AI Integration in Human Resource Practices: A Study of Selected Construction Companies in Nigeria

[1]Obasan, Olabowale Taiwo & [2]Atere, Akinsogo
Department of Accountancy,
Abraham Adesanya Polytechnic, Ijebu-Igbo, Ogun State, Nigeria.
Correspondence author email: pemisire0703@gmail.com, +234 803 441 1824

Abstract
This study investigates the adoption and integration of artificial intelligence (AI) technologies in human resource management (HRM) within selected construction companies in Nigeria. Through a comprehensive literature review and survey analysis, the research explores the current state of AI implementation in HRM, the factors influencing its adoption, and the perceived impact of AI on HR practices. The findings highlight a growing trend toward AI integration, with approximately 80% of the surveyed companies incorporating AI into their HR functions. The majority of these organizations view AI as a crucial tool for enhancing HR operations, with 70% reporting improvements in efficiency as a result of AI adoption. Factors such as technological advancements, organizational support, and expertise in AI significantly affect its implementation in HRM. The study contributes to the understanding of AI adoption in human resource management and offers valuable insights for organizations seeking to optimize their HR practices through AI technologies.

Keywords: *Artificial intelligence, Employee Performance, Employee Compensation, Human Resource, Accuracy, Precision*

Introduction

The integration of Artificial Intelligence (AI) into human resource management is reshaping the field by improving efficiency, accuracy, and decision-making. AI is increasingly utilized in HR functions such as recruitment, performance evaluation, and employee training. Research shows that AI can streamline repetitive administrative tasks like data entry and record management, leading to time savings and reduced errors. Tools powered by AI—such as predictive algorithms in recruitment—enhance the hiring process by identifying top candidates (Xero, n.d.). Companies like KPMG and Deloitte are leveraging AI for workforce planning and talent management, helping improve HR strategies and outcomes (PwC & EY, n.d.). However, the adoption of AI also raises important concerns, including data privacy, ethical risks, and its potential impact on human jobs.

This study explores how AI is being integrated into human resource management within Nigerian construction companies. It aims to understand the extent of AI adoption, the influencing factors, and the effects on HR operations. While AI has been embraced for automating routine HR tasks, less attention has been given to its long-term implications—such as workforce displacement, skill gaps, and the ethical challenges associated with automated decision-making (Brown & Green, 2018). Initially developed for basic automation, AI now plays a role in complex HR functions like predictive analytics and employee engagement (Smith, 2018). Despite this progress, many studies overlook the broader consequences for HR professionals, such as training needs and job redefinition (Chen et al., 2019; Smith & Jones, 2020).

In Nigeria, the construction sector faces unique challenges—including manual inefficiencies and regulatory demands—that AI could help address (Ahmed et al., 2019). The pandemic has further accelerated digital transformation, prompting firms to consider AI-based HR solutions (Sinha et al., 2021). This research investigates how Nigerian construction firms are adopting AI in HR, the challenges they face, and the overall impact on human resource management practices.

Statement of the Problem

The integration of Artificial Intelligence (AI) into human resource management (HRM) within Nigerian construction companies presents a complex and dynamic challenge. While AI has the potential to enhance efficiency, accuracy, and decision-making in HRM, its adoption within the Nigerian construction industry is shaped by factors such as technological readiness, regulatory frameworks, and organizational culture. Despite growing interest in AI, there is limited understanding of how Nigerian construction companies are adopting and integrating AI into their HR practices and how AI adoption affects organizational performance and stakeholder perceptions. Furthermore, there is a need to explore the challenges and opportunities associated with AI adoption in HRM, particularly concerning issues such as data privacy, security, and ethical implications.

Research Objectives

The research objective is to identify and analyze the key factors that drive the adoption and implementation of artificial intelligence (AI) in human resource management (HRM) within Nigerian construction companies..

Research Questions

What are the key factors driving the adoption and implementation of AI in human resource management within Nigerian construction companies?

Research Hypothesis

H1: There are significant factors that influence the adoption and implementation of AI in HRM within Nigerian construction companies.

Justification for the study

The justification for this study on the role of Artificial Intelligence (AI) in human resource management (HRM) within Nigerian construction companies is grounded in several key factors. First, AI has the potential to greatly enhance the efficiency and effectiveness of HRM practices, leading to more informed decision-making and optimized workforce management. Understanding the current level of awareness and readiness among HR professionals regarding AI is critical for ensuring its successful adoption and integration in Nigerian construction companies.

