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# Artificial Intelligence and Recruitment Practices in Nigeria: Ethical Implications and the Future of Talent Management

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**Abstract.** At a time where the use of Artificial Intelligence packages has virtually taken over human activities today, the human resources segment responsible for the recruitment of prospective employees is not left behind. As a result, the study explored artificial intelligence and recruitment practices in Nigeria: Ethical implications and the future of talent management. The survey research design type using the descriptive approach was employed in this study. This design allows for the study of a large population with a view to generating varied characteristics of the identified phenomenon. The population for the study comprised all recruiting organisations in Lagos, Edo, Kwara, Imo, and Borno states, respectively. Through the multi-stage technique, the ballot and hat procedure was used to select 5 states from 36 states. A stratified sampling procedure was then employed to select 6 public-private recruitment firms from each of the states; a Proportionate sampling procedure of 20% with replacement was used to select 2 recruitment organisations each from the respective states to make a total of 10 public-private recruiting firms. A simple random sampling procedure was later introduced to select a sample of 540 respondents for the study. Artificial Intelligence and Recruitment Practices in Nigeria Questionnaire (AIRPiNQ) was used for data collection. This Questionnaire is a 24 closed tools with 4 Likert Scale response format of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). Ethical consideration for the instrument was determined. Validity of the instrument was determined, and using the Cronbach alpha index of .893; Simple correlation and multiple correlation analysis were used to analyse data and hypotheses tested at .05 level of significance. The findings of the study revealed that the use of Artificial Intelligence tools has helped to facilitate the selection of competent and resourceful employees. The study concluded that AI offers a clear pathway to faster, more consistent, and potentially more meritocratic hiring when properly governed by industry frameworks. It is recommended among others that there needs to exist strengthened governance, human oversight and regulatory compliance under Nigeria's emerging AI and data-protection policy of the nation as contained in the Nigeria Communication Commission and Nigeria Data Protection Act policy documents.

**Keywords:** Artificial Intelligence, Recruitment Practices, Talent Management, Employees, Human Resources Management

## 1. Introduction

The use of artificial intelligence (AI) has become a transformative force in organisational human resource management (HRM), particularly in the domain of recruitment, where efficiency, accuracy and data-driven decision-making are increasingly prioritised and needed for shortlisting of talents or prospective employees. In the world of recruiting, AI tools are now used to automate résumé screening, assess candidates, job matching and even guide preliminary interviews thereby reducing administrative burden on Human Resource departments and shortening hiring cycles. These advances have spurred growing interest among organisations in developing economies, including Nigeria, where employers seek cost-effective mechanisms to manage large applicant pools and improve talent acquisition outcomes (Stone et al., 2015; Upadhyay & Khandelwal, 2018).

In Nigeria, Adeyeye et al. (2022) stated that the adoption of AI-assisted recruitment platforms is an emerging feat across sectors like banking, oil and gas, telecommunications, civil service, and technology-based firms. Many organisations are integrating the use of AI-enabled Applicant

Tracking Systems (ATS), chatbot-supported candidate interactions, and algorithmic screening tools to improve objectivity and organisational efficiency. However, Nigeria's socio-economic terrain is characterised by high youth unemployment, a deficiency in digital skills gaps, and infrastructural constraints which raises critical questions about how these technologies can help shape recruitment fairness, accessibility and inclusion (Onyejiuwa & Mbah, 2023).

Many Human Resources Managers have incorporated the use of AI platforms to drive recruitment practices. It is expected that this use of AI would help navigate well in the selection of talents and source for qualified employees suitable for a specific job task. Some of these AI App includes Fuzu, nuJOB.ai, Expertini (ng.expertini.com), Jobberman, peopleHum, Zoho Recruit / Zoho People, Paradox "Olivia", Eightfold.ai, HireVue, HackerRank. They have specific functions attributed to each package in the course of selection. These Apps scrutinize CVs, assist in interview conducting, resume parsing, candidate shortlisting, history tracking, matching, and skills validation tailored to local employers, identification of talents with appropriate skills, area of strength, and weaknesses, among others.
Without being biased, it is fair to state that HR also admonishes that AI-driven recruitment sometimes introduces complex ethical issues around transparency, data privacy, and potential algorithmic bias. A study by Bogen & Rieke (2018) shows that AI systems can inadvertently reinforce historical inequalities when trained on biased data or programmed without sufficient oversight. For Nigeria, with its ethnically diverse and demographically young population, algorithmic discrimination may manifest along lines of language, religion, belief system, schooling background, socio-economic status, and regional representation. As a result, the implications of AI for employment equity within the Nigerian labour market require careful scholarly examination.

