INTEGRATION OF ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCE MANAGEMENT IN NIGERIAN TERTIARY INSTITUTIONS FOR EFFECTIVE MANAGEMENT.

By

Nwankwo Nkechi Chinelo, Ph.D.
Department of Educational Management
Chukwuemeka Odumegwu Ojukwu University Igbariam.
kakaluv30@gmail.com

Abstract

This paper explored Integration of Artificial Intelligence in Human Resource Management in Nigerian tertiary institutions for Effective Management. Depending on secondary data obtained from recognized online and print resources. The paper concluded that enhanced recruitment and talent acquisition, improved performance management, automation of routine hr tasks, predictive workforce planning, enhanced employee engagement and retention, data-driven decision making and contribution to institutional sustainability are benefits of integrating artificial intelligence (AI) into human resources management (HRM) in Nigerian tertiary institutions, limited technological infrastructure, high cost of implementation, lack of skilled personnel, data privacy and security concerns, resistance to change, algorithmic bias and ethical issues and regulatory and policy gaps are the challenges hindering integration of AI into human resources management of tertiary institutions in Nigeria. Based on the findings, the paper recommends; strengthening technological infrastructure in tertiary institutions, provide capacity-building and training, implement data privacy and security measures, adopt ethical AI and mitigate bias, foster change management and stakeholder engagement, develop policy and regulatory frameworks, promote cost-effective and scalable AI solutions and align AI deployment with sustainable development goals (SDGS).

-**Keywords:** Artificial Intelligence, Human Resource Management, tertiary institutions

1.0 Introduction

The rapid advancement of artificial intelligence (AI) is reshaping administrative and decision-making processes across sectors worldwide. In Nigerian tertiary institutions—universities, polytechnics, and colleges of education—human resources management (HRM) faces persistent challenges such as inefficient recruitment processes, manual personnel records, opaque promotion

and appraisal systems, high administrative overheads, and difficulties in talent retention. Deploying AI-driven tools (for example: intelligent recruitment screening, predictive analytics for staff development, automated payroll and benefits processing, and chatbots for routine employee queries) promises to transform HRM from a largely transactional function into a strategic partner that supports institutional goals and long-term sustainability.

For tertiary institutions in Nigeria, sustainable development depends not only on infrastructural investment and curriculum quality but also on effective people management. AI can improve HR efficiency and transparency, reduce bias in selection and promotion when carefully designed, support continuous professional development through personalized learning recommendations, and provide evidence-based workforce planning to match staffing to evolving academic needs. These improvements can lower costs, free senior administrators for higher-order strategic work, and enhance institutional resilience—contributing directly to institutional sustainability and national development goals.

However, the introduction of AI into HRM is not without risks: data privacy and security concerns, potential algorithmic bias, digital skills gaps among administrators and staff, infrastructural constraints (reliable power and internet), and policy or regulatory gaps in the Nigerian context. Any deployment must therefore be sensitive to local realities, include stakeholder engagement (faculty, non-academic staff, unions), and be accompanied by clear governance, capacity-building, and ethical safeguards.

This study examines the potential and practicalities of deploying AI in HRM within Nigerian tertiary institutions. It aims to (1) map AI applications relevant to HR functions in the tertiary sector, (2) evaluate expected benefits for institutional sustainability, (3) identify contextual challenges and ethical considerations specific to Nigeria, and (4) propose actionable recommendations and governance frameworks for safe, equitable, and effective AI adoption in HRM. By situating technological possibilities within institutional and socio-economic realities, the work seeks to guide policymakers and university managers toward deployments that strengthen both human-capital management and sustainable development outcomes.

2.0 Conceptual Terms

2.1 Concept of Tertiary Institutions

Tertiary institutions refer to post-secondary educational establishments that provide advanced academic, professional, and vocational training beyond the secondary school level. They include universities, polytechnics, colleges of education, and specialized institutes. These institutions play a critical role in national development by producing skilled manpower, advancing research, and fostering innovation (Okebukola, 2018).

