

The Application of Artificial Intelligence in Audit Practices in Nigeria

NWEKE Ijeoma Veronica¹ & Mordi Kelvin Adim²

¹Bursary Department, Nnamdi Azikiwe University, Awka

²Department of Accounting Education,
Federal College of Education (Technical), Asaba, Nigeria

DOI: 10.56201/jafm.vol.11.no11.2025.pg154.165

Abstract

This study empirically investigated the application of artificial intelligence in audit practices in Nigeria. In order to determine the relationship between AI and audit practices, AI (independent variable) was proxy using expert system (ES) and intelligent agents (IA) while audit practices was the dependent variable. Two hypotheses were formulated to guide the investigation and the statistical test of parameter estimates was conducted using least squares regression model operated with E-Views.12. Survey design was adopted and data for the study was obtained through e-questionnaire survey sent to the various Staff WhatsApp Group Platform of the selected audit firms in Anambra State Nigeria. The results of the study showed that expert system and intelligent agents have positive and significant effect on audit practices in Nigeria. Based on this, the study concludes that the use of AI in audit ensures effective audit practices in Nigeria. The study therefore suggests the need for the application of AI in audit practices as the results of the study showed its significant influence on risk assessments and usefulness in fraud detection.

Keyword: Artificial Intelligence; Expert System; Intelligent Agents

1. Introduction

The auditing profession has long served as a cornerstone of financial integrity and public trust in economic systems worldwide. Audit quality, defined by the completeness, reliability, and comparability of financial data, is fundamental to ensuring that financial statements add economic value to investment decisions (Adeoye, 2023). However, the global audit profession has faced significant criticism and credibility challenges following high-profile financial scandals involving major corporate entities such as Enron, Tyco, and WorldCom, which also implicated major auditing firms. More recently, the Wirecard financial scandal further reinforced concerns about audit quality and the deceptive appearance of major auditing firms. In Nigeria, these global concerns resonate deeply, as the profession grapples with persistent issues of audit quality degradation and ethical dilemmas among practitioners (Appah, 2025).

The global financial crisis of 2007/2008 heightened the need to address issues of audit quality in the context of reliability and timely reporting (Okeke & Akaegbobi, 2025). Despite financial regulations, enforcement requirements, and the adoption of International Financial Reporting Standards (IFRS), the quality of financial reporting has not significantly improved. Manual and traditional financial reporting methods have proven inadequate to mitigate worsening audit quality, creating what scholars describe as a widening audit expectation gap. This deteriorating situation represents a clear indictment of the integrity of the accounting profession and audit practices globally, including Nigeria. In response to these challenges, Artificial Intelligence (AI) has

emerged as a transformative force in the global accounting and auditing landscape. AI technologies, including expert systems, intelligent agents, machine learning, and fuzzy logic, are revolutionizing financial reporting and auditing processes by enhancing efficiency, accuracy, and predictive capabilities.

Existing literature on AI in auditing reveals significant gaps, particularly within the Nigerian context. While numerous studies have examined audit quality from various perspectives, research specifically investigating the effect of AI on audit quality in relation to implications for Nigerian accountants remains limited. The few studies that have addressed this topic have produced divergent opinions and mixed results, signifying inconsistencies and inconclusiveness in the literature. For instance, while some researchers like Hasan (2021) and Appah (2025) reported positive effects of information technology on audit quality, others such as Lee and Tajudeen (2020) and Balios et al. (2020) found contradictory results.

The study therefore addresses these gaps by providing new insights into the problem of poor audit quality in Nigeria and investigating how AI technologies might offer solutions. It examines both the technological and human dimensions of AI integration in determining the effectiveness of audit practices in Nigeria. By focusing specifically on the Nigerian context, with its unique regulatory, infrastructural, and skill-based challenges, this research contributes valuable insights that may inform practitioners, policymakers, and educational institutions in their efforts to enhance audit quality through appropriate technological integration.

To achieve this purpose, we formulated the following hypotheses:

H₀₁: The use of expert system has no significant effect on auditing practices in Nigeria.

H₀₂: The use of intelligent agents has no significant effect on auditing practices in Nigeria

This study includes several sections. Therefore, the remainder of this study is structured as follows: Section 2 addresses the business rationale (an overview of the current state of the relevant literature). This is followed by Section 3, which deals with the methodology. Section 4 presents and discusses the results, while Section 5 deals with conclusion and recommendations.