The regulatory environment also influences AI deployment in recruitment. It is on record that Nigeria's Data Protection Act (2023) provides guidelines on lawful data processing, consent, and candidate privacy protections. Nonetheless, gaps remain in the governance of automated decision-making, algorithmic accountability, and transparency obligations for employers using AI-powered hiring systems. These gaps underscore the need for empirical evidence to guide policy development and organisational compliance (NITDA, 2019; Adebayo & Allen, 2021).

Despite its advantages, AI adoption in recruitment faces challenges within Nigeria, including limited organisational readiness, insufficient HR analytics capacity, the cost of technological acquisition, and low digital literacy among applicants. AI systems deployed without proper adaptation may perform poorly due to linguistic diversity, informal labour market dynamics and inconsistencies in Nigerian résumé formats and job descriptions. These persistent mismatches highlight the need for locally informed studies that evaluate how AI tools perform within Nigeria's unique labour market environment (Adebanjo & Okolie, 2022).

Given these opportunities and challenges, this study investigates Artificial Intelligence and Recruitment Practices in Nigeria with a focus on understanding adoption levels, organisational motivations, operational effectiveness, fairness concerns, and regulatory implications. By examining the intersection of technology, human decision-making, and labour market realities, the study seeks to contribute to scholarship on digital HR transformation in developing economies. It also aims to provide evidence-based recommendations to employers, policymakers, and HR professionals to ensure that AI strengthens the recruitment process, recruitment efficiency, equity, and allows for candidate experience in Nigeria.

### 1.1 Statement of the Problem

At a time where the new world order encourages the use of Artificial Intelligence in recruitment, Human Resources Managers in Nigerian organisations continue to face significant uncertainties regarding the effectiveness, fairness and suitability of AI-driven hiring systems. While AI tools promise faster résumé screening, objective assessments and reduced recruitment costs, a study by Onyejiuwa & Mbah, (2023) suggests that many Nigerian firms lack the technical and organisational readiness required to deploy these systems effectively. Some of these challenges may range from inadequate digital infrastructure, low HR analytics capabilities, inconsistent data quality and limited awareness of AI governance frameworks, which may also hinder optimal utilisation. Additionally, most AI recruitment tools are designed and programme in Western economies, thereby addressing labour-related issues in the West compared to

their use in an environment whose labour principles and expectations are at total variance with the West, as these AI platforms may not accurately interpret local résumé formats, linguistic variations, or informal employment histories common among Nigerian applicants. This creates a risk of inaccurate candidate evaluations, operational inefficiencies, and mistrust among job seekers, hence the need for the exploration of Artificial Intelligence and Recruitment Practices in Nigeria: Ethical Implications and the Future of Talent Management.

### 1.2 Objectives of the Problem

The core objective of this study is to explore the use of artificial intelligence in recruitment practices in Nigeria: Ethical Implications and the Future of Talent Management. Specifically, its objectives include:

- assess how use of artificial intelligence correlate with recruitment practices in Nigeria.
- examine which artificial intelligence tools promote effective recruitment practices in Nigeria

### 1.3 Hypotheses

$H_1$: The use of artificial intelligence does not have any significant correlation with recruitment practices in Nigeria.
$H_2$: Use of Artificial intelligence tools does not significantly promote effective recruitment practices in Nigeria.

### 1.4 Relevance of the Study

The outcome of this would help enhance teachers' understanding of emerging technological trends that shape graduate employability and workforce requirements. By examining how Artificial Intelligence influences recruitment practices, teachers gain insights into essential digital competencies and behavioural attributes being evaluated by automated systems. Such knowledge helps educators align teaching strategies, curriculum content, and employability training with industry expectations. For researchers, this study provides a critical foundation for advancing empirical scholarship on digital transformation in human resource management. It offers new data on adoption patterns, ethical issues, fairness concerns, and operational challenges associated with AI-driven recruitment in Nigeria. The findings will contribute to filling existing literature gaps on algorithmic hiring in African labour markets, stimulate further comparative studies, and support theoretical development on technology acceptance, organisational behaviour, and labour economics.