Second, the ethical implications of AI in HRM are especially important in a diverse country like Nigeria, where cultural and regulatory considerations vary. Exploring these ethical concerns will help organizations establish clear guidelines and standards for the use of AI in HRM, ensuring fairness, transparency, and accountability in human resource decisions.

Moreover, studying the impact of AI on the workforce is essential for preparing HR professionals for the technological changes ahead. By identifying the skills and competencies required for effective AI adoption, companies can develop training programs and strategies to enhance their workforce's ability to utilize AI tools effectively in HRM processes.

Overall, this study is vital for providing valuable insights and practical recommendations for Nigerian construction companies looking to harness the power of AI in HRM, ultimately leading to more efficient workforce management and better organizational performance.

Literature Review

Recent studies have increasingly focused on the integration of Artificial Intelligence (AI) into human resource management (HRM), exploring its adoption, benefits, and potential drawbacks. Alles and Brennan (2020) examined AI's role in auditing, showing how it enhances quality and efficiency through data analysis and anomaly detection. Similarly, Wu et al. (2019) highlighted AI's capacity to streamline recruitment, assess employee performance, and support data-driven decision-making in HR.

Ethical issues remain a significant area of concern in AI-driven HR practices. Rahman et al. (2021) emphasized the need for transparency and accountability in AI algorithms to avoid bias and promote fairness. Raval and Joshi (2018) also called for the development of ethical guidelines to govern AI use, stressing the importance of equitable and transparent decision-making processes.

In addition, several researchers have explored how AI is reshaping the HR profession itself. Mishra et al. (2020) discussed the growing demand for new skills among HR professionals, including digital literacy and adaptability, to remain relevant in an AI-enhanced environment. Ahmed et al. (2019) pointed to leadership support and organizational culture as critical factors in successful AI adoption within HR systems.

AI technologies, particularly machine learning, offer powerful capabilities in recruitment and performance management. These tools can analyze large volumes of employee data to uncover trends, optimize hiring, and anticipate

future workforce needs. Furthermore, AI-driven automation can reduce the administrative workload, allowing HR professionals to focus on more strategic tasks.

Despite these advantages, ethical concerns—such as algorithmic bias and lack of transparency—remain central to current research. Addressing these issues through robust ethical frameworks is essential to ensure fair and responsible AI integration. As HR continues to evolve, ongoing education, organizational readiness, and strong leadership will be key to maximizing the benefits of AI while mitigating its risks.

Theoretical Framework

Agency theory

Agency theory provides a useful lens for understanding the role of Artificial Intelligence (AI) in human resource management (HRM) within Nigerian construction companies, particularly in terms of aligning the interests of principals (owners or shareholders) and agents (management or employees), and enhancing overall organizational performance (Jensen & Meckling, 1976). In the context of AI in HRM, the key principles of agency theory can help explain how AI can improve monitoring, control, and decision-making processes.

For example, AI can enhance monitoring by offering real-time insights into employee performance and operational data, thereby reducing agency costs typically associated with manual monitoring and management practices (Fama & Jensen, 1983). Moreover, AI can help align incentives by providing objective performance metrics based on data analysis, which motivates agents (management or employees) to act in the best interests of the principals (shareholders or business owners), and reduces the likelihood of opportunistic behavior (Eisenhardt, 1989). Additionally, AI can improve decision-making by delivering accurate, timely information that aids in HR planning, recruitment, and talent management, thereby enhancing the quality of decisions made within the organization (Demski & Feltham, 1978).

Thus, agency theory offers a robust framework for understanding how AI can optimize HRM processes, fostering alignment between the interests of principals and agents and improving the performance and efficiency of Nigerian construction companies.

Institutional Theory

Institutional Theory posits that organizations are deeply influenced by external institutions, such as laws, regulations, and societal norms, which shape their behaviors and practices to secure legitimacy and ensure their continued existence (Meyer & Rowan, 1977). In the context of AI adoption in human resource management (HRM) within Nigerian construction companies, Institutional Theory provides insight into how external pressures drive the adoption of AI technologies. Nigerian companies may integrate AI into their HRM practices to comply with industry regulations, labor laws, and other legal requirements, which helps them enhance their legitimacy and avoid potential penalties (Alles & Brennan, 2020).

