

Original Research

## Improving Nigerian Public Universities' Integrity Through Artificial Intelligence (AI) Monitoring Systems

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*\*\*Related declarations are provided in the final section of this article.*

### Abstract

Various problems—from exam malpractice to corruption to ineptitude—undermine the integrity of Nigerian public universities. The study examines the potential introduction of Artificial Intelligence (AI) technologies as monitoring systems designed to enhance academic integrity. By identifying and investigating issues such as assessment irregularities, the scale and nature of academic fraud, and social and political corruption, AI technologies can offer advanced mechanisms for the pre-emptive detection and deterrence of misconduct, thereby restoring public trust and educational outcomes. This research emphasises the need to establish AI integration by developing requisite infrastructure, systematic human capital development, and a robust ethical framework. The study ultimately advocates for a more holistic approach for strategic visioning, stakeholder participation, and continuous evaluation to build an environment conducive to ethical scholarship in Nigerian public universities. Other recommendations include establishing national policies on AI applications in education, training at various levels, and a concerted effort by educational stakeholders to enhance the quality of higher education systems in the country. Deploying AI applications with due diligence and ingenuity will rebuild academic integrity and operational efficiency, fostering a risk-averse and proud education ecosystem in Nigerian universities.

**Keywords:** Artificial Intelligence (AI), Improving, Nigerian Public Universities, Integrity, Monitoring Systems

### Introduction

The threats to public universities in Nigeria manifest in numerous ways, and the problems are often convoluted. The truth is that any integrity-related issues within a public university environment will impact educational quality and fully compromise the integrity of learning outcomes and assessments. Establishing a sustainable, high-quality higher education system is only possible if

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problems are recognised and managed positively. Areas to enhance the quality of higher education and promote academic integrity with AI systems moving forward include the proactive identification and deterrence of various types of misconduct at accommodation facilities.

Nigerian public universities have numerous integrity challenges, most emanating from ingrained systemic issues and moral lapses. There are multiple acts of academic misconduct, from school-level cheating to administrative malpractices (Azuka, 2014; Omonijo, 2014). For instance, the researchers submitted a report alleging that such assessments were rife with corrupt and unethical conduct by academic staff to influence student outcomes (Ubi et al., 2021). It could range from a false assessment of students to score manipulation (Rasheed, 2023; Ubi et al., 2021). Additionally, institutional corruption remains a significant obstacle to the smooth administration of universities (Jacob & Lawan, 2020).

There has been academic misconduct by students across a broad spectrum, including cheating, plagiarism, misrepresentation, lying, exam cheating, project copying, and dishonesty in data collection and analysis (Abolarin & Babalola, 2020; Azuka, 2014; Omonijo, 2014). Researchers have cited Ghostwriting as a problem (Akbar & Picard, 2020). In addition, there is a lack of knowledge and enforcement of academic misconduct in Nigerian tertiary institutions. This ignorance may extend to a few lecturers regarding the importance of maintaining academic integrity and what constitutes ethical behaviour, including self-plagiarism (Akbar & Picard, 2020). Moreover, faculty members often lack the will to report integrity breaches, and dealing with them can be quite burdensome (Akbar & Picard, 2020).

Furthermore, institutional corruption has been described as systemic in Nigeria and thus woven into the nation's fabric, pervading even aspects such as the safety of student results, where people altered documents (Ndukwe & Obiorah, 2019). Academic dishonesty is not the only challenge that befalls Nigerian universities; there are also indiscipline, inadequate facilities, poor funding, examination malpractices, and mismanagement (Udefi, 2015).

Despite the above challenges, the rapid advances in Artificial Intelligence provide valuable opportunities to alter how management monitors academic integrity in educational settings, with AI systems gaining the capacity to develop more sophisticated tools to monitor and deter academic dishonesty in order to improve the trustworthiness of degrees and research from colleges and universities (Balalle & Pannilage, 2025). AI-enabled systems can employ advanced algorithms to detect plagiarism, contract cheating, and data manipulation more effectively than their predecessors. This increased capacity is crucial, considering that AI, such as ChatGPT, can also pose new challenges to academic integrity (Dempere et al., 2023). AI, therefore, will enhance feedback and assessment systems, addressing the long-standing problems of efficiency and quality that Nigerian higher education has grappled with (Agbarakwe & Chibueze, 2024). Specific AI applications for monitoring include video surveillance systems for examinations (Agwi et al., 2020) and biometric verification systems (e.g., fingerprint and facial recognition) to ensure the integrity of the assessment (Dempere et al., 2023). The management may also integrate Blockchain technology to prevent data tampering in grading systems (Dempere et al., 2023).