2. Review of Related Literature

2.1. Artificial Intelligence

According to Onogholo et al (2025), Artificial intelligence (AI) is technology that enables computers and machines to simulate human learning, comprehension, problem solving, decision making, creativity and autonomy. Artificial intelligence refers to computer systems that can perform complex tasks normally done by human-reasoning, decision making, creating.

Artificial intelligence is the science and engineering of making intelligent machines and, alternatively making a machine behave in ways that would be called intelligent if a human were so behaving (Russell & Norvig, 2016).

According to Sagarika et al. (2022) artificial intelligence is intelligence exhibited by machines contrary to the usual intelligence displayed by people. It is the ability of a machine or a computer to copy from something that is natural, in terms of acquiring and applying knowledge and skills. When a machine mimics a human mind by thinking for itself, it is known as artificial intelligence. The field of AI is vast and constantly expanding, and such characterization concerns AI beyond its current capabilities, namely artificial narrow intelligence, thereby comprehending two potential future types of AI: artificial general intelligence and artificial super intelligence (Riyam, 2023).

2.1.1 Expert System

An Expert System (ES) in auditing is a branch of artificial intelligence that emulates the decision-making ability of a human expert. It is a computer-based system that uses a knowledge base of facts, rules, and procedures accumulated from human audit experts, coupled with an inference engine that applies logical reasoning to solve complex audit problems (O'Leary, 2023).

An expert system is a computer program that uses knowledge and inference procedures to solve problems that are difficult enough to require significant human expertise for their solution (Russell & Norvig, 2016).

2.1.1.1 Applications of Expert Systems in Audit Practices in Nigeria

According to Riyam (2023), expert systems are particularly well-suited for structured, rule-based audit tasks that require consistency and a high level of expertise. The areas of application includes;

- i. **Internal Control Evaluation:** The system can guide an auditor through a questionnaire about a client's internal controls. Based on the answers, it can identify control weaknesses, assess control risk, and recommend specific audit tests.
- ii. **Financial Statement Diagnosis (Analytical Procedures):** The ES can analyze financial ratios and trends, compare them to industry benchmarks, and flag unusual fluctuations or relationships that indicate potential misstatements or risks.
- iii. **Audit Planning and Risk Assessment:** By processing client data (e.g., industry, management integrity, financial health), the system can help determine the overall audit risk, identify high-risk areas, and assist in developing an effective audit plan.
- iv. **Loan Loss Provisioning and Going Concern Evaluation:** In banking audits, ES can automate the initial assessment of loan portfolios. For going concern, it can analyze specific indicators (e.g., recurring losses, loan defaults) to provide a preliminary assessment of the entity's ability to continue as a going concern.
- v. **Fraud Detection:** While not a substitute for forensic investigation, an ES can screen for common fraud indicators, such as transactions just below authorization limits or conflicts of interest, prompting further investigation.

2.1.2 Intelligent Agents

Intelligent agents are transforming auditing by automating complex tasks and workflows, moving beyond simple automation to act as semi-autonomous digital specialists (Ajibade, 2025). These agents enhance audit quality by working under human oversight to handle everything from data extraction to risk assessment, freeing auditors to focus on professional judgment and complex analysis

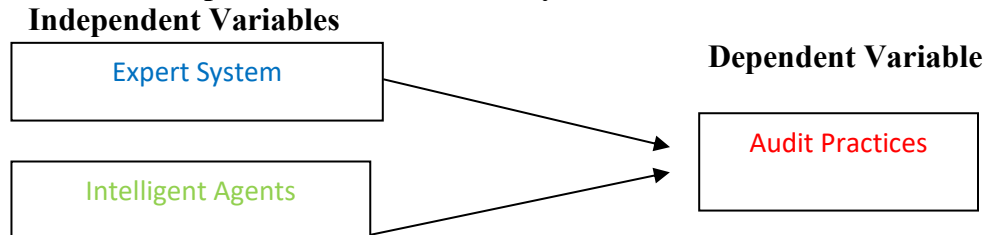
According to Balogu (2025), the application of intelligent agents in auditing is transforming the profession by automating complex tasks, enhancing data analysis, and improving risk assessment. These AI-powered systems can operate autonomously to achieve specific goals, moving beyond simple automation to handle multi-step workflows and make informed decisions

