

## Technological Innovations and Effective University Administration in Ekiti State Universities

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### ARTICLE INFO

*Keywords:* Technological Innovations, Effective, University Administration

*Received :* 24 September

*Revised :* 24 October

*Accepted:* 25 November

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### ABSTRACT

This study examined the influence of technological innovations – artificial intelligence, blockchain technology, and cloud computing – on effective university administration in Ekiti State, Nigeria. A descriptive correlational research design was adopted. The population consisted of administrative staff from Ekiti State University (EKSU) and Bamidele Olumilua University of Education, Science and Technology (BOUESTI), from which 336 respondents were selected using stratified and simple random sampling techniques. A structured instrument titled Technological Innovation and University Administration Questionnaire (TIUAQ) was used for data collection. The instrument was validated by experts and demonstrated satisfactory reliability, with a Cronbach Alpha coefficient of 0.75. Data were analyzed using mean scores for the research questions and simple linear regression for the hypotheses at the 0.05 significance level. Findings revealed that artificial intelligence ( $R = .603$ ), blockchain technology ( $R = .499$ ), and cloud computing ( $R = .522$ ) each had a significant positive relationship with effective university administration. These results indicate that technological innovations play a crucial role in improving administrative efficiency, record management, transparency, and service delivery within universities. The study recommends that university management invest in modern technological infrastructure, provide continuous ICT training for administrative staff, and establish clear policies that support sustainable digital transformation.

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## **INTRODUCTION**

The myriads of technologies that are evolving in recent times has defined this age as the most digital era of all time. Technology in the present times has witnessed a remarkable evolution to become a need rather than an option. All facets of the society are currently experiencing a paradigm shift in modes of operation as technological innovations usher in momentous transformation. The application of technology has become increasingly important and interconnected. Every field owes its advancement to technology, and this clearly indicates the importance of technology in every aspect of human endeavour. The rise of cutting-edge innovation in technologies has brought the need for improvement and vast possibilities for the future.

Innovation' is a word derived from the Latin meaning "to introduce something new to the existing realm and order of things". Technological innovation refers to the process of developing and introducing new or significantly improved technologies, methods, products, or services that create value and address existing problems or needs (Mothe, & Nguyen-Thi, 2012). It involves applying scientific knowledge, creativity, and engineering to produce advancements that enhance efficiency, performance, or overall quality of life. It is associated with the development of new forms of process and product. Technological innovation is an element of the complex system of technology directed to satisfy needs, achieve goals, and solve problems of adopters (Coccia, 2021). Coccia further stated that technological innovations are the out-come of a problem-solving activity in a specific technological field to achieve and/or sustain goals. In educational perspective, technological innovation could be used to describe some useful changes and advancement in the mode of operations in tertiary institutions. The conception of technological innovation is associated with the idea of human progress (Coccia & Bellitto, 2018). The distinctive character of technological innovations is the solution of consequential problems, a progressive satisfaction of human wants, and/or human control of nature through scientific advances and new technology.

University administration is a term used to describe the management and operational procedures within a university, incorporating models for planning, financing, and overseeing academic activities (Osuji & Fekarurhobo, 2023). University administration refers to the application of the universities' resources to implement the programme of the universities with the aims of realizing the objectives of the universities (Ogunode, 2020). University administration is the effective use of the resources of the university to implement the teaching programme, research programme and the community service programme of the universities (Ogunode & Abubakar, 2020). University administration is made up of administrators who are part of the human resource workforce of universities, they are a vital resource that manages and utilizes all other resources (financial and material) to accomplish set goals (Onyeike & Sam-Jaja, 2015). Hence, university administration could be described as the coordination of activities involving all resources that are required to achieve educational goals and objectives.

In the light of the foregoing, the effectiveness of the university administration is determined in the achievement of educational goals and objectives set by the university. According to Onyeike and Sam-Jaja, (2015), university administration effectiveness refers to the ability of academic leaders to effectively carry out administrative tasks associated with employee administration, university's social responsibility, student staff administration, financial and physical resources, experience and training, amongst others. University administration is said to be effective when the several departments within the university each responsible for specific aspects of the institution's operations are driven towards accomplishing the general goals of the university. That is, the application of technology innovation in carrying out operations in various aspects of university administration such as admission management, effective students' affair management, management of human resources, research administration, management of school plant, students' performance management, quality assurance process, safety management and public affair management could enhance the overall effectiveness of administration in university (Federal Republic of Nigeria, 2013).