Although AI represents a valuable tool for fostering academic integrity, implementing such innovative technology in Nigerian public universities is fraught with numerous pros and cons.

When management integrates new forms of AI into educational environments, several key issues must be addressed, including ethical concerns, data privacy, and the digital divide (Artyukhov et al., 2024). Institutions also typically lack strong policies to recognise the role of AI in academic activities. Thus, there is a need for well-structured guidelines (Balalle & Pannilage, 2025). However, this study focuses on identifying the most effective means of designing and implementing AI monitoring systems in integrity-challenged areas of Nigerian public universities, to build a more honest and dependable academic environment.

### **Statement of the Problem**

Presently, Nigerian public universities face numerous challenges that compromise the integrity of academic and institutional life. These challenges have profound negative implications for the quality of academic instruction and the marketability of degrees granted by these institutions, thereby hindering the overall development of the nation's human capital. The aforementioned challenges stem from academic fraud among students, compromises in student assessments by academic community members, and gross abuses within the administrative sphere (Azuka, 2014; Omonijo, 2014; Rasheed, 2023; Ubi et al., 2021).

Perpetration of acts like plagiarism/examination malpractices or falsification of results or inefficiencies in the administrative system has cut down on public trust in Nigerian higher education and the quality of its graduates, who are competent and morally upright (Abolarin & Babalola, 2020; Azuka, 2014; Ndukwe & Obiorah, 2019; Omonijo, 2014). In addition, the lax enforcement of academic integrity provisions, a lack of sufficient deterrent measures and an apparent reluctance to address integrity breaches exacerbate the current situation (Akbar & Picard, 2020). Conventional methods of curbing and monitoring integrity issues have become inadequate in addressing the modern forms of academic misconduct on a scale and sophistication that new technologies can facilitate (Balalle & Pannilage, 2025; Dempere et al., 2023).

As a result, there is a pressing need to identify new and effective ways of safeguarding academic integrity in Nigerian public universities. If not identified, Nigeria's educational ecosystem will remain shrouded in low-quality standards and reputational issues, leaving students unprepared to make ethical and professional contributions to society. This study aims to bridge this gap by intentionally configuring and implementing how Artificial Intelligence (AI) monitoring systems can proactively address these integrity issues, thereby establishing transparency, accountability, and academic reputation in Nigerian public universities. In particular, it aims to identify key issues facing universities, assess how AI can address these issues, and provide recommendations for a comprehensive model of implementing AI-driven monitoring solutions. The expected outcome will provide policymakers, educational leaders, and stakeholders in higher education with invaluable recommendations for enhancing governance and accountability in public Nigerian universities.

### **Review of Related Literature**

#### **Critical Challenges Facing Public Universities in Nigeria**

Numerous deep-seated systemic and multidimensional challenges face Nigerian public universities, significantly hindering their ability to deliver quality education, conduct research, and contribute to

national development. These challenges are longstanding, and experts have often described them in academic literature on multiple operational and academic fronts.

### **1. Inadequate Funding and Infrastructure Decay**

Insufficient funding is a significant challenge that almost engulfs all university operations (Jacob & Lawan, 2020). Although researchers have repeatedly pointed out that Nigerian public universities are poorly funded, budgetary allocations in Nigeria fall below the UNESCO recommendation of 26% for national education budgets (Jacob & Lawan, 2020). Such a significant funding shortfall creates critical issues affecting:

**Inadequate Facilities:** A widespread problem of infrastructural decay exists, characterised by obsolete machines, outdated Curriculum, and a lack of modern classrooms, laboratories, and libraries (Ahmed et al., 2015; Iruonagbe et al., 2015). Most institutions have decayed nearly entirely due to insufficient resources (Juliet et al., 2019).

**Poor Research and Innovation:** The scanty funds have a direct impact on research and innovation activities, resulting in a complete absence of research grants and poor research outputs (Aguboshim et al., 2021; Iruonagbe et al., 2015). This limits Nigerian scholars from achieving global recognition in research and publication (Ebekoziem & Aigbavboa, 2022).

**Weak Financial Base:** Public universities typically have poor internal revenue generation and inadequate contributions from two sectors of society: the private sector and NGOs. Alums further complicate the situation (Jacob et al., 2021). These financial weaknesses cripple all institutions from achieving their goals (Fayokun & Adedeji, 2015).