2.1.2.1 The Application of Intelligent Agents in Audit Practices in Nigeria

- i. **Taskers:** Handle specific, well-defined operations. In auditing, this includes document classification and data extraction from invoices or contracts
- ii. **Automator's:** Integrate end-to-end processes, managing multiple steps and basic decision-making. They can execute client information requests or manage semi-automated review processes

- iii. **Collaborators:** Function as AI 'teammates' that work alongside auditors, augmenting human capabilities. They can support advisory work and conduct risk assessments
- iv. **Orchestrators:** The most advanced type, these agents coordinate multiple other agents and manage sophisticated AI-human interactions. They can act as a copilot, allowing professionals to interact with audit software using natural language and assist with staff resource allocation

Figure 1: The Conceptual Model for the Study



Source: Researcher's Concept (2025)

The figure 1 above shows the conceptual model of this study which focuses on an in-depth assessment of existing literature on the application of artificial intelligence in audit practices in Nigeria. Specifically, the conceptual review covers the related issues which include: scholarly definitions of concepts like expert system and intelligent agents as it relates to audit practices in Nigeria as shown in the diagram.

2.2 Theoretical Framework

2.2.1 The Classical Theory of Artificial Intelligence (CTAI)

The Classical Theory of Artificial Intelligence serves as the foundation for this research (CTAI). The theory was propounded in the year 1956 by Claude Shannon and Arthur Samuel. The theory, according to Muller (2012), is focused on the question of whether AI is even conceivable. It prompts inquiries like, "Can a machine think?" and "Can a machine do x?" According to Dagunduro et al. (2023), AI will likely never completely replace human intelligence. However, Super Artificial Intelligence (SAI) machines, which were developed quickly, are in a serious race with Human inventors, according to Zohuri and Rahmani (2020). Thus, while this theory stands on the premix that humans will still provide the necessary transactions for AI to operate, it is still a matter of argument that several operations of humans have not been totally taken over by AI in the recent years. Despite the advancement in AI, however, this theory is still relevant as to the limitations of what machines can perform, asserting that AI is fundamentally limited and should be replaced with other methods (Muller, 2012). While this study focusses on the link between artificial intelligence and auditing practice, this theory creates more awareness as to the continued relevance of accountants on accounting activities but with dimensional changes in approach.

Also, according to Omaliko and Akpukpu (2025), the classical theory of artificial intelligence provides a foundational lens to analyze AI adoption in auditing, emphasizing perceived usefulness (PU) and perceived easy use (PEOU) as critical drivers. Extensions incorporating trust, transparency, and regulatory alignment further refine its applicability. Addressing these factors through training, user-centric design, and explainability can enhance AI integration in auditing practices.

Thus, the study was anchored on Classical Theory of artificial intelligence. The justification for using this theory to underpin the study stem from the fact that literature review has demonstrated

the existence of relationship between artificial intelligence and audit practices effectiveness in Nigeria.

2.3 Empirical Review

Lawal and Adeyeye (2025) conducted a study on the effect of artificial intelligence and its associated variables on job performance. Privacy, consent, security, scalability, the role of corporations, and the changing nature of business are used as a study community and focused on Small and Medium Enterprises (SMEs) in China, business sector. To collect data from the random sample, a questionnaire was constructed. 220 managers were included in the sample. Additionally, the study took a descriptive method and analyzed the data using SPSS. The findings indicated that artificial intelligence has a statistically significant effect on employment. Performance is determined solely by factors. Additionally, the findings indicated that gender, academic credentials, and years of experience all have a statistically significant impact on work performance. Ugo (2023) carried out an empirical investigation on the impact of artificial intelligence on accounting practice in Nigeria. The study adopted a survey research design. Data for the study were extracted from one hundred and forty-eight (148) respondents extracted from selected organizations in Abuja. A questionnaire was used as the primary instrument for data collection. The data were analyzed with the aid of frequency tables and percentages and the hypotheses were tested with probability values extracted from the regression output. The major findings of the study revealed that expert systems and neural networks contribute positively and significantly to accounting practice in Nigeria.

