relevance, and adequacy of the items in relation to the research objectives. Their feedback led to the refinement of ambiguous items, improvement in language precision, and alignment of constructs with measurable indicators of AI adoption and administrative efficiency. The reliability of the instrument was established through a pilot test conducted outside the study area, after which the internal consistency of the questionnaire was determined using Cronbach’s Alpha reliability coefficient. The instrument yielded a reliability index of .82, which indicates a high level of internal consistency and confirms that the instrument is sufficiently reliable for data collection in educational research contexts (Nunnally & Bernstein, 2019).

A total of 180 respondents were selected for the study using stratified random sampling technique. This sampling approach was adopted to ensure proportional representation of both academic and administrative staff across the selected universities. Stratification was based on institutional affiliation and staff category, thereby ensuring that the sample adequately reflects the diversity of perspectives within Business Education Faculties. Data collected from respondents were analyzed using descriptive statistics, specifically mean and standard deviation, to answer the research questions. The use of mean scores enabled the determination of average response patterns, while standard deviation provided insights into the degree of consensus or variability among respondents. A decision benchmark of 2.50 on the 4-point Likert scale was adopted; mean scores equal to or above 2.50 were interpreted as agreement or acceptance, while scores below 2.50 were interpreted as disagreement or rejection of the statement.

Results

Research Question 1: What is the level of Artificial Intelligence adoption in administrative tasks in Business Education Faculties of public universities in Edo and Delta States, Nigeria?

Table 1
Level of Artificial Intelligence Adoption in Administrative Tasks in Business Education Faculties

AI Administrative Tools	UNIBEN Mean	AAU Mean	DELSU Mean	Grand Mean	Decision
Automated record systems	2.80	2.60	2.50	2.63	Moderate
AI chatbots for student inquiries	2.40	2.30	2.20	2.30	Low
Predictive scheduling systems	2.55	2.45	2.40	2.47	Low
Digital examination processing	2.90	2.70	2.60	2.73	Moderate
AI-based data analytics tools	2.35	2.20	2.10	2.22	Low

The findings in Table 1 reveal that the overall level of AI adoption is low to moderate, with a cluster of mean scores ranging from 2.22 to 2.73, which is marginally above or below the 2.50 decision threshold. Only two indicators—automated record systems (Grand Mean = 2.63) and

digital examination processing (Grand Mean = 2.73)—fell within the moderate adoption range, indicating partial digitization rather than intelligent automation. The remaining indicators, particularly AI chatbots (2.30) and data analytics tools (2.22), fall clearly below the acceptable threshold, signifying weak integration of advanced AI systems. From a critical standpoint, this pattern suggests that Business Education Faculties in the selected Nigerian universities are operating at a basic digital transformation stage rather than a mature AI-driven administrative ecosystem. The narrow margin between moderate and low adoption further indicates institutional fragility in technological integration. This aligns with the view that AI deployment in Nigerian universities is still largely experimental and fragmented, reflecting systemic infrastructural and capacity constraints rather than strategic institutional adoption.

Research Question 2: What are the perceived effects of Artificial Intelligence adoption on administrative efficiency in Business Education Faculties in public universities in Edo and Delta States, Nigeria?

Table 2

Perceived Effects of Artificial Intelligence Adoption on Administrative Efficiency

Efficiency Indicators	UNIBEN Mean	AAU Mean	DELSU Mean	Grand Mean	Decision
Faster service delivery	3.10	2.95	2.90	2.98	Agreed
Improved accuracy of records	3.20	3.00	2.85	3.02	Agreed
Reduced workload for staff	3.05	2.90	2.80	2.92	Agreed
Enhanced decision-making	3.00	2.85	2.75	2.87	Agreed
Improved communication systems	3.15	3.00	2.90	3.02	Agreed

The data in Table 2 indicate that respondents strongly perceive AI adoption as beneficial to administrative efficiency, with all grand mean scores ranging between 2.87 and 3.02, which are significantly above the 2.50 benchmark. The highest-rated benefits—improved accuracy of records and communication systems (both 3.02)—suggest that AI is particularly valued for enhancing information integrity and institutional coordination. Similarly, faster service delivery (2.98) indicates perceived improvements in turnaround time for administrative processes. From a critical analytical perspective, these findings demonstrate a clear perception–implementation gap, where AI is recognized as highly beneficial despite its relatively low actual adoption (as shown in Research Question 1). This suggests that administrative staff are aware of AI’s transformative potential but are constrained by infrastructural, technical, and policy limitations. The consistency of mean scores across institutions also indicates a shared systemic perception, reinforcing the argument that AI is universally viewed as efficiency-enhancing within Nigerian higher education administration, even if practical integration remains limited.