### **2. Poor Administration, Governance**

Most importantly, smooth administration and governance give a university the impetus to work well. However, there are other elements where Nigerian public institutions face their own share of significant challenges:

**Weak Administrators and Political Interference:** These factors cripple the administration of Nigerian public universities. (Jacob & Lawan, 2020). Inconsistent policies and a lack of program continuity are prevalent (Iruonagbe et al., 2015; Udefi, 2015).

**Institutional Corruption:** Significant obstacles to proper administration exist in universities due to corruption that spans the various levels and processes within the institutions (Jacob & Lawan, 2020). This can create an environment that fosters poor planning and projection, and, in general, undermines effective governance (Jacob et al., 2021).

### **3. Academic Integrity and Corruption**

Many forms of malpractice and corruption have severely compromised the integrity of academic processes and outcomes:

**Assessment Irregularities:** Corruption and unethical activities by academic staff in determining student outcomes are not uncommon (Ubi et al., 2021). These include falsifying scores or manipulating grades of students (Rasheed, 2023; Ubi et al., 2021).

**Student Malpractices:** Examination misconduct, impersonation, forging results, and even stealing question papers are some of the various malpractices students engage in (Enwereuzor et al., 2020). This raises questions about the ethical climate in the Nigerian teaching context (Enwereuzor et al., 2020).

**Workplace Deviant Behaviours:** Among the staff of higher institutions, workplace deviance is prevalent, with cases such as sexual harassment, embezzlement, irregularities, extortion, and fraud (Obalade & Mtembu, 2023).

**Systemic Corruption:** Corruption is associated with higher education. It is not merely isolated incidents but rather a common phenomenon that violates ethical norms and negates the core values of education (Amini-Philips & Ogbuagwu, 2017). According to Asiyai (2015), it can include corruption related to admission, financial corruption, and corruption related to accreditation. Experts thus observe that corruption erodes public trust in universities and ultimately inhibits the quality of education (Denisova–Schmidt, 2025).

#### 4. Human Resource Problems

The tremendous human resource issues that arise when considering both academic and non-academic staff can affect the quality of education:

**Inadequate Academic Staff:** Public universities suffer from an insufficient number of academic staff, which in turn results in poor quality teaching and learning (Jacob et al., 2021; Jacob & Lawan, 2020).

**Brain Drain:** Remuneration is poor, and welfare for lecturers is inadequate, leading to better academics migrating abroad in search of opportunities (Iruonagbe et al., 2015; Juliet et al., 2019).

**Poor Staff Development:** Often, there is a lack of capacity development for academic staff, which lacks support for both professional advancement and the improvement of overall instruction quality (Jacob & Lawan, 2020).

#### 5. Policy Inconsistencies and Curriculum

The Curriculum and policy on education directly affect other issues:

**Old Curricula:** Many public universities still use outdated curricula and textbooks, hindering their ability to keep pace with contemporary global standards and industry needs (Iruonagbe et al., 2015).

**Uncoordinated Policies:** Complications in the Nigerian educational system make improving higher education difficult due to poorly articulated ideologies and inconsistent policies (Udefi, 2015).

The most critical aspects of the challenges confronting public universities in Nigeria are interlinked, forming a web of issues that require more comprehensive and sustained intervention. One of these problems directly stems from and is exacerbated by the fundamental funding deficits and infrastructural decay, resulting in rampant corruption and administrative inefficiencies. Policymakers must address these factors if this country's higher education sector is to be revived and allowed to play its vital role in national development.

## **Review of Related Literature on the Potential of AI to Address Critical Challenges Facing Public Universities in Nigeria**

AI practices in higher education present a transformative opportunity to address many challenges currently confronting Nigeria's public universities. Although each issue has its own implementation considerations, AI is exceptionally well-positioned to suggest novel solutions for enhancing academic integrity, resource management, other administrative functionalities, and teaching methods.

### **1. Academic Integrity Enhancement and the Battle Against Corruption**

Academic misconduct and institutional corruption are among the most pressing challenges faced by public universities in Nigeria. In this area, AI monitoring systems hold great promise:

**Detection of Academic Misconduct:** With its finely tuned algorithms, AI can identify various forms of academic dishonesty, including plagiarism, contract cheating, and data manipulation (Balalle & Pannilage, 2025). This is important in protecting the integrity of qualifications and upholding ethical standards (Balalle & Pannilage, 2025).