2.2 Concept of Artificial Intelligence (AI)

Artificial Intelligence is the branch of computer science that focuses on creating machines capable of performing tasks that typically require human intelligence, such as learning, reasoning, problem-solving, and decision-making (Russell & Norvig, 2021). In organizational contexts, AI is deployed for predictive analytics, automation of routine processes, data-driven decision-making, and enhancing operational efficiency. Ogunode and Ukozor (2023) conceptualized Al as programs designed with human-like intelligence and structured in the forms of computers, robots, or other machines to aid in the provision of any kind of service or tasks to improve the social economic and political development of the society. Artificial Intelligence is an application or program constructed to carry out tasks with human-like intelligence. Artificial intelligence (AI) as simulation of human intelligence by software-coded heuristics. Artificial Intelligence is a branch of science producing and studying the machines aimed at the stimulation of human intelligence processes (Frankenfield 2023). Artificial intelligence (AI) in this paper can be seen as machine designed with similar human intelligence to function and execute tasks that hum being can do. Artificial intelligence (AI) are machines with high level of intelligence similar to that of human being that enable them to carry out complex tasks and responsibilities. The integration of Artificial Intelligence (AI) into the educational management has gained significant attention in recent years as a potential catalyst for educational development especially in the university education. AI facilities are globally used in all aspect of the universities ranging from the administration, management to supervision and classroom management.

2.3 Concept of Human Resources Management (HRM)

Human Resources Management is the strategic approach to managing an organization's workforce to maximize employee performance and contribute to the achievement of organizational goals. HRM involves recruitment, training and development, performance appraisal, compensation, and employee relations (Armstrong, 2020). In tertiary institutions, effective HRM ensures that academic and non-academic staff are well-managed to support teaching, research, and institutional development.

Human Resources Management (HRM) is the governance and administration of a workplace's personnel. It encompasses various practices and processes that aim to optimize employee performance and well-being, as well as promote a positive work culture. HRM involves a wide range of responsibilities, including employee recruitment, training and development, performance management, compensation and benefits, and employee relations. HRM also deals with legal compliance, workplace safety, and employee engagement. Through HRM, organizations can effectively manage their human capital and ensure their employees' success and satisfaction at work.

Human Resources Management (HRM) is a crucial aspect of any organization. It is responsible for managing the most valuable asset of any company - its employees. HRM encompasses a wide range of tasks, such as hiring, training, performance evaluations, and managing employee

relations. It also includes benefits administration, compliance with labor laws, and creating policies that promote a healthy work environment for employees. The success of an organization heavily relies on the effectiveness of its HRM practices. By optimizing HRM, companies can attract, retain, and develop a talented workforce, thereby driving the growth and success of the organization.

2.4 Concept of Sustainable Development

Sustainable development refers to meeting present needs without compromising the ability of future generations to meet their own needs. It integrates economic growth, social inclusion, and environmental protection (United Nations, 2015). In the context of tertiary institutions, sustainable development involves efficient use of resources, fostering innovation, promoting inclusive policies, and building human capacity that contributes to long-term societal and economic growth.

Sustainable development is a concept that aims to meet the needs of the present without compromising the ability of future generations to meet their own needs. It involves finding a balance between economic growth, environmental protection, and social well-being. The concept of sustainable development has been gaining importance in academic research, as it has become increasingly clear that our current patterns of consumption and production are not sustainable in the long term. Through various methods such as renewable energy, sustainable agriculture, and responsible resource management, sustainable development seeks to create a more resilient and equitable world for all. It is a crucial concept in today's world as we face challenges such as climate change, loss of biodiversity, and widening social inequalities.