Khaled et al. (2023) investigated the impact of using artificial intelligence applications on the performance of accountants and audit firms. The final sample for this study comprises 38 audit firms. This study uses a survey-based methodology in the context of Saudi Arabia. The results of the multiple regression revealed that the audit firms using artificial intelligence applications perceive them as useful instruments that increase the performance of accountants and audit firms. Anna (2022) identified the benefits of applying the Artificial Intelligence (AI) in the audit sector. The study employed a questionnaire for a research sample including 206 auditing and accounting practitioners and students. Data were collected via an online survey. A principal axis factor analysis with the Promax rotation was conducted to assess the underlying structure for the points of the questionnaire. The research outcomes indicate that, in the opinion of the respondents, AI adoption increases audit efficiency, and enhances client communication and service. Finally, AI can also automate time-consuming and routine tasks. The three indicated factors account for 62.223% variance. The findings reveal the advantages of AI adoption and could support managers in deploying new technology in their organizations.

Mohammed and Emre (2022) investigated the transformational effects of artificial intelligence (AI) on auditing procedures and financial reporting accuracy. This study looks at how artificial intelligence (AI) tools, such data analytics and machine learning, are changing auditing by making it more efficient, lowering the risk of human mistake, and boosting the ability to spot fraud. Using regression analysis, the study found that artificial intelligence on auditing procedures and financial reporting accuracy.

Akinadewo (2021) investigated the relationship between Artificial Intelligence and Accountants' Approach to Accounting Functions. The study used the research design method of a structured questionnaire. The targeted population and the sample size were 205, which comprises accountants with experience in systems application for accounting and other financial transactions functions. A purposive sampling technique was adopted to determine the respondents. The results of the

analysis using OLS revealed that artificial intelligence has a significant positive impact on accountants' approach to accounting functions.

3. Methodology

The study adopted a survey design in order to examine the effect of artificial intelligence on audit practices in Nigeria using some selected audit firms in Anambra state as a reference point. It is a design that incorporates personal interview, observation and questionnaire to ensure corroboration of facts, thus ensuring the validity and reliability of the data collected. The selected audit firms in Anambra State ranges from Ozobia Jiba and Co (Chartered Accountants), Edo Wyse Consulting Services, Chika Uchime and Co (Chartered Accountants), Okechukwu Uchime and Co (Chartered Accountants), to Nnamdi Azikiwe University Consultancy Services (NAUCS). Data for the study was collected through the use of e-questionnaire survey (Google Form) sent to the respondents through their employees WhatsApp group platform out of which 48 responses were recorded and received and were used in the data analysis. The e-questionnaire survey was designed where respondents were asked to assess the usefulness of artificial intelligence on audit practices in Nigeria using Likert five point scales referred as: (1) To a Very High Extent (THE), (2) To a High Extent (HE), (3) Neutral (N), (4) To a Very Low Extent (TLE) and (5) To a Low Extent (LE). The collected data was transformed to scale measurement using Likert five point scale and the hypotheses were statistically tested using Least Squares Regression Model with the aid of E-Views 12.

3.1 Model Specification

In line with the previous studies, the present study designed a model to examine the application of artificial intelligence on auditing practices. The functional model for the study is shown below as thus:

$$AP = F(ES, IA)$$

The explicit form of regression designed for the study is shown in equation below as thus:

$$AP = \beta_0 + \beta_1 ES + \beta_2 IA + \varepsilon$$

AP = Audit Practice

ES = Expert System

IA = Intelligent Agents

μ = Stochastic Term

$\beta_1 - \beta_2$ = Coefficient of Regression Equation

β_0 = Constant coefficient (intercept) of the model

'A Priori' is given as: $\beta_0, \beta_1, \beta_2 > 0$

Decision Rule: accept H_0 if P-value $> 1-5\%$ significant level otherwise reject H_0

4. Data Analysis and Results

4.1 Distribution of Respondents Responses

The distribution of the respondents' responses was explicated on table 4.1.1 below as thus:

Table 4.1.1: Analysis of the Respondents Responses

Item	Respondents	Percentage
Audit Firms		
1 Ozobia Jiba and Co (Chartered Accountants)	11	23
2 Edo Wyse Consulting Services	8	17
3 Chika Uchime and Co (Chartered Accountants)	9	18
4 Okechukwu Uchime and Co (Chartered Accountants),	8	17
5 Nnamdi Azikiwe University Consultancy Services (NAUCS)	12	25
Total	48	100.00