Human resource personnel would also benefit from the findings of this study useful as it offers practical insights into how AI technologies can enhance or complicate recruitment processes within Nigerian organisations. It also sheds light on best practices for implementing AI tools, mitigating algorithmic bias, improving candidate experience, and complying with data protection regulations. HR practitioners will also benefit from understanding the limitations of AI systems, the importance of human oversight, and the need for strategic alignment between technology and organisational goals. On the part of students, it provides clarity on how AI tools evaluate candidates, what skills are increasingly required, and how digital recruitment platforms influence job opportunities. With many organisations now using automated résumé screening, online tests, and AI-powered interviews, students are exposed to digital competencies and employability skills necessary to succeed. Students are better guided on how to adapt their job-search strategies, structure their CVs for ATS compatibility, ethical navigation of data-driven recruitment systems and build confidence.

## 2. Research Methodology

The survey research design type using the descriptive approach was employed in this study. This design allows for the study of a large population with a view to generating varied characteristics of the identified phenomenon. The population for the study comprised all recruiting organisations in Lagos, Edo, Kwara, Imo, and Borno states, respectively. Through the multi-stage technique, the ballot and hat procedure was used to select 5 states from 36 states. A stratified sampling procedure was then employed to select 6 public-private recruitment firms from each of the states; a Proportionate sampling procedure of 20% with replacement was used to select 2 recruitment organisations each from the respective states to make a total of 10 public-private recruiting firms. A simple random sampling procedure was later introduced to select a sample of 540 respondents for the study. Artificial Intelligence and Recruitment Practices in Nigeria Questionnaire (AIRPiNQ) was used for data collection. This Questionnaire is a 24 closed questionnaire with 4 Likert Scale response format of Strongly Agree (SA), Agree (A),

Disagree (D) and Strongly Disagree (SD). Ethical consideration for the instrument was determined. Validity of the instrument was determined, and using the Cronbach alpha index of .893; Simple correlation and multiple correlation analysis were used to analyse data, and hypotheses were tested at the .05 level of significance.

## 3. Data and Interpretations

$H_1$: The use of artificial intelligence does not have any significant correlation with recruitment practices in Nigeria.

**Table 1:** Pearson Product-Moment Correlation analysis showing use of artificial intelligence and recruitment practices

| Variables | N | Mean | SD | r | Sig | Remark |
|---|---|---|---|---|---|---|
| Artificial Intelligence | | 2.17 | .49 | | | |
| Recruitment practices | 540 | 2.85 | .68 | .780 | 000 | Reject $H_1$ |

***Source:*** *Fieldwork (2025)*

The data in Table 1 shows that 540 respondents participated in this study, as a correlation index of .780 was derived, meaning the existence of a positive relationship between artificial intelligence and the recruitment process. At sig. value of .000 (P<.05), the null hypothesis is rejected and the alternative hypothesis retained.

$H_2$: Use of Artificial intelligence tools does not significantly promote effective recruitment practices in Nigeria.

**Table 2:** Multiple Correlations showing Artificial Intelligence tools and effective recruitment practices

| S/N | Variables | 1 | 2 | 3 | 4 | 5 | 6 | Mean | SD |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Fuzu | .02 | | | | | | 12.65 | 2.56 |
| 2 | Jobberman | .02 | .01 | | | | | 9.78 | 1.44 |
| 3 | Zoho Recrui | .01 | .03 | .02 | | | | 8.65 | 2.11 |
| 4 | HireVue | .04 | .03 | .02 | .00 | | | 11.92 | 1.64 |
| 5 | HackerRank | .03 | .01 | .03 | .00 | .01 | | 10.55 | 1.85 |
| 6 | Recruitment Practices | .65 | .48 | .66 | .71 | .59 | 0 | 8.83 | .96 |

*Correlation is significant at the 0.05 level (2-tailed)