Sustainable development is a concept that addresses the interdependence of social, economic, and environmental factors to ensure the long-term well-being of current and future generations. It aims to create a balance between meeting the needs of the present without compromising the ability of future generations to meet their own needs. This includes promoting economic growth, social inclusion, and environmental protection. Sustainable development requires equal consideration of economic, social, and environmental factors in decision-making processes, as well as the integration of sustainable practices into daily life. By promoting sustainable development, we can strive towards a more prosperous and equitable world for all

3.0 Method

Integration of Artificial Intelligence in Human Resource Management in Nigerian tertiary institutions for Effective Management is a position paper that adopted a systematic literature review-based method. The method allows to collect and review the related previous literature from various online sources. With the aid of digital platform, the researcher collected secondary information to generate knowledge on this topic from 2015-2025. The position paper followed qualitative narrative design method. The researcher has visited different online sites to collect the previous literature and analyze the Integration of Artificial Intelligence in Human Resource

Management in Nigerian tertiary institutions for Effective Management. The previous findings are critically analyzed and presented in different themes as on the Integration of Artificial Intelligence in Human Resource Management in Nigerian tertiary institutions for Effective Management (Adapted from Ogunode, 2025).

Inclusion and exclusion criteria

Inclusion

This output of the literatures on the Integration of Artificial Intelligence in Human Resource Management in Nigerian tertiary institutions for Effective Management presents an in-depth study and result that can infer conclusion on the topic. The study includes: online publication; conference paper, journals sorted from reputable international journals such as CEON, Elsevier, Hindawi, JSTOR, IEEE, Learn Techlib, SAGE, Nebraska and Springer (Adapted from Ogunode, 2025v).

Exclusion

Also, the literature review excludes information from edited books, preprints, monographs, information below 2015 and book chapters (Adapted from Ogunode, 2025).

4.0 Result and Discussion on benefits of integrating Artificial Intelligence (AI) into Human Resources Management (HRM) in Nigerian tertiary institutions:

The integration of Artificial Intelligence (AI) into Human Resources Management (HRM) is increasingly recognized as a strategic innovation capable of transforming administrative efficiency and institutional effectiveness in tertiary institutions. In Nigerian universities, polytechnics, and colleges of education, HR departments play a critical role in managing academic and non-academic staff, ensuring productivity, and supporting institutional goals. The adoption of AI technologies in HRM offers numerous benefits ranging from improved recruitment processes to enhanced sustainability outcomes. The major benefits of integrating AI into HRM in Nigerian tertiary institutions are discussed below.

Enhanced Recruitment and Talent Acquisition

One of the most significant benefits of AI integration into HRM is improved recruitment and talent acquisition. AI-powered recruitment tools can automate job postings, screen large volumes of applications, and shortlist candidates based on predefined criteria such as qualifications, experience, and competencies. In Nigerian tertiary institutions where recruitment exercises often attract thousands of applicants, AI systems reduce human bias and administrative bottlenecks by ensuring objective and transparent selection processes. Additionally, Ogunode, & Ukozor, (2023) AI-driven tools such as applicant tracking systems and intelligent assessment platforms enable institutions to identify high-quality academic and administrative talent more efficiently. This enhances the ability of institutions to attract skilled lecturers, researchers, and support staff critical

to academic excellence. AI can streamline the recruitment process in tertiary institutions by automating candidate screening, matching qualifications to job requirements, and predicting candidate suitability using data analytics. This reduces the time and cost associated with manual recruitment and minimizes human biases in selecting academic and non-academic staff (Kaplan & Haenlein, 2020).

Improved Performance Management

AI technologies significantly enhance performance management systems by enabling continuous and objective evaluation of employee performance. Traditional performance appraisal methods in Nigerian tertiary institutions are often manual, subjective, and irregular. AI-based performance management systems use data analytics to track key performance indicators such as teaching effectiveness, research output, administrative efficiency, and professional development activities. These systems provide real-time feedback, enabling staff to identify strengths and areas for improvement. As a result, performance management becomes more transparent, evidence-based, and aligned with institutional goals, fostering a culture of accountability and continuous improvement (Ogunode1 Idoko, & ThankGod, 2024).. AI enables institutions to collect and analyze performance data of staff systematically. Predictive analytics can identify areas where employees excel or need development, enabling personalized training programs. This ensures that staff performance aligns with institutional goals (Davenport & Ronanki, 2018). AI tools can track teaching effectiveness, research output, and administrative efficiency, providing evidence-based recommendations for promotions or professional development.