Moreover, institutions exert normative pressure on organizations, compelling them to align their practices with industry standards and expectations. In the Nigerian construction industry, adopting AI in HRM might be driven by a desire to adhere to perceived best practices, thereby gaining legitimacy within the sector (Scott, 2008). Additionally, institutional influences shape how organizations perceive what is appropriate or necessary. For example, Nigerian construction companies may view AI adoption as a crucial technological advancement to remain competitive, meet evolving stakeholder

expectations, and strengthen their position in the market (Scott, 2008).

Thus, Institutional Theory helps explain how external forces, including regulations, industry norms, and competitive pressures, drive the adoption of AI in HRM practices in Nigerian construction companies.

Methodology

The study adopted an exploratory and quantitative research design to explore the integration of artificial intelligence (AI) in accounting practices within Nigerian organizations, focusing on implementation and impact. Multi-stage sampling was used to select respondents, with three companies randomly selected from a list of organizations in Ogun State, Nigeria, in the first stage. In the second stage, employees involved in accounting practices within the selected companies were identified and invited to participate in the study. A total of 30 respondents were surveyed, with approximately 10 respondents selected from each of the three selected companies. Data was collected using a structured questionnaire distributed through Google Forms, designed to gather information on the implementation of AI in accounting practices, the perceived impact of AI on accounting tasks, and the challenges faced in integrating AI in accounting. Quantitative data collected through the questionnaire was analyzed using statistical methods, including descriptive statistics such as frequencies and percentages to summarize the responses. Inferential statistics, such as t-tests or ANOVA, were used to analyze the relationships between variables, depending on the nature of the data. The study adhered to ethical guidelines, ensuring the confidentiality and anonymity of respondents, with informed consent obtained from all participants.

Results

The demographic data gathered from the study provides a comprehensive overview of the characteristics of respondents in the context of accounting in Nigeria. The findings reveal that the majority of respondents are male, which is a common trend observed in many studies and reports within the accounting profession. This gender distribution aligns with the general representation of males in certain industries or professions, including accounting. However, the presence of a significant female representation (40%) indicates a positive trend towards gender diversity in the field. In terms of age distribution, the data shows that the majority of respondents fall within the age range of 28 to 37 years old, which corresponds to mid-career professionals. This age group is typically associated with individuals who have gained substantial experience and expertise in their field. This finding is consistent with the expectations in the accounting profession, where professionals often progress in their careers and assume more senior roles as they gain experience.

Table 1: Socio-demographic Characteristics of the Respondents

Gender		**Frequency**	**Percentage**
	Male	18	60.0
	Female	12	40.0
	Total	30	100.0
Age		**Frequency**	**Percentage**
	18yrs -22yrs	2	6.6
	23yrs-27yrs	5	10.0
	28yrs-32yrs	8	26.6
	33yrs-37yrs	12	40.0
	38yrs and above	5	16.6
	Total	30	100.0
Education		**Frequency**	**Percentage**
	OND/Diploma	1	3.3
	HND/B.Sc	8	26.6
	M.Sc/MBA	13	43.3
	Professional qualification	6	20.0
	Ph.D	2	6.6
	Total	30	100.0
Ethnicity		**Frequency**	**Percentage**
	Hausa	2	6.6
	Igbo	6	20.0
	Yoruba	19	63.3
	Others	3	10.0
	Total	30	100.0
Marital Status		**Frequency**	**Percentage**
	Single	6	20.0
	Married	22	73.3
	Divorced/Widowed	2	6.6
	Total	30	100.0
Religion		**Frequency**	**Percentage**
	Christianity	16	53.3
	Islam	13	43.3
	Traditional	1	3.3
	Total	30	100.0
How many years of experience do you have in your current role?		**Frequency**	**Percentage**
	0-5yrs	8	26.6
	6-10yrs	11	36.6

	10-15yrs	4	13.3
	Above 15yrs	7	23.3
	Total	30	100.0
What is your job title or role within the organization?		**Frequency**	**Percentage**
	Account Payable	4	13.3
	Account Receivable	6	20.0
	Tax Accounting	6	20.0
	Internal Audit	3	10.0
	Tax Accounting	2	6.6
	Financial Accounting	3	10.0
	Payroll	3	10.0
	Treasury Management	3	10.0
	Total	30	100.0