Currently, universities in developed countries and few in developing countries are leveraging cutting edge technological innovations in their administrative operations for effective service delivery. Technological innovations such as artificial intelligence, blockchain technology, cloud computing, digital assessment platforms, collaborative platforms, mobile apps, students' information systems, human resource management systems among others are increasingly gaining ascendance in university administration. These technologies have been reported to aid the administrative services, lecturer's workload and students' management (Mamgai, 2023). Research by Nwuke and Osuji (2024) emphasized that post-pandemic reforms in university administration necessitate a systematic approach to integrating digital tools and technologies.

One of the most prevalent technological innovations in universities is the utilisation of artificial intelligence in administration. Artificial intelligence are computers systems that built to replicate human intelligence to solve data-based problems and knowledge intensive task (Andersen, 2024; Offia, Ayoko & Yunisa, 2025; Raji & Amadi, 2023). The deployment of artificial intelligence in certain administrative functions has encouraged data-driven decision making and increased work speed and accuracy (Osuji & Arannilewa, 2023; Jessy & Arannilewa, 2025). Westagilelabs (2022) asserts that AI can help to eliminate manual administration work such as scheduling, rescheduling classes, marking attendance, grading papers, finance, and accounting and record keeping in schools, colleges and universities. In tone with the trajectory of which the article is going, the advent of artificial intelligence is said to have greatly contributed to effective universities administration and management, even in Nigeria. However, this contribution can further be strengthened through the integration of blockchain technology.

Blockchain technology is a crucial innovation in university management. Blockchain technology is a decentralized technology that uses cryptographic techniques to ensure sensitive data security, privacy and reliability. The primary aim of blockchain technology is to increase the degree of security via cryptographic systems, thereby providing users with better control of sensitive data and privacy and allowing providers to duplicate data and due diligence process (Aliti, Leka, Luma & Trpkovska, 2022). One of the most challenging aspects of the education system is the verification of academic credentials of students, which often is a manual and time-consuming process for all stakeholders involved. The integration of blockchain technology in educational institutions is gaining momentum due to its promise to improve the graduation system and the process of verifying educational qualifications (Rasheed & Mimirinis, 2023). Blockchain can bring unprecedented levels of transparency, data integrity, and security to university systems (Loukil, Abel & Boukadi, 2021). For example, student records, financial transactions, and research data can be securely stored on a blockchain, making them immutable and accessible only by authorized parties.

Academic credential fraud is a growing concern, but blockchain can restructure verification processes by providing tamper-proof digital diplomas and certificates. Institutions like MIT have already adopted blockchain-based systems (e.g., Blockcerts) to issue verifiable credentials (Chen *et al.*, 2019). These digital records are cryptographically secured, reducing administrative overhead and eliminating the need for third-party verification (Grech & Camilleri, 2017). Employers and other institutions can instantly authenticate qualifications, enhancing trust and efficiency in academic and professional ecosystems (Swan, 2015). Blockchain can optimize university supply chains and financial operations by improving transparency and reducing inefficiencies. Smart contracts automate procurement processes, ensuring timely payments and reducing fraud (Tapscott & Tapscott, 2016). Additionally, blockchain-based ledgers enable real-time tracking of university assets, from laboratory equipment to library resources (Cocco *et al.*, 2017). Financial transactions, including tuition payments and grant disbursements, become more secure and auditable, minimizing errors and enhancing accountability (Coyne & McMickle, 2017).

The wide array of blockchain technology extends to sustainability of contracts and agreement. Buterin (2014) noted that smart contracts, self-executing agreements on blockchain, can revolutionize university governance by automating administrative processes such as faculty promotions, grant allocations, and compliance reporting (Buterin, 2014). These contracts enforce predefined rules without intermediaries, reducing bureaucratic delays and corruption risks (Mougayar, 2016). For instance, tenure decisions could be programmed based on transparent, immutable performance metrics, ensuring fairness (Swan, 2015). Such automation enhances operational efficiency while maintaining trust in institutional decision-making.