Automation of Routine HR Tasks

The automation of routine and repetitive HR tasks is another major benefit of AI integration. AI applications such as chatbots, robotic process automation, and intelligent workflow systems can handle tasks like payroll processing, leave management, staff records updating, and responding to routine HR inquiries. In Nigerian tertiary institutions, where HR departments are often understaffed and burdened with administrative workloads, automation reduces errors, saves time, and improves service delivery (Ogunode, Okolie, & Chinedu, 2023). This allows HR professionals to focus on strategic functions such as staff development, workforce planning, and policy implementation, thereby increasing overall organizational efficiency. AI can automate repetitive administrative functions such as payroll processing, leave management, attendance tracking, and benefits administration. This reduces administrative burden, minimizes errors, and frees HR staff to focus on strategic tasks that enhance institutional development (Bersin, 2019). AI-powered chatbots can handle employee inquiries about leave policies, benefits, or regulations, improving efficiency and staff satisfaction.

Predictive Workforce Planning

AI enhances workforce planning through predictive analytics, which enables institutions to anticipate future staffing needs and challenges. By analyzing historical data on staff turnover,

retirement trends, workload distribution, and student enrollment, AI systems can forecast manpower requirements and skills gaps ((Raghavan et al., 2020). In Nigerian tertiary institutions facing issues such as aging academic staff and uneven staff distribution across departments, predictive workforce planning supports proactive decision-making. This ensures timely recruitment, succession planning, and targeted capacity building, thereby preventing disruptions in teaching, research, and administration. AI can analyze trends in staff turnover, retirement, and recruitment needs to help tertiary institutions plan their workforce effectively. This ensures continuity in teaching, research, and administrative functions (Chaudhuri et al., 2021). Predictive models can alert management about potential staff shortages in critical departments, allowing proactive hiring or training interventions.

Enhanced Employee Engagement and Retention

Employee engagement and retention are critical to institutional stability and performance. AI-powered HR tools contribute to improved staff engagement by providing personalized learning opportunities, career development recommendations, and timely feedback mechanisms. For example, AI-driven learning management systems can suggest training programs based on individual career goals and performance data. Furthermore, sentiment analysis tools can assess employee satisfaction through surveys and feedback platforms, enabling management to address concerns promptly. In Nigerian tertiary institutions, where staff morale can be affected by workload, delayed promotions, or limited resources, AI-supported engagement strategies help improve job satisfaction, loyalty, and retention. AI applications can monitor employee engagement through sentiment analysis of staff feedback, surveys, and performance reviews. Institutions can use these insights to implement policies that improve staff morale and reduce turnover (Marler & Boudreau, 2017). Personalized career development recommendations and recognition systems powered by AI can enhance motivation and retention among academic and non-academic staff.

Data-Driven Decision Making

AI facilitates data-driven decision-making by transforming large volumes of HR data into actionable insights. HR managers in tertiary institutions can use AI analytics to make informed decisions on recruitment, promotion, training, and compensation ((Olaleke et al., 2020). This reduces reliance on intuition or manual judgment and enhances transparency and accountability in HR practices. In the Nigerian context, where institutional decisions are often scrutinized for fairness and compliance, data-driven HRM strengthens governance and builds trust among staff and stakeholders. Evidence-based decisions also improve resource allocation and institutional planning. AI allows HR managers to make informed decisions based on real-time data analytics rather than intuition. Strategic decisions related to promotions, workforce deployment, training needs, and compensation become more objective and transparent (Chaudhuri et al., 2021). An AI dashboard could provide management with insights on which departments are underperforming, guiding targeted interventions to improve institutional effectiveness.