**Anti-Corruption Measures:** Experts anticipate that AI will play a significant role in combating corruption. To achieve this, it analyses bulk data and predicts corruption risks, identifying irregularities in procurement, financial transactions, and administrative processes (Köbis et al., 2021; Rey-Puech et al., 2025). The management has been proactive in combating the endemic corruption that has ravaged university administration, a dark cloud hanging over higher education in Nigeria (Amini-Philips & Ogbuagwu, 2017).

**Assessment and Feedback Integrity:** AI can significantly enhance assessment and feedback processes, addressing some long-standing issues of effectiveness and quality in Nigerian higher education. Researchers rely on more regular, often skewed, evaluation approaches (Agbarakwe & Chibueze, 2024).

### **2. Enhancing Administration, Governance, and Operational Efficiency**

Nigerian universities face numerous challenges, including poor administration, governance issues, and operational inefficiencies. The management can use AI to revamp these processes:

**Automation of Administrative Work:** AI can automate administrative tasks ranging from student admission to curriculum planning, assessment, and even the issuance of transcripts and degrees (George & Wooden, 2023). It thus saves time and streamlines administrative practices (Olayinka et al., 2024).

**Greater Operational Efficiency and Decision-Making Through the Use of AI Tools:** AI can enhance administrative efficiency and facilitate better decision-making by university administrators through data analysis (Khan et al., 2025; Patel & Ragolane, 2024). Our vision of a "smart university" that can perform 90 per cent of its work independently through AI is becoming a reality (George & Wooden, 2023).

**Diminishing Operational Burden:** AI can facilitate the strategic transformation of ensuring higher education becomes more effective by reducing operational burden on human resources, allowing them to focus on more complex tasks (George & Wooden, 2023; Olayinka et al., 2024).

### 3. Addressing Inadequate Funding and Resource Management

AI can directly improve funding, but the existing resources may have a chance of being optimised for their utilisation following better financial management:

**Financial Operationalisation and Predictive Analytics:** AI can enhance educational financial management by automating routine processes, improving prediction and scenario analysis for budgeting, and supporting the strategic allocation of available resources (Lin & Yu, 2023).

**Resource Optimisation:** AI tools help achieve sustainability goals by optimising energy and managing other resources (Khan et al., 2025). Such applications may also extend to macro-planning and quality allocation, thereby providing modest growth in backward performance on efficiency in the education industry under circumstances where traditional performance measures prove dysfunctional (Petropoulos et al., 2023).

### 4. Modernising Curriculum and Staff Development

Obsolete curricula and no continuous staff development are further crucial areas through which AI can provide solutions:

**Curriculum Development and Personalised Learning:** AI can support curriculum development and provide personalised, adaptive learning to students (George & Wooden, 2023; Ocen et al., 2025; Olayinka et al., 2024). This is beyond passive traditional approaches to teaching.

**Enhancing Instruction and Learning:** AI tools are praised for improving instruction and learning, helping instructors create methods, and offering alternative ways to inspire students (Ocen et al., 2025; Artyukhov et al., 2024). In this way, students are equipped with the critical thinking and technology skills necessary for an evolving environment (Olayinka et al., 2024).

### Challenges and Considerations for AI Implementation in Nigeria

It is, however, challenging to meaningfully apply AI in Nigerian public universities. This is a result of the complications listed below that management must address:

**Infrastructural difficulties:** A common feature of poor developing countries like Nigeria is the significant limitations in infrastructure, such as poorly developed technological systems and shockingly poor internet access, which limit the full benefit of AI (Bali et al., 2024; Olayinka et al., 2024). Financial constraints further inhibit the development of such infrastructure (Bali et al., 2024).

**Ethical dilemmas in data protection:** AI education applications raise concerns about data privacy and algorithmic bias (Patel & Ragolane, 2024; Artyukhov et al., 2024). These require nuanced navigation and the development of new regulatory frameworks (Lin & Yu, 2023).

**Awareness and cultural barriers:** There is limited awareness among teachers and administrators about the importance of AI and its practical application. Cultural and socioeconomic differences may also hinder progress (Olayinka et al., 2024; Patel & Ragolane, 2024).

**Need for Policy and Training:** These infrastructural limitations, ethical issues, and lack of strategic frameworks, including efficient policies and practical training of staff and students, would need to be addressed if AI is to be integrated effectively (Patel & Ragolane, 2024).