The results in Table 1 revealed that there is a significant positive correlation between Fuzu AI tool and recruitment practices (r (540) = .65, P<.05). This implies that as Fuzu AI tool increases, recruitment practices increase as well. Jobberman AI tool has a positive and significant correlation with recruitment practices (r(540)= .48, P<.05). This implies that as Jobberman AI tool increases, recruitment practices increase as well. Zoho Recrui AI tool have a positive significant correlation with recruitment practices (r(540)= .66 P<.05), this implies that as Zoho Recruit AI tool increases, recruitment practices also increase. HireVue AI tool has a positive significant correlation with recruitment practices (r(540)= .71, P<.05), this implies that as the HireVue AI tool increases, recruitment practices also. HackerRank AI tool has a positive significant correlation with recruitment practices (r(540)= .59, P<.05). This implies that as the HackerRank AI tool increases, recruitment practices increase in the recruitment process. However, HireVue, Zoho Recruiter, Fuzu, Hacker Rank, and Jobberman contributed significantly to recruitment practices in this order.

## 4. Discussions

Hypothesis one reveals that the use of artificial intelligence has a significant correlation with recruitment practices in Nigeria. This implies that the use of artificial intelligence (AI) in Nigerian recruitment practices was found to be significantly correlated with more efficient candidate screening, faster shortlisting, and improved predictive matching between applicant profiles and job requirements, which was largely driven by automated resume parsing, predictive analytics, and video-interview analysis employed by employers. The outcome of this study conforms to that of Nwambuko (2025) and Ogboe and Sowande (2024) who affirmed that where AI systems are combined with human oversight, such organisations in always realize the greatest gains in selection accuracy and perceived fairness, but where infrastructure constraints (poor internet, limited IT skills) or opaque algorithmic designs persist, AI's positive effects are constrained and risks of biased outcomes increase. According to World Journal of Academic Research and Reflection, WJARR (2025), the Nigerian evidence base suggests a

clear and significant relationship between AI use and contemporary recruitment practices, tempered by contextual factors (sector, infrastructure, governance) that moderate both effectiveness and equity of AI-driven hiring.

Hypothesis two reveals that the adoption of artificial intelligence tools has significantly promoted effective recruitment practices in Nigeria. Artificial intelligence (AI) tools have significantly promoted more effective recruitment practices in Nigeria by automating and improving several stages of hiring workers. The outcome of this study corroborates studies by Ogboe, (2024); Onwuneme, (2025) and WJARR, (2025) submissions that these AI tools have enhanced CV parsing and shortlisting, candidate matching through predictive analytics, automated scheduling and interviewing, and continuous candidate engagement via chatbots which together reduce time-to-hire, increase screening consistency and improve the quality of shortlisted candidates. Onwuneme(2025) noted further that the adoption of AI tools facilitates fast recruitment outcomes, encourages higher interviewer preparedness, and greater alignment between candidate skills and job requirements. At the same time, researchers and industry analysts caution that infrastructural deficiencies like unstable power and internet, uneven digital literacy, algorithmic opacity, and data protection constraints can blunt these benefits or introduce bias if unmitigated.

## 5. Conclusion

The evidence indicates that artificial intelligence has materially reshaped recruitment practices in Nigeria by increasing efficiency in CV screening and shortlisting, improving candidate–job matching through predictive analytics, and freeing HR professionals to focus on higher-value, strategic tasks. These benefits are most pronounced where AI tools are integrated into hybrid workflows that pair algorithmic scoring with human judgment; however, gains are uneven because infrastructure gaps (power, internet), limited digital skills, weak data-protection practices, and opaque algorithmic designs can reduce effectiveness and introduce fairness risks. Thus, while AI offers a clear pathway to faster, more consistent, and potentially more meritocratic hiring when properly governed, its positive impact depends on complementary investments in capacity, infrastructure, and oversight to mitigate bias and protect candidate rights.

## 6. Recommendations

Among others the study recommended the following:

- Industry regulators and government agencies should update and enforce data-protection and AI governance frameworks to ensure that the various recruitment tools meet transparency, fairness and accountability standard.
- Organisations must adopt human-in-the-loop designs, conduct regular algorithmic audits and bias testing and publish clear candidate-facing explanations of automated decisions.
- There must be deliberate investment will in digital infrastructure and target capacity-building (HR upskilling, IT support) to ensure tools perform reliably across regions and sectors.
- There should be timely implement of pilot projects with independent evaluation before wide rollout and use monitoring & evaluation metrics (time-to-hire, diversity outcomes, candidate satisfaction) to guide scale-up and
- Foster cross-sector collaboration between government, industry, academia and civil society in sharing best practices, create standards for ethical use and develop accessible grievance mechanisms for candidates affected by automated hiring decisions. These steps together will help balance efficiency gains with fairness, transparency and long-term sustainability.