Source: Field Survey, 2025

Regarding education, a significant proportion of respondents hold either a Master's degree or a Bachelor's degree. This distribution reflects the educational requirements commonly seen in accounting professions, where higher education qualifications are often necessary. The high percentage of respondents with Master's degrees (43.3%) indicates a strong emphasis on advanced education within the accounting field in Nigeria. Ethnically, the majority of respondents identify as Yoruba, which shows that Ogun State, Nigeria is predominantly Yoruba. This distribution is reflective of the country's ethnic diversity and is consistent with the general population demographics. Similarly, the religious distribution of respondents aligns with the religious demographics of Nigeria, with Christianity and Islam being the two dominant religions. In terms of marital status, the data shows that a large majority of respondents are married. This finding is in line with the general population and does not deviate significantly from expected norms. Additionally, the distribution of years of experience among respondents indicates a relatively experienced workforce in the accounting field, with the majority having between 6 to 10 years of experience. The data shows that respondents hold various job titles or roles within their organizations, including Account Payable (13.3%), Account Receivable (20.0%), Tax Accounting (20.0%), Internal Audit (10.0%), Financial Accounting (10.0%), Payroll (10.0%), and Treasury Management (10.0%). This distribution reflects the diverse nature of roles within the accounting department of organizations.

Objective One: Assess the current state of AI adoption and integration in human resource management among Nigerian organizations.

Table 2:

To what extent does your organization currently use AI technologies in its human resource management		**Frequency**	**Percentage**
	Strongly disagree	2	6.6
	Disagree	1	3.3
	Neutral	3	10.0
	Agree	15	50.0
	Strongly agree	9	30.0
	Total	30	100.0
How would you rate the level of AI integration in your organization's accounting software/system?		**Frequency**	**Percentage**
	Strongly disagree	2	6.6
	Disagree	5	10.0
	Neutral	8	26.6
	Agree	12	40.0
	Strongly agree	5	16.6
	Total	30	100.0
How satisfied are you with the current level of AI adoption in your organization's human resource management ?		**Frequency**	**Percentage**
	Strongly disagree	2	6.6
	Disagree	2	23.3
	Neutral	4	13.3
	Agree	11	36.6
	Strongly agree	10	30.0
	Total	30	100.0
How important do you think AI adoption is for improving human resource management in your organization?		**Frequency**	**Percentage**
	Strongly disagree	2	6.6
	Disagree	5	10.0
	Neutral	8	26.6
	Agree	12	40.0
	Strongly agree	5	16.6
	Total	30	100.0
To what extent do you think AI adoption has improved the efficiency of human resource management in your organization?		**Frequency**	**Percentage**
	Strongly disagree	1	3.3
	Disagree	6	20.0
	Neutral	2	6.6
	Agree	13	43.3
	Strongly agree	8	26.6
	Total	30	100.0

How would you rate the level of AI expertise among accounting staff in your organization?		**Frequency**	**Percentage**
	Strongly disagree	2	6.6
	Disagree	5	10.0
	Neutral	8	26.6
	Agree	5	16.6
	Strongly agree	40	40.0
	Total	30	100.0
How likely is your organization to increase its investment in AI technologies for human resource management in the future?		**Frequency**	**Percentage**
	Strongly disagree	1	3.3
	Disagree	2	6.6
	Neutral	1	3.3
	Agree	11	36.6
	Strongly agree	15	50.0
	Total	30	100.0

Source: Field Survey, 2025

The data indicates a strong trend towards the integration of AI technologies in accounting processes among the surveyed organizations. With approximately 80% of organizations already using AI in their accounting practices, it is evident that AI adoption has gained significant traction. This high level of adoption aligns with the findings of previous studies, which have highlighted a growing acceptance of AI in various industries, including accounting (Smith et al., 2020). Moreover, the fact that over half of the organizations rate the level of AI integration in their accounting software/system as moderate to high suggests that AI technologies have been effectively incorporated into existing accounting systems.

The positive attitude towards AI adoption is further emphasized by the fact that a majority of organizations perceive AI as important for improving accounting processes. This recognition of AI's potential benefits is crucial, as it indicates a willingness to explore and leverage AI technologies to enhance efficiency and effectiveness in accounting practices. Additionally, the finding that 70% of respondents believe AI adoption has led to improvements in accounting processes highlights the tangible impact of AI technologies on organizational operations.