Source: Field Survey (2025)

Table 4.1.1 above shows that 11 respondents representing 23% of the respondents were the staff of Ozobia Jiba and Co Chartered Accountants; 8 respondents representing 17% of the respondents were the staff of Edo Wyse Consulting Services, 9 respondents representing 18% of the respondents were the staff of Chika Uchime and Co (Chartered Accountants), 8 respondents representing 17% of the respondents were the staff of Okechukwu Uchime and co (Chartered Accountants) while the remaining 12 respondents representing 25% of the respondents were the staff of Nnamdi Azikiwe University Consultancy Services (NAUCS).

4.2 Descriptive Statistics

The descriptive summary is a set of methods used to summarize and describe the main features of a dataset such as its central tendency, variability and distribution. Thus provides an overview of the data and help identify patterns and relationships between variables. This is shown on table 4.2.1 as thus:

Table 4.2.1: Descriptive Statistics

	AP	ES	IA
Mean	4.78	4.21	4.29
Median	4.32	4.11	4.18
Maximum	4.92	4.35	4.56
Minimum	4.16	4.05	3.69
Std. Dev.	0.11	0.18	0.45
Skewness	0.91	0.23	0.33
Kurtosis	1.23	2.56	2.13
Jarque-Bera	0.93	0.41	0.67
Probability	0.87	0.78	0.18

Sum	25.1	20.8	21.2
Sum Sq. Dev.	0.11	0.87	0.83
Observations	5	5	5

Source: E-View 12 Computational Results (2025)

From Table 4.2.1 above, the mean (average), maximum values, minimum values, standard deviation and Jarque-Bera Statistics (Normality Test) were shown. The results provide some insight into the determinants AI (expert system, intelligent agents) and its effect on audit practice in Nigeria. Firstly, it can be observed that the sampled respondents were characterized by a positive audit practice (AP) value of 4.78. This implies that AP is determined by artificial intelligence in Nigeria. The distribution is platykurtic since the kurtosis (1.23) is less than 3, implying that the outliers are few. The Jarque-Bera probability of 0.87 is greater than 0.05, which means that the distribution of audit practice comes from a normal distribution. The average value of expert system (ES) for the sampled respondents was 4.21 with a standard deviation value of 0.18. This implies that expert system enables audit practice in Nigeria at a degree risk of 18%. There is also a variation in maximum and minimum values of ES which stood at 4.35 and 4.05 respectively. This wide variation in ES values among the sampled respondents justifies the need for this study that expert system is a determinant of effective audit practice in Nigeria. The distribution is platykurtic since the kurtosis (2.56) is less than 3, implying that the outliers are few. The Jarque-Bera probability of 0.78 is greater than 0.05, which means that the distribution of expert system is not different from a normal distribution.

The mean value of intelligent agents (IA) for the sampled respondents was 4.29. This means effective audit practice is determined by the intelligent agents. There is also a variation in maximum and minimum values of IA which stood at 4.56 and 3.69 respectively. This high variation in IA values among the sampled respondents justifies the need for this study that effective audit practice is determined by intelligent agents at a degree risk of 45%. The distribution is platykurtic since the kurtosis (2.13) is less than 3, implying that the outliers are few. The Jarque-Bera probability of 0.18 is greater than 0.05, which means that the distribution of intelligent agents does not deviate from normal distribution.

4.3 Correlation

Table 4.3.1: Correlation Matrix

	AP	ES	IA
AP	1.0000		
ES	0.3095	1.0000	
IA	0.9824	-0.6732	1.0000

Source: E-Views 12 (2025)

Table 4.3.1 above shows the relationship between all pairs of independent variables and dependent variables used in the regression model. It reveals that all the independent variables have positive correlation with the dependent variable (AP) while some of the components of artificial intelligence has negative relationship with one another. The values on the diagonal are all 1.0000 which shows that each variable is perfectly correlated with itself.

In checking for multi-collinearity, we noticed that no two explanatory variables were perfectly correlated. This means that there is an absence of multi-collinearity in our models. Multi-

collinearity between the explanatory variables may result to wrong signs or implausible magnitudes in the estimated model coefficients and the bias of the standard errors of the coefficients.