AI is derived from the above important deductions, as its application offers the strongest possible solution to many critical issues in a Nigerian public university, including safeguarding academic integrity, addressing corruption, and improving administrative efficiency. It will further modernise the delivery of education. However, realising such benefits would require well-coordinated efforts to carefully clear the infrastructural, financial, ethical, and awareness-related hurdles, ensuring that AI implementation is strategic and practical.

## **Review of Related Literature on Proposing a Comprehensive Model for Implementing AI-Driven Monitoring Solutions in Nigerian Public Universities**

In Nigeria's public universities, AI/ML monitoring systems require a comprehensive model integrating strategic vision, robust infrastructure, personnel development, governance, and evaluation. The literature suggests that while AI offers transformative opportunities to address the challenges faced by public universities, a structured approach is necessary for successful adoption and the development of sustainable systems (George & Wooden, 2023; Patel & Ragolane, 2024).

### **1. Strategic Vision and Institutional Models for AI Adoption**

A rigorous model begins with a clearly expressed strategic vision that ties AI integration to the university's primary objectives. This involves recognising AI as a mechanism for institutional change and a means to gain a competitive advantage (George & Wooden, 2023). Various institutional models for AI implementation exist, ranging from enhancing existing educational models with AI to expanding them through new AI-enhanced practices and processes (Rughiniş et al., 2025). Public universities in Nigeria should emphasise developing a vision to enhance learning outcomes, bolster administrative efficiencies, and manage academic honesty (Agbarakwe & Chibueze, 2024; Patel & Ragolane, 2024). The goal is to create "smart universities" that can automate the university's administrative role, curriculum development, assessment, and perhaps, other academic processes. (George and Wooden, 2023). The impetus for change and the adoption of AI in the educational space is low despite the need (Bali et al., 2024). African higher education needs strategic goals for implementing AI (Falebita & Kok, 2024).

### **2. Confronting Infrastructure Challenges and Readiness**

One of the most significant challenges of adopting AI solutions in developing countries, such as Nigeria, is the extreme infrastructure challenge (Bali et al., 2024). Many universities lack proper infrastructure, adequate financial resources, and stable internet connectivity, which hinders their ability to fully leverage the benefits of AI (Bali et al., 2024; Rana et al., 2024). Thus, an integrated model must place a premium on:

**Infrastructure improvement:** This could encompass investment in a strong network connection, computational capacity, and secure storage solutions (Patel & Ragolane, 2024).

**Financial Planning:** Insecure financial barriers that preclude the establishment of necessary infrastructure need to be addressed (Akinola, 2023; Bali et al., 2024), such as exploring funding models, partnerships, and lower-cost AI solutions.

**Cybercrime Risk Management:** It is essential to develop a framework for addressing cybercrime risks to support and protect AI systems and sensitive university data from exposure and breaches, which can result in significant financial, social, and intellectual property losses (Badamasi & Utulu, 2021).

### 3. Development of Human Capital and Capacity Building

The application of AI in a university ecosystem relies heavily on the readiness and adeptness of the institution's human component. A comprehensive model should detail:

**Training and Skill Building:** The trilateral training of the academy, administration, and students is paramount. In addition to promoting AI literacy, stakeholders must understand what AI can do, thereby preparing them for the evolution of teaching and learning inclusion in day-to-day educational practices (Akinola, 2023; Sanusi et al., 2024).

**Fostering Expertise:** A pressing concern is the AI knowledge gap and preparing local experts to oversee the development and maintenance of AI systems (Rana et al., 2024). Efforts to narrow the gap involve partnerships, developing specific training programs tailored to the technology, or recruiting skilled workers outside the university.

**Facilitating Acceptance:** Although some individuals may oppose the acceptance of AI-related technology, it remains a crucial factor in faculty and student use (Akinola, 2023). Attention to some socio-cultural dynamics can also inform student engagement with AI technology (Essien et al., 2024).

### 4. Policy, Governance, and Ethical Frameworks

AI-based monitoring tools require robust policy and ethical frameworks to ensure their responsible and equitable use. Academic institutions often lack robust policy frameworks that acknowledge the use of AI by students in any academic endeavour, which is crucial for ensuring political, institutional, and educational accountability (Balalle & Pannilage, 2025). A practical, comprehensive, and integrated model should have:

**Ethical Frameworks:** Establishing clear ethical frameworks for AI use when and where required; frameworks mindful of data privacy, security, and accountability, especially regarding algorithms governing monitoring (Chan, 2023). This includes highlighting areas of ethical dilemma in using AI for research writing (Ugwu et al., 2024). Responsible AI on the African continent necessitates governmental support and regulation for the equitable use of AI and protection against misuse or harmful applications (Okolo et al., 2022).