The data also indicates a strong level of AI expertise among accounting staff, with a significant majority of organizations recognizing this expertise. This is a positive sign, as it suggests that organizations have invested in developing the necessary skills and knowledge to effectively utilize AI technologies in accounting. Furthermore, the high percentage of organizations expressing a strong inclination to increase their investment in AI technologies for accounting processes in the future indicates a continued commitment to AI adoption and integration. Overall, the findings suggest that organizations in Nigeria are embracing AI technologies in their accounting practices and are optimistic about the potential benefits. The positive attitude towards AI adoption, coupled

with the perceived improvements in accounting processes, highlights the transformative impact that AI can have on organizational performance.

The findings from this study indicate a generally positive trend towards the adoption and integration of AI technologies in accounting processes among Nigerian organizations. A significant majority of respondents agreed or strongly agreed that their organizations currently use AI technologies in accounting, with 80.0% expressing agreement. This aligns with existing studies that highlight a growing acceptance of AI in accounting (Smith et al., 2020). Additionally, 56.6% of respondents rated the level of AI integration in their organization's accounting software/system as neutral or above, indicating a moderate level of integration. This finding is consistent with research by Jones and Lee (2019), who emphasized the importance of AI integration in enhancing accounting processes. Furthermore, a majority of respondents (70.0%) believed that AI adoption has improved the efficiency of accounting processes, reflecting the potential benefits of AI technologies in streamlining accounting tasks (Brown & White, 2018). The likelihood of future investment in AI technologies for accounting processes was also high, with 86.6% of respondents indicating a likelihood or strong likelihood of increased investment. This finding is supported by studies highlighting the increasing investment in AI technologies across various industries, including accounting (Roberts & Smith, 2021). However, there is still room for improvement, as indicated by the mixed responses regarding satisfaction with the current level of AI adoption. Overall, the findings suggest a positive attitude towards AI adoption in accounting processes among Nigerian organizations, with potential implications for enhancing efficiency and effectiveness in accounting practices.

Table 3:

R= .491[a]
R Square= .256
Adjusted R square=.290
Standard Error=.

ANOVA

	Sum of Squares	Degree of freedom	Mean Square	F	P	Remarks
Regression	32.927	4	40.8310	33.123	0.001	*
Residual	57.033	12	3.107			
Total	89.960	16				

Table 5:

Objective Two: To identify the key factors influencing the adoption and implementation of AI in accounting among Nigerian organizations.

Regression Summary

Level of Significant at 0.05

The statistical analysis conducted on the adoption and implementation of AI in accounting among Nigerian organizations reveals several key insights. The regression model used demonstrates a moderate ability to explain the variance in AI adoption, with approximately 25.6% of the variance accounted for by the included factors. The model's statistical significance, as indicated by the ANOVA results, suggests that at least one of the independent variables significantly predicts AI adoption.

Among the factors considered, technological advancement emerges as a significant driver of AI adoption, with organizations possessing more advanced technologies showing a higher propensity for AI adoption. Conversely, stringent regulatory requirements are found to negatively impact AI adoption, highlighting the potential hindrance posed by regulatory frameworks.

Organizational support is identified as a positive influencer of AI adoption, emphasizing the importance of supportive structures within organizations. Additionally, the availability of AI expertise is found to positively influence adoption, underscoring the significance of skilled personnel in driving AI initiatives. However, organizational culture does not appear to significantly impact AI adoption, suggesting that while important, cultural factors may not be the primary drivers in this context. These findings align with existing studies emphasizing the importance of technological readiness, regulatory environment, organizational support, and expertise availability in influencing AI adoption. The negative effect of regulatory requirements on AI adoption is also consistent with literature advocating for regulatory frameworks that facilitate, rather than impede, AI adoption. However, the non-significant effect of organizational culture contrasts with some studies, indicating that additional factors may play a more dominant role in AI adoption within the accounting context

Variables	**Coefficient**	**Standard Error**	**t-value**	**p-value**
Constant (Artificial Intelligent)	0.125	0.032	3.891	0.001
Technological Advancement	0.352	0.041	8.579	< 0.001
Regulatory Requirement	-0.189	0.028	-6.750	< 0.001
Organizational Support	0.084	0.036	2.333	0.021
Availability of AI Expertise	0.297	0.045	6.609	< 0.001
Organizational Culture	-0.041	0.029	-1.414	0.158

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Objective Three: Examine the impact of AI adoption in accounting on organizational performance and stakeholder perceptions in Nigeria, focusing on efficiency, accuracy, and decision-making capabilities.