4.4: Test of Hypothesis

Table 4.4.1: Result on the Role of AI on Audit Practices in Nigeria

Dependent Variable: AP

Method: Least Squares

Date: 10/24/25 Time: 1:48

Sample: 1-5

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ES	0.687623	0.089585	7.675648	0.0000
IA	0.299873	0.019874	15.08870	0.0000
C	0.209947	0.039987	5.250381	0.0001
R-squared	0.698273	Mean dependent var	2.056224	
Adjusted R-squared	0.610934	S.D. dependent var	3.983743	
S.E. of regression	2.109873	Akaike info criterion	7.938764	
Sum squared resid	20.94662	Schwarz criterion	7.989686	
Log likelihood	6.909827	Hannan-Quinn criter.	7.220935	
F-statistic	10.09345	Durbin-Watson stat	2.009834	
Prob(F-statistic)	0.000000			

Source: E-View Computational Results (2025).

4.5: Discussion of Findings.

The coefficient of determination R^2 shows 0.69 indicating that the overall model explained 69 percent of the total variations in the dependent variable (audit practice). Thus shows that these variables (ES, IA) can only explain 69 percent of change in audit practice in Nigeria leaving 31 percent unexplained. This is to say that there are other factors that can contribute to effective audit practice in Nigeria other than the use of AI. The sig. (or p-value) is .0001 which is below the .01 level; hence, we conclude that the overall model is statistically significant, or that the variables have a significant and joint effect on the dependent variable. With this, the researcher affirms the validity of the regression model adopted in this study.

The results of the regression are therefore slated below as follows:

H₀₁: The use of expert system has no significant effect on auditing practices in Nigeria.

This hypothesis was tested and the result of this regression as expositied on table 4.4.1 indicates that the relationship between ES and AP is positive and significant. This is justified with the P-value (significance) of 0.0000 which is less than the 1% level of significance adopted. Likewise the result of positive coefficient of 0.688 indicates that expert system is a determinant of effective audit practice in Nigeria. We consequently rejected null hypothesis and accepted the alternate hypotheses which contends that the use of expert system has significant effect on auditing practices

in Nigeria. This aligns with the finding of Akinadewo (2021), Mohammed and Emre (2022) who found that the use of AI enables audit practices.

H₀₂: Intelligent Agents has no significant effect on auditing practices in Nigeria.

This hypothesis was tested and the result of this regression as expositied on table 4.4.1 indicates that the relationship between IA and AP is positive and significant. This is justified with the P-value (significance) of 0.0004 which is less than the 1% level of significance adopted. Likewise, the result of positive coefficient of 0.2998 indicates that intelligent agents ensure effective audit practice in Nigeria. We consequently rejected null hypothesis and accepted the alternate hypotheses which contends that intelligent agents have significant effect on auditing practices in Nigeria. This is in consonance with the priori expectations of Muslim and Hassan (2022), Anna (2022) who found that artificial intelligence is a determinant of effect audit practices in Nigeria.

5. Conclusion

The study examined the application of artificial intelligence on audit practices in Nigeria. In addressing this, the study employed a survey research design, using e-questionnaire sent through an online platform seeking responses from the staff of the selected auditing firms in Anambra State. The results from the inferential analysis revealed that audit practices in Nigeria is positively affected by the application of artificial intelligence in audit exercises.

5.1 Recommendation

In lieu of the findings of the study, the following recommendations were made:

1. The study recommends that the application of artificial intelligence in auditing firms should be encouraged as the effectiveness of audit practices depends on it.
2. Also, the use of artificial intelligence should be encouraged as it ensures audit quality in terms of accuracy, reliability and timely financial reporting.