**Regulatory Frameworks:** Who engages in the development of regulatory frameworks strategically, which reduce the risk of algorithmic bias, misuse of data, and/or potential social

impact (Patel & Ragolane, 2024). A part of responsible AI development and deployment in Africa (Okolo et al., 2022).

**Transparency and trust:** To foster trust in AI systems, ensuring transparency in their operations, including explanations of their purpose and capabilities, is essential. Research on adopting AI in developing nations highlights trust and privacy as key dimensions of importance (Rana et al., 2024). One illustration of a comprehensive educational policy framework for AI in higher education teaching and learning addresses AI's pedagogical, governance, and operational aspects in higher education policy (Chan, 2023).

## 5. Monitoring Solutions

Practising AI in academic integrity monitoring has several aspects:

**Academic Integrity Systems:** The use of AI to identify forms of academic misconduct, such as direct plagiarism and contract cheating, while linking to existing prevention systems and policies, thereby using AI-enhanced academic misconduct behaviours (Birks & Clare, 2023). In addition to existing frameworks, researchers have developed holistic approaches to enhance academic integrity in Gen AI (Habiba & Shadek, 2024; Rasul et al., 2024).

**Assessment and Feedback Processes:** Researchers have utilised AI to enhance the efficiency and quality of assessment and feedback systems, moving beyond simply replacing traditional assessments (Agbarakwe & Chibueze, 2024).

**Proactive Monitoring:** Continuous monitoring through AI using real-time systems to detect anomalies or breaches of integrity to intervene pre-emptively.

## 6. Sustainability, Evaluation, and Adaptation

An extensive framework for implementing AI requires an infrastructure that allows for continuous reflection, adjustment, and sustainability. This will recognise:

**Continuous Reflection and Adjustment:** Ongoing reflection on the effectiveness of the AI solutions and adjustments, as needed.

**Scalability:** Building to scale across multiple departments and potentially more broadly across universities (Mahajan, 2025).

**Flexibility and Adaptability:** Ensuring ways of being adaptable in its model that responds to a range of modes by diversifying experience in the education and can respond to different context that arises in real time, as AI is not just one thing, and should have institutional frameworks that could mirror the different visions across the field of commitment (Mahajan, 2025; Rughiniş et al., 2025).

The compilation of the previous literature review revealed that Nigerian public universities face challenges in adopting AI-based monitoring solutions, which are essential for their operations. This is not impossible, but requires a larger framework that looks to strategically plan, develop infrastructure, plan development of human capital, create consensus on ethics, and have an implementation strategy that fits with the mode of institution to leverage AI in order to provide a more effective and reputable higher education experience and improve issues related to academic integrity and administrative efficiency.

## Theoretical framework

The Unified Theory of Acceptance and Use of Technology is the most relevant theory for the study.

### Unified Theory of Acceptance and Use of Technology (UTAUT)

Under the original framework developed by Venkatesh et al., the UTAUT model is the most recognised framework for understanding technology adoption. It identifies the main determinants of behavioural intention and actual usage (Haroud & Saqri, 2025). The UTAUT model draws on aspects from several previous acceptance models and seeks to further our understanding of how people accept and use new technology.

### Reason for appropriateness of UTAUT for this Study:

1. **User acceptance and use focus.** The study topic is relevant to the implementation of AI monitoring systems. It is closely aligned with the use and acceptability of technology by multiple stakeholders in Nigerian public universities, such as students, faculty, and other administrative staff. UTAUT was developed by researchers, specifically to predict and explain user behavioural intentions and behaviours towards technology (Wu et al., 2022).

2. **Relevance to Developing Countries:** Researchers have also successfully utilised the UTAUT framework to study technology adoption in universities in developing countries, including Nigeria (Alabi & Mutula, 2020; Nicholas-Omoregbe et al., 2017; Rana et al., 2024). This further affirms the utility and strength of the UTAUT framework in contexts reflective of those in public universities in Nigeria. Public universities in Nigeria face unique challenges such as infrastructural issues, financial issues, and a lack of expertise, among other things (Rana et al., 2024).

3. **Key Constructs for Parallel Implementation:** UTAUT suggests that using a technology may be predominantly influenced by four key constructs (Haroud & Saqri, 2025):

**Performance Expectancy:** The extent to which one believes the system will benefit performance enhancement. In this study, this may relate to how AI monitoring enhances academic integrity or supports streamlined administrative functions.