Table 5:

S/N	ITEMS	N	Mean Score	Standard Deviation
1	How has AI adoption affected the efficiency of your organization's accounting processes	30	3.27	.189
2	To what extent has AI adoption improved the accuracy of your organization's accounting practices	30	3.23	.217
3	How has AI adoption influenced decision-making capabilities in your organization?	30	2.98	.301
4	How would you rate the overall impact of AI adoption on organizational performance in accounting	30	2.84	.209
5	How satisfied are stakeholders (e.g., employees, customers, investors) with the impact of AI adoption on accounting practices in your organization?	30	3.50	.225
6	How likely are stakeholders to recommend AI adoption in accounting to other organizations?	30	2.86	.365
7	How would you rate the level of organizational readiness for AI adoption in accounting?	30	3.27	.153
	Valid N (Listwise)	30		

Source: Field Survey, 2025

The data provided offers insights into the perceived impact of artificial intelligence (AI) adoption in accounting practices within Nigerian organizations. Across several metrics, including efficiency, accuracy, decision-making capabilities, overall organizational performance, stakeholder satisfaction, likelihood of recommendation, and organizational readiness, respondents generally expressed positive views regarding the effects of AI adoption. For efficiency perception, with consistent responses noted by the low standard deviation of 0.189. Similarly, for accuracy enhancement, the mean score of 3.23 suggests a positive impact, albeit with slightly more variability in responses, indicated by the standard deviation of 0.217. However, on the aspect of decision-making capabilities, respondents perceived a somewhat lower impact, with a mean score of 2.98 and a higher standard deviation of 0.301, suggesting mixed perceptions among respondents. Regarding overall organizational performance, the mean score of 2.84 reflects a moderate perception, with a standard deviation of 0.209 indicating moderate consistency in responses. Stakeholder satisfaction received a relatively high mean score of 3.50, with a low standard deviation of 0.225, indicating consistent positive perceptions. The likelihood of stakeholders recommending AI adoption in accounting to other organizations received a mean score of 2.86, suggesting a moderate likelihood, but with more variability in responses, as indicated by the standard deviation of 0.365. Respondents rated the level of organizational readiness for AI adoption relatively high, with a mean score of 3.27 and a low standard deviation of 0.153,

indicating consistent perceptions of readiness across participants.

Discussion of Findings

The findings of the study corroborate existing research on AI adoption in accounting among Nigerian organizations. The majority of respondents indicated current use of AI technologies in accounting, aligning with the growing acceptance of AI in this field as noted in previous studies (Smith et al., 2020). This alignment underscores the increasing integration of AI into traditional accounting practices, which has been a subject of interest in recent years. The moderate level of AI integration in accounting software/systems also aligns with prior research, suggesting ongoing efforts to incorporate AI into accounting processes (Jones & Lee, 2019). This finding indicates a positive trend towards leveraging AI technologies to enhance accounting efficiency and accuracy, as highlighted in previous studies. Moreover, the perception that AI adoption has improved the efficiency of accounting processes is consistent with prior research emphasizing the benefits of AI in streamlining accounting tasks (Brown & White, 2018). This finding underscores the practical impact of AI adoption on organizational operations, indicating a shift towards more efficient accounting practices. Additionally, the high likelihood of future investment in AI for accounting processes reflects a recognition of AI's value in driving future advancements in accounting technology, consistent with broader trends of increased investment in AI technologies (Roberts & Smith, 2021). Despite these positive trends, the mixed responses regarding satisfaction with current AI adoption levels suggest potential challenges or areas for improvement in AI implementation, echoing findings from previous studies. Overall, the study's findings reflect a positive attitude towards AI adoption in accounting among Nigerian organizations, highlighting the potential for AI to enhance efficiency and effectiveness in accounting practices in the region.

The analysis of factors influencing AI utilization in accounting processes within Nigerian organizations reveals several key findings. Firstly, technological advancement emerges as a significant driver, with organizations possessing more advanced technologies showing a higher likelihood of adopting AI. This aligns with the notion that technological readiness plays a crucial role in AI adoption (Brown & White, 2018). Secondly, regulatory requirements have a notable negative impact on AI adoption, suggesting that stringent regulations may hinder organizations from adopting AI in their accounting practices. This finding underscores the importance of regulatory frameworks that facilitate rather than impede AI adoption (Jones & Lee, 2019). Thirdly, organizational support is identified as a positive influencer, indicating that organizations with supportive structures are more inclined to adopt AI in accounting. This supports the idea that organizational culture and leadership support are critical for successful AI adoption (Smith et al., 2020). Fourthly, the availability of AI expertise positively influences AI adoption, emphasizing the importance of skilled personnel in driving AI initiatives. However, organizational culture does not significantly impact AI adoption, indicating that while culture is important, other factors may play a more dominant role in the context of AI adoption in accounting. These findings collectively suggest that to enhance AI utilization in accounting processes, organizations in Nigeria should focus on advancing their technological capabilities, addressing regulatory challenges, fostering a supportive organizational culture, and ensuring access to AI expertise.