References

- Adeoye, O. (2023). Artificial intelligence and audit quality: Implications for practicing accountants. *Asian Economic and Financial Review*, 13(11). <https://doi.org/10.55493/5002.v13i11.4861>
- Ajibade, B. (2025). *Practical perspectives on the use of AI by the Nigerian judiciary*. S.P.A. Ajibade & Co.
- Akinadewo, I. S. (2021). Artificial intelligence and accountants' approach to accounting functions. *Covenant Journal of Politics & International Affairs*, 9(1), 40-55
- Anna, K. (2022). Artificial Intelligence in audit. *Prace Naukowe Uniwersyte-tu Ekonomicznego we Wrocławiu*, 66(4)
- Appah, E. (2025). Artificial intelligence and audit practice of public audit firms in Nigeria: Does audit experience and expertise matter? *European Journal of Business and Innovative Research*, 13(6). <https://doi.org/10.37745/ejbir.2013>
- Appah, E. (2025). Artificial intelligence and audit practice of public audit firms in Nigeria: Does audit experience and expertise matter? *European Journal of Business and Innovative Research*, *13*(6). <https://doi.org/10.37745/ejbir.2013>
- Balios, D., Kotsilaras, P., Eriotis, N., & Vasilou, D. (2020). Big data, data analytics and external auditing. *Journal of Modern Accounting and Auditing*, 16(5), 211–219.
- Balogun, H. (2025). Artificial intelligence in Nigeria: Key regulatory considerations
- Dagunduro, M. E., Falana, G. A., Adewara, Y. M. & Busayo, T. O. (2023). Application of artificial intelligence and audit quality in Nigeria. *Humanities, Management, Arts, Education & the Social Sciences Journal*, 11(1), 39-56. www.isteams.net/humanitiesjournaldx.doi.org/10.22624/AIMS/HUMANITIES/V11N1P4
- Hasan, A. (2021). Artificial intelligence in accounting and auditing: A literature review. *Open Journal of Business and Management*, 10, 440-465. <https://doi.org/10.4236/ojbm.2022.101026>
- Khaled, O. A. (2023). The role of artificial intelligence in developing accounting: Automating processes and enhancing financial reporting in Saudi Arabia. *Management*, 2025(1), 239–255
- Lawal, S. A., & Adeyeye, V. A. (2025). Artificial intelligence intervention in auditing against fund embezzlement in the banking sector of Nigeria. *Multifinance*, *3*(1), 92–108. <https://doi.org/10.61397/mfc.v3i1.427>
- Lee, C. S., & Tajudeen, F. P. (2020). Usage and impact of artificial intelligence on accounting: Evidence from Malaysian organisations. *Asian Journal of Business and Accounting*, 13(1), 213–239
- Mohammed, A., & Emre, K. (2022). Artificial intelligence in education (AIEd): A high-level academic and industry note 2021. *AI and Ethics*, 2, 157–165. <https://doi.org/10.1007/s43681-021-00074-z>
- Müller, V. C. (Ed.). (2012). *Philosophy and theory of artificial intelligence*. Springer. <https://doi.org/10.1007/978-3-642-31674-6>
- Okeke, O. N., & Akaegbobi, T. (2025). Artificial intelligence (AI) and financial statement audits. *Advance Journal of Management, Accounting and Finance*, 10(9), 138–155. <https://doi.org/10.5281/zenodo.17252013>
- O'Leary, D. E. (2023). Auditor environmental assessment. *Intelligent Systems in Accounting, Finance & Management*, 11(2), 105-115. <https://doi.org/10.1002/isaf.229>

- Omaliko, E., & Akpukpu, F. (2025). Moderating role of information and communication technology in corporate governance and fraud detection in listed deposit money banks in Nigeria. *Journal of Global Accounting*, 11(4), 142-169
- Onogholo, A. O., Bosun-Fakunle, Y. F., & Agbo, I. S. (2025). Artificial intelligence (AI) and accounting practice in Nigeria: A conceptual approach. *FUOYE Journal of Accounting and Management Sciences*, 8(1).
<https://www.fjam.fuoye.edu.ng/index.php/fjam/article/view/267>
- Riyam, M. (2023). Artificial Intelligence and Sustainable Development. *Al-Mustaqbal Journal of Sustainability in Engineering Sciences*, 1(1), 24-30.
- Russell, S., & Norvig, P. (2016). *Artificial intelligence: A modern approach* (3rd ed.). Pearson.
- Sagarika M., Michael T., & Holly B. (2022). Artificial intelligence focus and firm performance. *Journal of the Academy of Marketing Science*, 50(6), 1176-1197
- Ugo, C. (2023). Ethical frameworks for artificial intelligence in public policy. *AI & Society*, 28(4), 102–115.
- Zohuri, B., & Rahmani, F. (2020). Artificial intelligence in energy systems: A review of applications. *AI in Energy Research*, 8(4), 230–245.