**Effort Expectancy is the** extent to which an individual believes the system will be easy to use. In this regard, it may relate to how the user views the ease of use and management of the AI monitoring system.

**Social Influence:** The degree to which an individual's perception of other persons of significance to him or her endorses the individual's use of the new system. This may be especially significant in the university context, where considerations of this construct —peer pressure, institutional commitment, and support from leadership— are relevant.

**Facilitating Conditions:** This construct refers to the extent to which an individual believes organisational and technical resources are available. It addresses issues directly related to infrastructure and support for Nigerian universities.

4. **Extensibility and Adaptability:** The UTAUT model can expand to include additional constructs relevant to the research focus. For example, Rana et al. (2024) used a "Trust and Privacy-Augmented UTAUT Framework" to examine AI adoption in academia in developing countries.

Given the issues of privacy, surveillance, and fairness with AI monitoring systems, researchers have added trust and privacy to the UTAUT framework to understand acceptance and use better, particularly concerning academic integrity. Researchers can also apply ethical concerns as constructs in the UTAUT framework to understand continuous use behaviour (Baig & Yadegaridehkordi, 2025).

**5. Applicability Across a Variety of Technologies:** UTAUT is fungible in evaluating the adoption of different technologies in the higher education space, including e-learning systems (Khlaif et al., 2024), mobile apps (Sergeeva et al., 2025), and generative AI tools (Strzelecki, 2023). This suggests that researchers use UTAUT interchangeably to assess AI monitoring systems.

The UTAUT theoretical framework can assist researchers in considering the factors that inform acceptance and continued use of AI monitoring systems. It can also identify likely inhibitors and facilitators of success, thereby enhancing integrity.

## **Conclusion**

Research into integrity enhancement in the public universities of Nigeria through AI monitoring mechanisms has shown a remarkable avenue for addressing the endemic issues of academic misconduct, corruption, and ineffective use of resources for administrative tasks. The literature review reveals several issues facing public universities in Nigeria, including a culture of corruption, irregularities in assessment, and capacity limitations. Proactively, AI can help detect academic fraud and improve administrative processes. When policymakers use data and evidence to inform policy, practice, and experience, it enhances evidence-informed decision-making. Successful implementation is achievable through a structured approach that includes visioning, strengthening infrastructure, ensuring comprehensive human capital training, and establishing a solid ethical model. The implications of not addressing pre-existing challenges in implementing AI in Nigerian public universities include the need for the Government to consider resources for structural reform, infrastructure levels, and specific cultural aspects. With a holistic model prioritising all these avenues, Nigerian public universities can leverage effective AI to enhance academic integrity and improve the quality and legitimacy of academic delivery. This study emphasised the need for a collective response by policymakers, educational leaders, and stakeholders to reform the higher education culture, improve ethical practice, and enhance performance, thereby establishing and sustaining a reputation of quality and relevance. This would enhance the status and appeal of Nigerian higher education globally and nationally.

## **Recommendations**

The following recommendations are made based on findings from the research:

1. Policymakers should develop a national policy for AI that will address ethics, privacy, and implementation guidance through fair and ethical practices. They should also prioritise and dedicate funding to address digital infrastructure (e.g., reliable internet and computing). Furthermore, policymakers should establish an organisation/agency to maintain oversight over the ethical implementation, assess systems, and ensure compliance. The researchers also recommend that the Government provide grants and incentives to support universities in investing in AI and conducting research on AI in education.

2. Educational leaders should develop a strategic plan for AI adoption at the institutional level while considering aims and integrity challenges. Design comprehensive training for faculty and students aimed at being ethical AI users, along with the effective use of AI. Review and update university policies regarding academic integrity and administration to reflect the use of AI monitors. Seek partnerships with technology companies, researchers, and organisations for extra support that leverage their background and/or resources. Promote a university culture prioritising data stewardship and responsible transparency in using AI.

3. Higher education stakeholders must be proactive about AI training and realise its importance for surveillance and data analysis. Speak to university management to provide feedback on AI systems. Always engage in ethically focused academic and professional practices and utilise AI to support educational integrity systems. Advocate for AI systems to be transparent and equitable and to uphold user privacy.