The findings align with previous research highlighting the positive impact of AI adoption on efficiency and accuracy in accounting practices (Kaur & Mittal, 2020). However, mixed perceptions regarding the influence on decision-making capabilities are consistent with studies emphasizing the need for further research and refinement in AI-assisted decision-making processes (Chen et al., 2019). The high stakeholder satisfaction and moderate likelihood of recommendation resonate with studies demonstrating the overall positive perceptions of stakeholders toward AI adoption in various organizational contexts (Mata et al., 2021). The high rating of organizational readiness suggests that organizations are adequately prepared or actively preparing for AI adoption in accounting, consistent with findings emphasizing the importance of organizational readiness for successful AI implementation (Lacity & Willcocks, 2017).

Theoretical Implications of the Research Findings

The research findings on AI adoption in accounting processes among Nigerian organizations have significant theoretical implications, particularly in the context of agency theory, positive accounting theory, and institutional theory. According to agency theory, organizations are seen as a network of contracts among stakeholders, including managers, shareholders, and employees. The findings suggest that organizations adopt AI technologies in accounting to improve accountability and transparency, aligning with shareholders' interests. For instance, the positive impact of AI adoption on efficiency and accuracy in accounting processes can be viewed as a strategy to reduce agency costs and enhance organizational performance (Jensen & Meckling, 1976).

Positive accounting theory, on the other hand, focuses on explaining accounting practices based on economic theories and incentives. The research findings align with this theory, as organizations perceive AI adoption as crucial for improving accounting processes. This perception is consistent with the theory's predictions regarding the determinants of accounting practices. Organizations adopt AI to reduce information asymmetry, enhance decision-making capabilities, and improve financial reporting quality (Watts & Zimmerman, 1986). Institutional theory emphasizes the influence of social, political, and cultural institutions on organizational behavior and practices. The findings that a majority of organizations have embraced AI technologies in accounting processes reflect the institutional pressure to adopt new technologies to remain competitive and meet societal expectations. The positive perception of AI adoption among stakeholders and the likelihood of future investment can be attributed to institutional pressures to conform to technological advancements in the accounting field (DiMaggio & Powell, 1983). Overall, the research findings support the theoretical foundations of agency theory, positive accounting theory, and institutional theory by demonstrating how organizations' adoption of AI technologies in accounting processes is influenced by economic incentives, accountability mechanisms, and institutional pressures. The findings highlight the importance of considering these theoretical perspectives when analyzing the implications of AI adoption in accounting practices.

Conclusion and Recommendations

The findings of this research reveal a positive trend in the adoption and integration of Artificial Intelligence (AI) technologies within Nigerian organizations, particularly in human resource management (HRM) practices. A large majority of companies have implemented AI in their HRM operations, with many reporting satisfaction with its effectiveness. The research further indicates that AI adoption has led to notable improvements in operational efficiency, accuracy, and decision-making within HRM functions.

From a theoretical perspective, the study's application of agency theory, institutional theory, and positive accounting theory underscores that AI adoption is driven by a need to enhance accountability, reduce agency costs, and comply with external pressures from societal and institutional forces. These theories offer a solid foundation for understanding the factors motivating AI adoption and its impact on organizational practices.

In light of these findings, several recommendations are proposed. First, organizations should continue to invest in AI technologies to further optimize HRM practices and enhance overall organizational performance. Second, it is crucial for companies to prioritize the development of AI expertise among HR personnel to fully harness the potential benefits of AI integration. Third, policymakers should consider creating regulatory frameworks that support the adoption of AI in HRM while ensuring transparency and accountability. Additionally, organizations should focus on improving communication and engaging with stakeholders to facilitate smooth adoption and reduce resistance to AI integration. This approach will help build trust and ensure that AI adoption is well-understood and positively received by all stakeholders.

In conclusion, the research underscores the transformative potential of AI in enhancing HRM practices and suggests that organizations that embrace AI technologies are likely to gain a competitive edge in the rapidly evolving digital environment.

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