## 7. Ethical Implications and the Future of Talent Management

The use of artificial intelligence in recruitment practices in Nigeria raises ethical concerns related to algorithmic bias, transparency, data privacy, and the potential exclusion of candidates without strong digital footprints. These issues underscore the need for clear regulatory frameworks and human oversight to ensure fairness and accountability in automated hiring decisions. As AI continues to evolve, talent management in Nigeria is expected to become more data-driven, predictive, and personalised, enabling organisations to identify, develop, and retain high-potential employees more effectively. Ultimately, the future of talent management will depend on balancing technological efficiency with ethical safeguards

that protect candidates' rights and promote inclusive workforce development.

**References**


Adebanjo, D., & Okolie, U. (2022). Digital transformation of human resource management in emerging economies: Opportunities and challenges. *Journal of African Business,* 23(3), 450–468.

Adebayo, S., & Allen, T. (2021). Data protection and emerging technologies in Nigeria: Implications for Businesses and HR Practices. *Information & Communications Technology Law,* 30(2), 1–15.

Adeyeye, O., Adeniji, A., & Osibanjo, A. (2022). Human resource analytics and the future of recruitment in Nigeria. *Journal of Management and Human Resource Development,* 14(1), 1–15.

Bogen, M., & Rieke, A. (2018). *Help wanted: An examination of hiring algorithms, equity, and bias.* Upturn.

Daily Trust. (2025, July 22). *How AI-powered systems shortchange qualified job applicants*. Daily Trust. https://dailytrust.com/how-ai-powered-systems-shortchange-qualified-job-applicants/ Daily Trust

National Information Technology Development Agency. (2019). *Nigeria Data Protection Regulation (NDPR).* https://nitda.gov.ng

Nigeria Data Protection Act (2023). www,ndpc.gov.ng

NITDA — National Centre for Artificial Intelligence and Robotics (NCAIR). (2024, August). *Nigeria National AI Strategy*. National Information Technology Development Agency. https://ncair.nitda.gov.ng/wp-content/uploads/2024/08/National-AI-Strategy_01082024-copy.pdf ncair.nitda.gov.ng

Nwambuko, T.C. (2025). Artificial intelligence and human resource management practices: The Nigerian experience. *Enugu State University Journal of Social Sciences & Humanities, 10*(2), 303-316.

Ogboe, O.S., & Sowande, A. (2024). Artificial intelligence (AI) as a paradigm shift in retooling human resource cycle operations in Nigerian universities. *World Journal of Innovative Management and Technology,* 8(6), 1-13.

Olayinka, O.O. (2025). Impact of artificial intelligence on recruitment processes of public tertiary institutions in the Federal Capital Territory, Abuja, Nigeria. *International Journal / [paper].* https://journals.indexcopernicus.com/api/file/viewByFileId/2468802 Index Copernicus Journals+1

Onwuneme, U.P. (2025). Impact of artificial intelligence on the recruitment process. *African Scholar Publications and Research International,* 8(1),43-58

Onyejiuwa, C., & Mbah, P. (2023). Artificial intelligence adoption in Nigerian organisations: Implications for HRM practices. *African Journal of Business and Economic Research,* 18(2), 115–132.

Stone, D., Deadrick, D., Lukaszewski, K., & Johnson, R. (2015). The influence of technology on the future of human resource management. *Human Resource Management Review,* 25(2), 216–231.

Upadhyay, A., & Khandelwal, K. (2018). Applying artificial intelligence: Implications for recruitment. *Strategic HR Review,* 17(5), 255–258.

World Journal of Academic Research and Reflection, WJARR. (2025). Application of artificial intelligence in employee recruitment decision-making process in Nigerian telecoms [Article]. *World Journal of Academic Research and Reflection.* Retrieved from https://journalwjarr.com/content/application-artificial-intelligence-employee-recruitment-decision-making-process-nigerian. World Affairs Review