Another novel technology with significant influence on university administration is cloud computing. Cloud computing is a model for enabling convenient, on-demand network access to a shared pool of configurable

computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. According to Nwuke and Nwanguma, (2024), cloud computing enables universities to centralize their data storage and provide real-time access to administrative resources, thereby enhancing flexibility and accessibility

Adeleke, Muraina and Adegbuyi (2020) observed that cloud computing service technology mostly used in Nigeria university administration is Software as a Service (SaaS), although others like Platform as a Service (PaaS) and Infrastructure as a Service (IaaS) were available but not as used as SaaS. The adoption of cloud service has really changed university administration in terms of easy data accessibility, easy data storage, and easy administration (Adeleke *et al.*, 2020). Cloud computing allows universities to store large volumes of data, such as student records, academic transcripts, financial information, and research data, in a secure, centralized location (Mohammad & Mcheick, 2011). This makes it easy for administrators, faculty, and students to access information from anywhere, at any time, using internet-connected devices serving as a notable advantage for digital assessment platforms in university administration.

Various empirical studies investigating the influence of technological innovations in university management have maintained that technological innovation has impacted the management of university education (Alonge & Onukwu, 2022; Krishnaveni & Meenakumari, 2014). It is pertinent that a study of this nature to investigate the kind of relationship that occur in the implementation of technological innovations and effective university administration.

### **Statement of Problem**

In recent years, technological innovation has become a driving force in transforming various sectors, including higher education. In Nigeria, universities are expected to provide quality education, research, and community service, but many face challenges in achieving these goals due to inefficient administrative systems and outdated management practices.

Despite the rapid advancements in digital technologies, Nigerian universities struggle to fully integrate technological tools into their administrative processes. The slow adoption of e-governance, automation of academic and financial processes, smart security systems and the use of data analytics in strategic planning have led to inefficiencies, mismanagement, campus insecurity and delays in university operations owing to the recent increase university students and employees. The problem revolves around understanding the extent to which the adoption of new technologies in university management can enhance decision-making, reduce operational costs, improve transparency, and foster better communication among staff, students, and the wider academic community. The question now is, what relationship exists between the utilization of technological innovations and effective university administration? To provide answer to this question, the study investigated the

relationship between technological innovations and effective administration in Ekiti States Universities.

### **Purpose of the Study**

The purpose of the study was to establish the relationship between technological innovations and effective administration in Ekiti State Universities. Specifically, the study sought to;

- 1 Determine the relationship between artificial intelligence utilisation and effective administration in Ekiti State Universities.
- 2 Investigate the relationship between blockchain technology utilisation and effective administration in Ekiti State Universities.
- 3 Determine the relationship between cloud computing utilisation and effective administration in Ekiti State Universities

### **Research Questions**

The following research questions guided the conduct of the study

1. What is the relationship between artificial intelligence utilisation and effective administration in Ekiti State Universities?
2. What is the relationship between blockchain technology utilisation and effective administration in Ekiti State Universities?
3. What is the relationship between cloud computing utilisation and effective administration in Ekiti State Universities?

### **Hypotheses**

The following null hypotheses guided the study;

**H<sub>01</sub>:** There is no significant relationship between artificial intelligence utilisation and effective administration in Ekiti State Universities.

**H<sub>02</sub>:** There is no significant relationship between blockchain technology utilisation and effective administration in Ekiti State Universities.

**H<sub>03</sub>:** There is no significant relationship between cloud computing utilisation and effective administration in Ekiti State Universities.

## **METHODOLOGY**

The study adopted a correlational research design. According to Dayon (2019) correlational research design is seen as a type of research design that seeks to establish the magnitude and direction of the relationship that exists between two variables. This design is appropriate for the study since it intends to establish a relationship between technological innovations and university administration in universities in Ekiti State Nigeria. The study was carried out in Ekiti State. The population of this study consisted of 2635 administrative staff in the two universities owned by Ekiti state Government. Specifically, there are 1390 administrative staff in Ekiti State University, Ado Ekiti while there are 1,245 administrative staff in Bamidele Olumilua University of Education, Science and Technology (Registry Department of both Universities, 2024).

The sample size of the study was 336 respondents. Using Krejcie and Morgan (1970) determination table, the minimum sample size for a population of 2,635 administrative staff is 336. Proportionate stratified random sampling was

used to select 50 percent of the sample size, that is 168 administrative staff from Ekiti State University and Bamidele Olumia University of Science and Technology cutting across the following administrative departments in the university; budgeting and planning, establishment, public relations, registry, admission, estate and works services, student affairs, quality assurance, research and development department, information and communication technology centre, Exams and Record. In each of the 12 department, 14 staffs including the directors were randomly selected, resulting to 168 administrative staff for each university involved in the study.