Research Question 3: What are the challenges limiting the adoption of Artificial Intelligence in administrative processes in Business Education Faculties in public universities in Edo and Delta States, Nigeria?

Table 3

Challenges Limiting Artificial Intelligence Adoption in Business Education Faculties

Challenge Indicators	UNIBEN Mean	AAU Mean	DELSU Mean	Grand Mean	Decision
Lack of technical skills	3.40	3.30	3.25	3.32	Agreed
Poor ICT infrastructure	3.50	3.45	3.40	3.45	Agreed
High cost of AI systems	3.30	3.20	3.10	3.20	Agreed
Resistance to change	3.25	3.10	3.05	3.13	Agreed
Lack of institutional policy	3.35	3.20	3.15	3.23	Agreed

The results in Table 3 reveal a consistently high agreement across all challenge indicators, with grand mean values ranging from 3.13 to 3.45, significantly above the acceptance threshold. The most critical constraint identified is poor ICT infrastructure (3.45), followed closely by lack of

technical skills (3.32). These high mean scores indicate that respondents perceive structural and human-capacity limitations as the dominant barriers to AI adoption. From a critical perspective, the clustering of high mean values suggests that the barriers to AI adoption are not isolated but systemic and interdependent, reinforcing each other in a cycle of underdevelopment. For example, inadequate infrastructure limits exposure to AI tools, which in turn reduces staff competence, while absence of institutional policy further weakens structured implementation. This finding reflects a deeper institutional readiness gap in Nigerian universities, where technological adoption is constrained not only by funding but also by governance, leadership prioritization, and strategic planning deficiencies.

Discussions

The findings of this study reveal that Business Education Faculties in Nigerian public universities are operating within a transitional digital environment, where basic automation systems exist but the deployment of full Artificial Intelligence (AI) capabilities remains limited, uneven, and largely fragmented. Although respondents acknowledged the potential of AI to enhance administrative efficiency, actual implementation remains constrained by infrastructural deficiencies, inadequate technical capacity, institutional inertia, and weak policy frameworks. This situation reflects a broader pattern within the Nigerian higher education system, where digital transformation is often characterized by partial adoption rather than full systemic integration (Olorunfemi & Aina, 2023; Eze & Okeke, 2024).

From a critical standpoint, the results of research question 1 confirm that AI adoption is still in its early-to-moderate stage, with only basic administrative functions such as record systems and examination processing showing partial automation. Advanced AI tools such as chatbots, predictive scheduling systems, and data analytics platforms remain largely underutilized. This finding supports the argument that Nigerian universities are not yet operating within a fully intelligent administrative ecosystem but are instead relying on hybrid systems that combine manual processes with limited digital tools. In practical terms, this indicates that AI integration is still largely experimental, inconsistent, and dependent on isolated departmental initiatives rather than institutional-wide strategy.

Conversely, the findings of Research Question Two demonstrate a strong perception among respondents that AI significantly enhances administrative efficiency. High mean scores across all efficiency indicators suggest that staff clearly recognize the benefits of AI in improving accuracy, reducing workload, and enhancing service delivery. This creates an important paradox: while AI is widely perceived as beneficial, its actual adoption remains low. This disconnect between perception and implementation can be explained by structural constraints within Nigerian universities, including unstable electricity supply, inadequate funding for ICT infrastructure, and limited access to specialized training programmes. In essence, the perceived value of AI is not matched by institutional readiness for implementation.

This outcome both supports and challenges the Technology Acceptance Model (TAM). On one hand, the high perceived usefulness of AI among respondents strongly validates TAM's central assumption that perceived usefulness drives positive attitudes toward technology adoption. On the other hand, the study reveals that perceived usefulness alone is insufficient to guarantee actual adoption in contexts such as Nigeria, where external constraints such as infrastructure, funding, and organizational readiness play a more decisive role. This extends TAM beyond its original behavioural focus, suggesting that in developing economies, adoption is not merely a psychological decision but a structurally constrained process.