4. Researchers should design studies that assess the effectiveness of AI for monitoring, costs, and socio-cultural aspects in Nigeria. They should develop AI technologies that consider Nigeria's specific educational challenges and data types and are tailored to the country's unique needs. They should critically reflect on and suggest improvements to any ethical frameworks so that AI systems are unbiased and do not violate rights. They should disseminate research findings to inform policymakers, benefiting them and informing future implementations of AI.

5. Society should support the AI modernisation of public universities for national development. Society should hold institutions and policymakers accountable for AI's ethical and practical implementation. Society should emphasise the importance of integrity-driven higher education as a key resource for developing skilled human capital in a moral society. Society should engage in informed discussions about how AI is integrated into education and participate in ethical public debates about its benefits and risks.

### **Implications of Findings**

The investigation into enhancing integrity in Nigerian public universities through AI monitoring systems has important implications for stakeholders. It highlights the need for collaborative action to leverage AI capabilities and mitigate associated problems.

### **Implications for Policymakers**

Policymakers are responsible for creating and enacting comprehensive policy frameworks on using AI in higher education, which centres on academic integrity, data privacy, and ethics. This involves frameworks to inform the appropriate use of AI, data collection, access, and security. Policymakers should also dedicate funding and support the development of robust, foundational digital infrastructure at public universities. Access to reliable internet, computing facilities, and protected data storage is indispensable when developing comprehensive AI monitoring systems. A national strategy for implementing AI in the educational landscape is necessary to give institutions the capacity and support to adopt these technologies successfully. The national strategy should also include supporting intellectual property rights and data governance topics. At the institutional level, school management may establish regulatory bodies or mechanisms to govern ethical use and

continuous review of these monitoring systems, ultimately targeting misuse, equity, and the rights of students and staff.

### **Implications for Educational Leaders**

University leaders need to develop a clear strategic vision for incorporating AI that reflects an institution's academic excellence and integrity values. Developing this strategy involves supporting AI, discussing possible positive outcomes, and addressing opposition. They need to consider how best to apportion limited resources, including software that enhances instruction, infrastructures needed to incorporate the ideas, and training supports to promote AI, to support AI. They must also consider partnerships and alternative funding mechanisms to promote AI plans. Educational leaders need broad strategies and engagement plans for training related to the ethical and practical use of AI monitoring systems for faculty, administrators, and students. Making this training a priority will ensure widespread adoption and allow the institution to combat potential cultural resistance. Educational leaders will review and update previously passed institutional policies related to academic integrity, assessment, and data management that do not incorporate AI-driven approaches. New policy guidelines must be transparent, fair, and compliant with applicable laws.

### **Implications for Stakeholders in Higher Education**

Monitoring AI systems can support increased accountability for students and staff, fostering a more transparent academic culture. This can restore confidence in the legitimacy of the qualifications. Students can experience fair assessment and timely feedback with AI tools. These factors can help improve the educational experience for students. Faculty can do the same for teaching and research, reducing the need for administrative tasks and promoting student-focused experiences. To successfully adapt to this new academic culture, all stakeholders must develop digital literacy and a basic understanding of AI. Stakeholders will need to engage with one another to discuss and provide feedback on the ethical implications of using AI, while also promoting fairness and equity in the eventual application of these systems. The industry can support these efforts by partnering with universities on technology transfer and curriculum development.

### **Implications for Researchers**

AI monitoring systems provide new research directions in AI ethics, algorithmic bias, data privacy, AI's effectiveness in identifying suspected misconduct, and the socio-cultural implications of AI, specifically in the context of higher education in Nigeria. Interdisciplinary collaboration requires research from multiple disciplines; it involves individuals with experience in AI, education, ethics, law, and social sciences working together to create meaningful and contextually relevant solutions. Researchers can provide critical, evidence-based advice to policymakers and educators who need to understand best practices for using AI systems, validate the system's effectiveness, and identify unintended outcomes. Research from Nigeria would also have global implications for the discourse on AI in education, particularly in addressing the implementation issues in developing countries with diverse challenges.

### **Implications for Society**

AI monitoring systems promote academic integrity, crucial for producing credible, competent, and ethical professionals to advance national development and prepare a skilled workforce. A

transparent and integrity-focused higher education system can revitalise confidence and credibility in the reputation of Nigerian universities on a national and global scale. A viable higher education sector with integrity, supported by AI mentorship, can attract investment, promote innovation, and enhance its potential to contribute to Nigeria's economic and social development success. Successful and ethical universities that utilise AI modelling can develop models for the responsible use of AI in other sectors of society, fostering a culture of technological advancement alongside ethical approaches.

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