Contribution to Institutional Sustainability

The integration of AI into HRM contributes significantly to the overall sustainability of tertiary institutions. By improving efficiency, reducing operational costs, and optimizing human capital utilization, AI supports financial sustainability. Environmentally, digital and AI-driven HR processes reduce paper usage and administrative waste, promoting eco-friendly practices ((United Nations, 2015). Socially, fair recruitment, unbiased performance evaluation, and improved staff welfare foster inclusive and equitable work environments. Collectively, these outcomes align with sustainable development goals and enhance the long-term resilience and competitiveness of Nigerian tertiary institutions. By improving efficiency, transparency, and employee satisfaction, AI-driven HRM contributes to the sustainable development of tertiary institutions. Optimized HR processes reduce wastage, promote accountability, and create a work environment conducive to innovation and academic excellence (United Nations, 2015).

B- Challenges of integrating Artificial Intelligence (AI) into Human Resources Management (HRM) in Nigerian tertiary institutions:

The integration of Artificial Intelligence (AI) into Human Resources Management (HRM) has the potential to significantly improve efficiency, transparency, and decision-making in tertiary institutions. However, despite its transformative prospects, the adoption of AI-driven HR systems in Nigerian universities, polytechnics, and colleges of education faces numerous challenges. These challenges are technological, economic, human, ethical, and institutional in nature, and they collectively hinder the effective deployment and utilization of AI in HRM practices.

Limited Technological Infrastructure

One of the major challenges confronting the integration of AI into HRM in Nigerian tertiary institutions is inadequate technological infrastructure. Many institutions struggle with poor internet connectivity, unstable power supply, outdated hardware, and limited access to modern data centers and cloud computing facilities **(**Ogunode, Ayoko, & Ezema, 2022). AI systems require robust digital infrastructure to function effectively, including reliable broadband, high-performance computing systems, and integrated digital databases. In the absence of these foundational technologies, AI tools such as predictive analytics, automated recruitment platforms, and intelligent decision-support systems cannot operate optimally. Consequently, HR departments are unable to fully leverage AI solutions, leading to inefficiencies and reduced confidence in technology-driven HR processes (Okoye & Eze, 2022). Many Nigerian tertiary institutions face infrastructural deficits such as unreliable electricity, slow internet connectivity, and inadequate IT facilities. AI systems require robust digital infrastructure, high-speed internet, and secure data storage facilities. Without these, implementation becomes difficult and costly (Olaleke et al., 2020). Automated HR platforms and AI-driven analytics tools may underperform or fail entirely in institutions lacking reliable IT systems.

High Cost of Implementation

The financial implications of implementing AI-based HR systems pose another significant challenge. AI adoption involves substantial initial capital investment in software licenses, hardware procurement, system integration, and data management infrastructure. In addition to these startup costs, there are recurrent expenses related to system maintenance, upgrades, cybersecurity, and staff training. Nigerian tertiary institutions often operate under limited budgets, with competing demands for funding across academic, administrative, and infrastructural needs (Eze et al., 2021). As a result, AI-driven HR initiatives are often deprioritized or abandoned due to financial constraints, limiting their adoption and scalability. AI technologies, including software, hardware, and maintenance, often involve significant upfront and ongoing costs. Many Nigerian tertiary institutions operate under tight budgets, making it challenging to allocate sufficient resources for AI integration (Adebayo & Akinola, 2021). Deploying AI-based recruitment and performance management systems can be financially prohibitive for smaller universities or colleges of education.