Two research instruments that was used in this study are, Technological Innovation in University Administration Questionnaire (TIUAQ) and Effective University Administration Questionnaire (EUAQ). The Technological Innovation in University Administration Questionnaire (TIUAQ) has two sections, eliciting information on technological innovations on encompassing artificial intelligence, blockchain technology and cloud computing. Effective university Administration Questionnaire (EUAQ) contained items that assessed effective administrative operation in universities. The both instruments were structured in a four-point rating scale of Strongly Agreed (4 points), Agreed (3 points), Disagreed (2 points), and Strongly Disagreed (1 point). In order to ascertain the validity of the two instruments (TIUAQ and EUAQ). The instruments were subjected to face and content validity by experts in Educational Management and Measurement and Evaluation. The reliability of the instruments was established by using Cronbach Alpha reliability method which gave 0.77, 0.83, 0.73 for TIUAQ while 0.82 was obtained from EUAQ. This reliability coefficients obtained showed that the instruments are reliable for data collection.

The researcher administered the instruments personally by visiting the institutions of study with the help of three (3) assistants. The questionnaires were retrieved by the researcher and the research assistants on the spot after being completed. 336 copies (100 percent) of the instruments were successfully distributed however, only 304 copies (90.47 percent) were retrieved and used for the data analysis. The research questions were answered using linear regression analysis. The "r" value or the correlation coefficient obtained was used to measure the relationship between two variables that are normally distributed. The decision rule was that correlation coefficient (r) from 0.00-0.30 was termed "very weak relationship", 0.31-0.49 was termed weak relationship, 0.50-0.69 was termed "moderate relationship", 0.70-0.79 was termed "Strong relationship" and 0.80-0.99 termed "very high relationship" (Ahiazu & Asawo, 2016; Amadi, 2020). The correlation coefficient may be negative or positive. The r-squared value was used to determine the extent each of the predictors contribute to the dependent variables. Analysis of variance from the linear regression was used establish the significance of the hypotheses at 0.05 level of significance. The hypotheses were accepted when the p-value is higher than the alpha level of 0.05 ( $p > 0.05$ ) and rejected when the p-value is less than the alpha level ( $p < 0.05$ ).

**RESEARCH RESULTS**

**Research Question 1:** What is the relationship between artificial intelligence utilisation and effective administration in Ekiti State Universities?

**Table 1: Regression Analysis on the Relationship between Artificial Intelligence Utilisation and Effective Administration in Ekiti State Universities**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Remark
1	.777 <sup>a</sup>	.603	.602	4.14373	.603	Strong Positive Relationship

**a. Predictors: (Constant), Artificial Intelligence Utilisation**

Table 1 presents the regression analysis of the relationship between artificial intelligence utilisation and effective administration in Ekiti State Universities. The analysis showed that the r-value obtained was 0.777 which indicates that a strong positive relationship exists between the observed variables. The R<sup>2</sup> of 0.603 implies that AI utilization alone accounts for approximately 60.3% of the variability in how effective university administration is, suggesting that AI has a substantial impact on university administration. The adjusted R<sup>2</sup> being nearly identical confirms that the model is not overfitting but is stable for prediction. Generally, the results indicate that the utilization of artificial intelligence (AI) has a strong positive relationship with university administrative effectiveness in Ekiti State Universities.

**Research Question 2:** What is the relationship between blockchain technology utilisation and effective administration in Ekiti State Universities?

**Table 2: Regression Analysis on the Relationship Between Blockchain Technology Utilisation and Effective Administration in Ekiti State Universities**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Remark
1	.707 <sup>a</sup>	.499	.498	4.65494	.499	Strong Positive Relationship

**a. Predictors: (Constant), Blockchain Technology Utilisation**

Table 2 reveals the regression analysis on the relationship between blockchain technology utilisation and effective administration in Ekiti State Universities. The correlation coefficient value obtained in the analysis was 0.707 which is an indication of a strong positive relationship existing between blockchain technology utilisation and effective administration. This means that,

as the use of blockchain increases, effectiveness in university administration may tend to improve as well. The  $r^2$  value of 0.499 recorded showed that 49.9% of the variation in effective university administration can be explained by the use of blockchain technology. The remaining 50.1% of variation may be due to other factors not included in the model. The closeness of the adjusted r square of 0.498 indicates that the model is robust and not overfitted. The result generally suggests that the utilization of blockchain technology is strongly related to university administrative effectiveness in Ekiti State Universities.

**Research Question 3:** What is the relationship between cloud computing utilisation and effective administration in Ekiti State Universities?