Similarly, the findings align with the Diffusion of Innovation Theory (DOI), particularly in relation to the slow pace of AI diffusion within the studied universities. Rogers' assertion that innovation adoption depends on communication channels, institutional readiness, and perceived complexity is clearly reflected in the Nigerian context. The low adoption of advanced AI tools suggests that AI is still perceived as complex, expensive, and technically demanding. Furthermore,

the absence of strong institutional policies and leadership-driven digital transformation strategies slows down the movement of AI from early adopters to the early majority stage. In this sense, Nigerian universities appear to be trapped between awareness and implementation stages of innovation diffusion. However, while the theoretical frameworks adequately explain behavioural acceptance and diffusion patterns, they are less sufficient in capturing the structural inequalities and infrastructural deficits that define the Nigerian higher education system. For instance, even when staff are willing to adopt AI systems, inadequate ICT infrastructure, irregular power supply, and limited institutional funding significantly restrict actual usage. This indicates that technology adoption in Nigerian universities is not only a matter of acceptance or diffusion but also one of systemic capacity and governance readiness.

The findings of Research Question Three further reinforce this argument by identifying poor ICT infrastructure, lack of technical skills, high cost of AI systems, resistance to change, and weak institutional policies as major constraints. Notably, the dominance of infrastructure-related challenges suggests that the problem is less about willingness and more about capability. This aligns with broader African higher education studies which argue that digital transformation is often hindered by foundational systemic weaknesses rather than user resistance alone (Mtebe & Kondoro, 2022). In addition, resistance to change—though moderately rated compared to infrastructure—still indicates a behavioural dimension of the problem. This suggests that while some staff are open to AI adoption, others remain skeptical due to fear of job displacement, lack of familiarity, or inadequate training. This duality reflects a mixed institutional culture where innovation acceptance coexists with technological apprehension.

Finally, the findings reveal a complex interaction between positive perceptions, limited adoption, and structural constraints. While staff recognize the value of AI in improving efficiency, institutional realities significantly limit its practical implementation. This underscores the need to move beyond theoretical acceptance models and incorporate infrastructural, policy, and capacity-building dimensions into understanding technology adoption in Nigerian universities. In doing so, the study contributes to a more context-sensitive interpretation of AI integration in developing economies, where innovation adoption is shaped not only by perception and diffusion processes but also by systemic readiness and institutional capability.

Conclusion and Recommendations

The study concludes that the adoption of Artificial Intelligence (AI) within Business Education Faculties of public universities in Edo and Delta States, Nigeria, is still in an emergent and transitional stage of development. Empirical evidence from the study indicates that while certain administrative functions—particularly automated record systems and digital examination processing—have achieved partial digitization, the integration of more advanced AI tools such as chatbots, predictive analytics, and intelligent decision-support systems remains limited. The findings demonstrate a consistent pattern of moderate to low AI adoption, despite a strong awareness among respondents of its potential to enhance administrative efficiency. This indicates a significant gap between perceived usefulness and actual implementation, largely driven by infrastructural deficiencies, limited technical competencies, high cost of deployment, and weak institutional policy frameworks. Consequently, administrative efficiency in the studied universities remains only partially optimized, suggesting that AI-driven transformation in Nigerian higher education administration is still at a developmental rather than fully operational stage.

The following recommendations were made based on findings:

1. University management and governing councils should prioritize investment in integrated AI-driven administrative platforms such as Enterprise Resource Planning (ERP) systems, intelligent student information systems, and automated workflow management tools. These systems will reduce manual workload, improve data accuracy, and enhance institutional responsiveness.

2. Regular and structured training programmes should be organized for academic and administrative staff to improve AI literacy, digital competence, and system usability skills. Such training should be embedded within staff development policies to ensure continuous professional adaptation to emerging technologies.
3. Government agencies and university authorities should collaboratively invest in robust ICT infrastructure, including stable internet connectivity, cloud-based systems, digital laboratories, and uninterrupted power supply solutions. Without this foundational support, AI adoption will remain superficial and unsustainable.
4. Universities should develop clear policy frameworks guiding the ethical use, implementation, and governance of AI systems in administrative processes. These policies should address data privacy, cybersecurity, algorithmic transparency, and role redefinition within automated environments.
5. To address the high cost of AI implementation, universities should engage in strategic partnerships with technology firms, telecommunications companies, and educational technology providers. Such collaborations can facilitate funding support, technical expertise transfer, and subsidized access to advanced AI solutions.

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