Lack of Skilled Personnel

The effective implementation of AI in HRM requires a workforce with specialized skills in data science, machine learning, information systems management, and AI ethics. However, many tertiary institutions in Nigeria lack adequately trained personnel to design, deploy, and manage AI systems. HR staff may possess traditional administrative expertise but lack digital and analytical competencies necessary for AI utilization. Similarly, IT departments may not have sufficient experience in advanced AI applications ((Kaplan & Haenlein, 2020). This skills gap increases reliance on external consultants and vendors, which can be costly and unsustainable in the long term. Furthermore, the absence of in-house expertise limits institutional capacity to customize AI systems to local needs and to ensure their continuous improvement. Effective AI deployment requires staff with knowledge in data science, AI programming, analytics, and system management. There is a shortage of such expertise in Nigerian tertiary institutions, which can hinder successful adoption and utilization (Okoye & Eze, 2022). HR personnel may not be able to interpret AI-generated analytics or manage AI platforms without targeted training.

Data Privacy and Security Concerns

AI systems depend heavily on large volumes of data, much of which is sensitive and personal in nature, including employee records, payroll information, health data, and performance evaluations. In Nigerian tertiary institutions, weak data governance frameworks, inadequate cybersecurity measures, and limited awareness of data protection practices raise serious concerns about data privacy and security (Adebayo & Akinola, 2021).. The risk of data breaches, unauthorized access, and misuse of information discourages institutions from adopting AI solutions. Additionally, uncertainties surrounding compliance with national data protection regulations further complicate AI deployment, making institutions cautious about digitizing HR processes. AI systems collect and process large amounts of personal and institutional data.

Without robust data protection laws and cybersecurity measures, sensitive employee information could be exposed to breaches or misuse (Eze et al., 2021). AI-driven HR systems storing staff records and salary data could be vulnerable to hacking if proper safeguards are not implemented.

Resistance to Change

Resistance to change among staff and institutional stakeholders is another critical barrier to AI integration in HRM. Employees may perceive AI as a threat to job security, professional autonomy, or established organizational practices. In tertiary institutions where traditional administrative procedures are deeply entrenched, the introduction of AI-driven systems can be met with skepticism and fear. This resistance is often exacerbated by low digital literacy levels and inadequate communication about the benefits and limitations of AI. Without proper change management strategies, staff engagement, and continuous training, AI initiatives may face poor acceptance and low utilization rates. Faculty and administrative staff may resist AI adoption due to fear of job displacement, unfamiliarity with technology, or distrust in automated decision-making systems (Kaplan & Haenlein, 2020). Staff may prefer traditional HR processes over AI tools, slowing adoption and limiting effectiveness.

Algorithmic Bias and Ethical Issues

The use of AI in HRM raises ethical concerns, particularly regarding algorithmic bias and fairness in decision-making. AI systems trained on historical HR data may inadvertently reinforce existing inequalities related to gender, ethnicity, age, or socioeconomic background. In the context of Nigerian tertiary institutions, where diversity and equity are important considerations, biased AI outcomes in recruitment, promotion, and performance appraisal can undermine institutional credibility and social justice. Moreover, Ogunode, & Ukozor, (2023) the lack of transparency in AI decision-making processes, often described as the "black box" problem, makes it difficult to explain or challenge automated decisions, raising ethical and legal concerns. AI systems can inadvertently perpetuate biases if the underlying data is biased or if algorithms are poorly designed. This can lead to unfair HR decisions in recruitment, promotions, or performance appraisals (Raghavan et al., 2020). An AI recruitment tool trained on biased historical hiring data could disadvantage certain groups of candidates.

Regulatory and Policy Gaps

The absence of comprehensive regulatory frameworks and institutional policies governing AI adoption further hinders its integration into HRM in Nigerian tertiary institutions. While data protection laws exist, there is limited clarity on AI-specific regulations, standards, and accountability mechanisms. Many institutions lack internal policies on AI procurement, usage, monitoring, and evaluation. This regulatory uncertainty creates risks related to compliance, liability, and governance, discouraging institutional leaders from embracing AI technologies. Without clear guidelines, AI implementation may be inconsistent, uncoordinated, and prone to misuse. Nigeria currently has limited legal frameworks specifically governing AI deployment,

data protection, and ethical use in HRM. Lack of clear policies can result in misuse, non-compliance, or legal challenges (Adebayo & Akinola, 2021).