**Table 3: Regression Analysis on the Relationship between Cloud Computing Utilisation and Effective Administration in Ekiti State Universities**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Remark
1	.723 <sup>a</sup>	.522	.521	4.54618	.522	Strong Positive Relationship

**a. Predictors: (Constant), Cloud Computing Utilisation**

Table 3 shows the result of regression analysis on the relationship between cloud computing utilisation and effective administration in Ekiti State Universities. With an r value of 0.723, the relationship between the observed variables is strong which implies that cloud computing utilization would substantially enhance administrative efficiency in Ekiti State Universities. The  $r^2$  value of 0.522 revealed that 52.2% of the variation in effective university administration can be explained by the use of cloud computing. The closeness of the adjusted r square indicates that the model is robust and not overfitted. The analysis shows that the utilization of cloud computing in university administration is strongly and positively linked to administrative effectiveness in Ekiti State Universities.

**Test of Hypotheses**

**H<sub>01</sub>:** There is no significant relationship between artificial intelligence utilisation and effective administration in Ekiti State Universities.

**Table 4: ANOVA Regression Summary on the Relationship between Artificial Intelligence Utilisation and Effective Administration**

Model		Sum of Squares	df	Mean Square	F	p-value	$\alpha$	Remark
1	Regression	7885.606	1	7885.606	459.253	.000 <sup>b</sup>	0.05	Reject H <sub>0</sub>
	Residual	5185.496	302	17.171				
	<b>Total</b>	<b>13071.102</b>	<b>303</b>					

a. Dependent Variable: Effective University Administration

b. Predictors: (Constant), Artificial Intelligence Utilization

The ANOVA result shows that AI utilisation has a statistically significant effect on effective university administration. A very high F-value of 459.253 indicates that the model significantly improves our prediction of the dependent variable (university administration effectiveness). The model explains a meaningful proportion of the variance in administrative effectiveness (confirmed earlier by a high  $R^2$ ), and the strong F-value with a p-value of .000 clearly supports the rejection of the null hypothesis. Since the p-value of 0.000 is less than 0.05 alpha-level, the result is statistically significant. This leads to rejection of the null hypothesis. This implies that universities that adopt and effectively utilise AI technologies in their administrative are likely to experience significant improvements in administrative efficiency, accuracy, and decision-making.

**H<sub>02</sub>:** There is no significant relationship between blockchain technology utilisation and effective administration in Ekiti State Universities.

**Table 5: ANOVA Regression Summary on the Relationship between Blockchain Technology Utilisation and Effective University Administration**

Model		Sum of Squares	df	Mean Square	F	p-value	$\alpha$	Remark
1	Regression	6527.230	1	6527.230	301.232	.000 <sup>b</sup>	0.05	Reject Ho
	Residual	6543.872	302	21.668				
	<b>Total</b>	<b>13071.102</b>	<b>303</b>					

a. Dependent Variable: Effective University Administration

b. Predictors: (Constant), Blockchain Technology Utilisation

Table 5 presents the ANOVA Regression Summary on the relationship between blockchain technology utilisation and effective university administration. The ANOVA table shows a regression sum of squares of 6527.230 with an F-value of 301.232 and a significance level (p-value) of .000, which is well below the  $\alpha$ -value of 0.05. This indicates a statistically significant relationship between blockchain technology utilisation and effective administration in Ekiti State Universities. The high F-value suggests that blockchain usage strongly contributes to the variation in administrative effectiveness, while the decision to reject the null hypothesis confirms that blockchain technology plays a meaningful role in enhancing university administration in Ekiti state.

**H<sub>03</sub>:** There is no significant relationship between cloud computing and effective administration in Ekiti State Universities

**Table 6: ANOVA Regression Summary on the Relationship between Cloud Computing Utilisation and Effective University Administration**

Model		Sum of Squares	df	Mean Square	F	p-value	$\alpha$	Remark
1	Regression	6829.448	1	6829.448	330.440	.000 <sup>b</sup>	0.05	Reject Ho

	Residual	6241.654	302	20.668				
	Total	13071.102	303					

a. Dependent Variable: Effective University Administration

b. Predictors: (Constant), Cloud Computing Utilisation

Table 6 presents the ANOVA regression summary on the relationship between cloud computing utilisation and effective university administration. The result from the analysis shows that the F-value of 330.440 was obtained suggesting that cloud computing utilisation strongly contributes to the variation in administrative effectiveness in universities in Ekiti state. With a p-value of 0.000 and degrees of freedom 302, the null hypothesis was rejected since the p-value is less than  $\alpha$ -value of 0.05. The high F-value suggests that cloud computing strongly contributes to the variation in administrative effectiveness, while the decision to reject the null hypothesis confirms that utilizing cloud computing in university administration could aid administrative effectiveness in Ekiti State.