4.1 Conclusion and Recommendations

The integration of Artificial Intelligence into Human Resources Management offers numerous benefits for Nigerian tertiary institutions. Enhanced recruitment and talent acquisition, improved performance management, automation of routine tasks, predictive workforce planning, increased employee engagement and retention, data-driven decision-making, and contributions to institutional sustainability collectively demonstrate the transformative potential of AI in HRM. When effectively implemented, AI serves as a strategic tool that strengthens institutional capacity, improves staff productivity, and supports sustainable development in the Nigerian higher education sector.

While AI holds significant promise for transforming human resources management in Nigerian tertiary institutions, its integration is constrained by multiple interrelated challenges. Limited technological infrastructure, high implementation costs, skills shortages, data privacy and security concerns, resistance to change, ethical issues, and regulatory gaps collectively impede the effective adoption of AI-driven HR systems.

Based on the findings, the paper recommends the followings:

1. Strengthen Technological Infrastructure

Tertiary institutions should invest in robust IT infrastructure, including reliable electricity, high-speed internet, cloud storage, and secure servers, to support AI adoption. Partnerships with tech companies and government initiatives can help reduce costs and improve accessibility.

2. Provide Capacity-Building and Training

HR personnel, administrative staff, and academic managers should be trained in AI literacy, data analytics, and system management. Institutions can organize workshops, seminars, and professional certification programs to enhance staff competence in using AI tools effectively.

3. Implement Data Privacy and Security Measures

Strict data protection policies and cybersecurity frameworks should be established to safeguard employee and institutional data. Compliance with Nigeria's data protection regulations (e.g., NDPR) should be mandatory to prevent breaches and ensure ethical handling of personal information.

4. Adopt Ethical AI and Mitigate Bias

AI systems should be designed to minimize bias and ensure fairness in recruitment, promotion, and performance evaluation. Regular audits and validation of AI algorithms can ensure transparency, accountability, and ethical HR practices.

5. Foster Change Management and Stakeholder Engagement

Resistance to AI adoption can be mitigated through stakeholder engagement, awareness campaigns, and participatory planning. Staff should be involved in decision-making processes regarding AI deployment, and concerns about job security should be addressed proactively.

6. Develop Policy and Regulatory Frameworks

Universities, regulatory bodies (like the National Universities Commission), and government agencies should establish clear guidelines for AI adoption in HRM. Policies should cover ethical use, data governance, accountability, and sustainable implementation practices

7. Promote Cost-Effective and Scalable AI Solutions

Institutions should consider phased implementation of AI, starting with pilot programs in critical HR functions (e.g., recruitment or payroll) before full-scale adoption. Open-source AI tools or cloud-based solutions can provide cost-effective alternatives for resource-constrained institutions.

8. Align AI Deployment with Sustainable Development Goals (SDGs)

AI in HRM should contribute to sustainable development by promoting transparency, efficiency, and workforce optimization. This alignment ensures that AI adoption supports long-term institutional growth, human capital development, and social responsibility.

References:

Adebayo, T., & Akinola, A. (2021). *Challenges and Prospects of Artificial Intelligence Adoption in Nigerian Tertiary Institutions*. Journal of Technology in Education, 12(3), 45–57.

Armstrong, M. (2020). *Armstrong's Handbook of Human Resource Management Practice* (15th ed.). Kogan Page.

Bersin, J. (2019). *HR Technology Trends for 2019: AI, Automation, and Analytics*. Deloitte Insights.

Chaudhuri, S., Dayal, U., & Narasimhan, P. (2021). *Predictive Analytics for Workforce Management in Higher Education*. Journal of Human Resource Management, 9(2), 45–59.

Davenport, T., & Ronanki, R. (2018). *Artificial Intelligence for the Real World*. Harvard Business Review, 96(1), 108–116.

Eze, S., Nwankwo, O., & Okafor, P. (2021). *Data Privacy and Security in Higher Education: Implications for AI Adoption*. Nigerian Journal of Educational Technology, 8(2), 23–36.

Frankenfield, J, (2023). Artificial Intelligence: What It Is and How It Is Used https://www.investopedia.com/terms/a/artificial-intelligence-ai.asp

Kaplan, A., & Haenlein, M. (2020). *Siri, Siri in My Hand: Who's the Fairest in the Land? On the Interpretations, Illustrations, and Implications of Artificial Intelligence*. Business Horizons, 63(2), 193–206.

Kaplan, A., & Haenlein, M. (2020). *Siri, Siri in My Hand: Who's the Fairest in the Land? On the Interpretations, Illustrations, and Implications of Artificial Intelligence*. Business Horizons, 63(2), 193–206.

Marler, J., & Boudreau, J. (2017). *An Evidence-Based Review of HR Analytics*. International Journal of Human Resource Management, 28(1), 3–26.

Ogunode, N, J, Ajape T, S & Jegede, D (2020) University Education Policies in Nigeria: Challenges Preventing the Implementation and the Ways Forward. *Jurnal Sinestesia*, 10 (2) 66-85

Ogunode, N. J., & Ndayebom, A. J. (2022). Problems faced by teaching programmes in Nigerian public tertiary institutions and way forward. *Kresna Social Science and Humanities Research Proceedings of the International Conference on Sustainable Development: Problems, Analysis and Prospects*. 203-211.

Ogunode, N. J., & Ukozor, C. U. (2023). Curriculum revolution in higher education: the mighty role of artificial intelligence. Retrieved June 22, 2023, from https://ijins.umsida.ac.id/index.php/ijins/article/view/971/1183

Ogunode1, N,. J. Idoko, G. & ThankGod, P. (2024). Artificial Intelligence and Implementation of Educational Administration and Planning Programme in Nigerian Tertiary Institutions. *International Journal of Academic Integrity and Curriculum Development,* 1(1), 41-47

Ogunode, N. J., Okolie, K. E., & Chinedu, R. (2023). Artificial intelligence and tertiary education management. *Electronic Research Journal of Social Sciences and Humanities,* 5(4), 18-31.

Ololube, N. P. (2016). Education Fund Misappropriation and Mismanagement and the Provision of Quality Higher Education in Nigeria. *International Journal of Scientific Research in Education, 9*(4), 333-349

Oluyemisi, O,. M. (2023). Impact of Artificial intelligence in Curriculum Development in Nigerian Tertiary Education. *International Journal of Educational Research.12(2),192-*

Okebukola, P. (2006), January 26. Okebukola counts blessings of varsity system. Vanguard, p: 27.

Chen, J., & Lerman, K. (2019). Ethical challenges of machine learning in education. In Proceedings of the 9th International Conference on Learning Analytics & Knowledge (pp. 481–485). ACM.

Olaleke, O., Adewale, F., & Yusuf, M. (2020). *Digital Infrastructure Challenges in Nigerian Universities*. African Journal of Information Systems, 12(1), 1–15.

Okoye, L., & Eze, C. (2022). *Human Capital Capacity for AI Implementation in Nigerian Tertiary Institutions*. International Journal of Educational Management, 36(4), 567–582.

Okebukola, P. (2018). *Higher Education in Nigeria: Challenges and Opportunities*. Lagos: National Universities Commission.

Raghavan, M., Barocas, S., Kleinberg, J., & Levy, K. (2020). *Mitigating Bias in Algorithmic Hiring: Evaluating Claims and Practices*. ACM Conference on Fairness, Accountability, and Transparency.

Russell, S., & Norvig, P. (2021). *Artificial Intelligence: A Modern Approach* (4th ed.). Pearson.

United Nations. (2015). *Transforming Our World: The 2030 Agenda for Sustainable Development*. New York: UN.