## DISCUSSION

Findings from research question one as presented in table 1 revealed that there is strong positive relationship between artificial intelligence utilisation and effective administration in Ekiti State Universities. The result of the null hypothesis tested in table 1 revealed that the existing relationship is statistically significant with p-value < 0.05 level of significance. This result implies that universities that adopt and effectively utilise AI technologies in their administrative are likely to experience significant improvements in administrative efficiency, accuracy, and decision-making. This result aligns with the view of Brynjolfsson and McAfee (2017), who assert that AI applications in organizational management enhance productivity and decision quality by automating repetitive tasks and providing data-driven insights. Similarly, Makridakis (2017) emphasized that AI technologies help institutions adapt to complexity through predictive analytics and intelligent automation, leading to more agile and responsive administrative processes. In support of this, Aiken *et al.* (2021) argue that AI adoption in higher education contributes to administrative transformation by streamlining workflows, improving communication, and enabling timely decision-making. Thus, the findings of this study are consistent with scholarly literature affirming the role of AI in advancing administrative effectiveness in educational institutions.

Findings from research question two as presented in table 2 showed that there is a strong positive relationship between blockchain technology utilisation and effective administration in Ekiti State Universities. The null hypotheses tested in table of 2 showed that there is significant relationship between blockchain technology utilisation and effective university administration. This result implies that the increased use of blockchain technology in university administration process can lead to improved administrative efficiency. This finding is consistent with the work of Zheng *et al.* (2018), who highlighted that blockchain technology enhances transparency, accountability, and data integrity in institutional operations, which are essential components of effective administration. Similarly, Grech and Camilleri (2017) reported that blockchain

applications in higher education – such as secure record-keeping, certification, and transaction tracking improve trust, reduce fraud, and streamline administrative procedures. Additionally, Sun, Cui, and Wang (2020) found that blockchain-based systems support decentralized and tamper-proof academic management processes, leading to greater efficiency and accuracy in university administration. These scholarly positions support the conclusion that blockchain adoption significantly enhances the administrative functions of universities. These scholarly perspectives support the conclusion that human resource management systems play a vital role in promoting effective and responsive university administration.

Moreso, finding from research question three as displayed in table 4.3 showed that there is a strong positive relationship between cloud computing utilisation and effective administration in Ekiti State Universities. The result of tested hypothesis in table 4.11 showed that there is a significant relationship between the observed variables above. This finding is related to the work of Alharthi *et al.* (2015), who emphasized that cloud computing facilitates streamlined administrative processes, reduces infrastructure costs, and enhances service delivery in higher education. Similarly, Mell and Grance (2011) highlighted that cloud computing provides scalable, on-demand access to computing resources, which supports better data storage, collaboration, and communication within institutions. In line with this, Sultan (2010) pointed out that universities leveraging cloud platforms benefit from enhanced flexibility, improved data security, and operational efficiency, which contribute to effective administration. These studies support the conclusion that integrating cloud computing into university systems significantly improves administrative effectiveness.

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusion

Based on the findings of the study, it was concluded that there is a positive strong correlation between technological innovations and effective university administration in Ekiti State Universities. The distinctive character of technological innovations is the solution of consequential problems, a progressive satisfaction of human wants, and improvement in activities through scientific advances and new technology. The utilization of technological innovations of the modern age in university administration would improve the effectiveness of university administration in Nigeria just like other universities in the developed countries. Technological innovations like artificial intelligence, blockchain technologies directly relates to effectiveness of university administration in Ekiti State.

### Recommendations

Based on the findings of the study, it was recommended amongst others;

1. University administrations should adopt AI-powered tools such as chatbots, predictive analytics, and automated decision-making systems to streamline routine operations like admission processing, academic advising, and early warning systems for at-risk students.

2. Universities should implement blockchain technology to enhance the security, transparency, and authenticity of academic records, certificates, and credential verification processes. This will reduce forgery and enhance institutional credibility.

Government should invest in cloud-based platforms in universities to enable secure, centralized storage of institutional data and facilitate real-time access to academic and administrative resources by both staff and students from any location

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*Osuji, Arannilewa*

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