3rd International Conference on Finance Business and Banking
Fakultas Ekonomi dan Bisnis Islam, Universitas Islam Negeri Mataram
Mataram, 27th - 28th November 2023
Available Online at http://proceeding.uinmataram.ac.id

Intregration of Artificial Intelligence for Accounting Information Systems Adoption in Nigerian Financial Institution

Ahmadi Abubakar Majidadi[1], Isah Muhammad Alhassan[2], Aminu Adamu Ahmed[3], Mohammed Nura Musa[4]
Department of Accounting, Federal Polytechnic Kaltungo, Gombe Sate, Nigeria[1], Department of Computer Science, Khadijah University Majia, Taura, Jigawa State, Nigeria[2], Depatment of Information Commuunication Technology, Fed, Polytechnic Kaltungo[3], Gombe Statem Nigeria, Department of Information Communication Technogoly, Fed, Polytechinc Kultungu, Gombe State, Nigeria[4]
Corresponding e-mail: aahmed.pg@atbu.edu.ng

ABSTRACT

Purpose — *This paper aims to explore the adoption of AI in AIS specifically for financial institutions in Nigeria. It discusses the current challenges faced by the traditional AIS in Nigerian financial institutions and highlights the need for innovation and technological advancements.*

Method — This is a comprehensive review of AI application to accounting information system..

Result — *The paper provides an understanding of AI in the accounting context, its various subfields, and its potential applications in improving the AIS. Furthermore, it outlines the potential benefits of integrating AI into AIS, including improved accuracy, efficiency, fraud detection, and compliance. The paper also addresses the implementation challenges and considerations, such as job displacement, data security, and cultural barriers. It presents successful AI adoption case studies from financial institutions globally and offers recommendations for Nigerian financial institutions to effectively adopt AI in its AIS.*

Novelty — *The paper emphases the importance of embracing AI as a means to enhance accounting processes and the potential impact it can have on the Nigerian financial sector.*

Keywords: *Artificial Intelligence, Accounting Information System, Finance, Financial Institutions*

INTRODUCTION

The adoption of artificial intelligence (AI) in accounting information systems (AIS) is becoming more and more commonplace worldwide, and financial institutions in Nigeria are starting to investigate its possible advantages as well. The accounting information system (AIS) is essential to the management of financial data in Nigerian financial institutions (Abdullahi & Ibrahim, 2022), the generation of reports (Oladele & Ogunleye, 2021), and the facilitation of decision-making processes (Akinsanya & Oyesola, 2020). The term "automated information system" (AIS) refers to a set of protocols, hardware, and software that make it possible to gather, process, store, and share financial data (Ezeani, 2019). According to Abdullahi & Ibrahim (2022) and Ezeani (2019), it acts as the foundation of financial institutions, guaranteeing accurate and dependable financial transaction recording and supplying crucial information to both internal and external stakeholders.

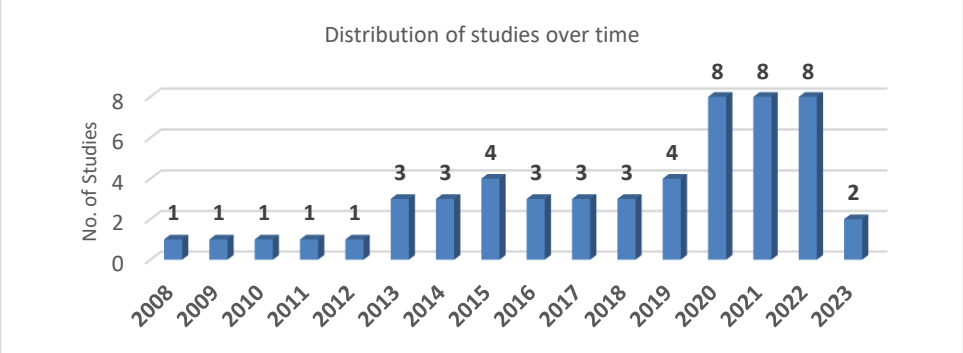
A rapidly developing field of technology called artificial intelligence (AI) seeks to imitate human intelligence in machines so that they may carry out tasks that normally demand for human cognitive capacities (Chen et al., 2020; Oladele & Ogunleye, 2021). Because AI has the potential to completely transform a number of industries, including accounting and finance, it has attracted a lot of interest. By automating laborious procedures, analysing massive volumes of data, and offering insightful analysis, artificial intelligence (AI) can improve the efficacy and efficiency of financial institutions in Nigeria within the framework of artificial intelligence (AIS) (Okoye, & Adetunji, 2018; Adelaja, & Adeyemi, 2019). Financial institutions in Nigeria can use AI in AIS in a number of ways. Machine learning techniques, for example, can be used to automate data entry and reconciliation procedures, which lowers errors and boosts productivity (Adeleke et al., 2021). Faster and more accurate data analysis is possible by using natural language processing (NLP) approaches to extract relevant data from unstructured financial documents, such as contracts or invoices (Adeleke et al., 2021; Oluwaseyi, & Adebayo, 2015).

The purpose of this paper is to examine how Nigerian financial institutions are utilising AI in AIS. This article aims to illustrate the benefits as well as challenges of incorporating AI into AIS by looking at the state of AIS in Nigerian financial institutions today and possible applications of AI. In addition, it seeks to offer suggestions on how Nigerian financial institutions might successfully integrate AI into their AIS while taking into account the particular circumstances and difficulties that it might encounter.

METHOD

As previously indicated, the purpose of this study is to investigate how financial institutions in Nigeria are utilising AI in AIS. By looking at the state of AIS in Nigerian financial institutions now and possible applications of artificial intelligence. It also aims to draw attention to the advantages, difficulties, and suggestions associated with AIS's AI integration. To accomplish these goals, a thorough literature review was carried out. Additionally, 54 relevant studies from 2008 to 2023 were used to expand knowledge on the potential for AIS adoption with AI as well as the state-of-the-art in Nigeria.

Figure 1. Distribution of Studies on AIS and aI Over Time



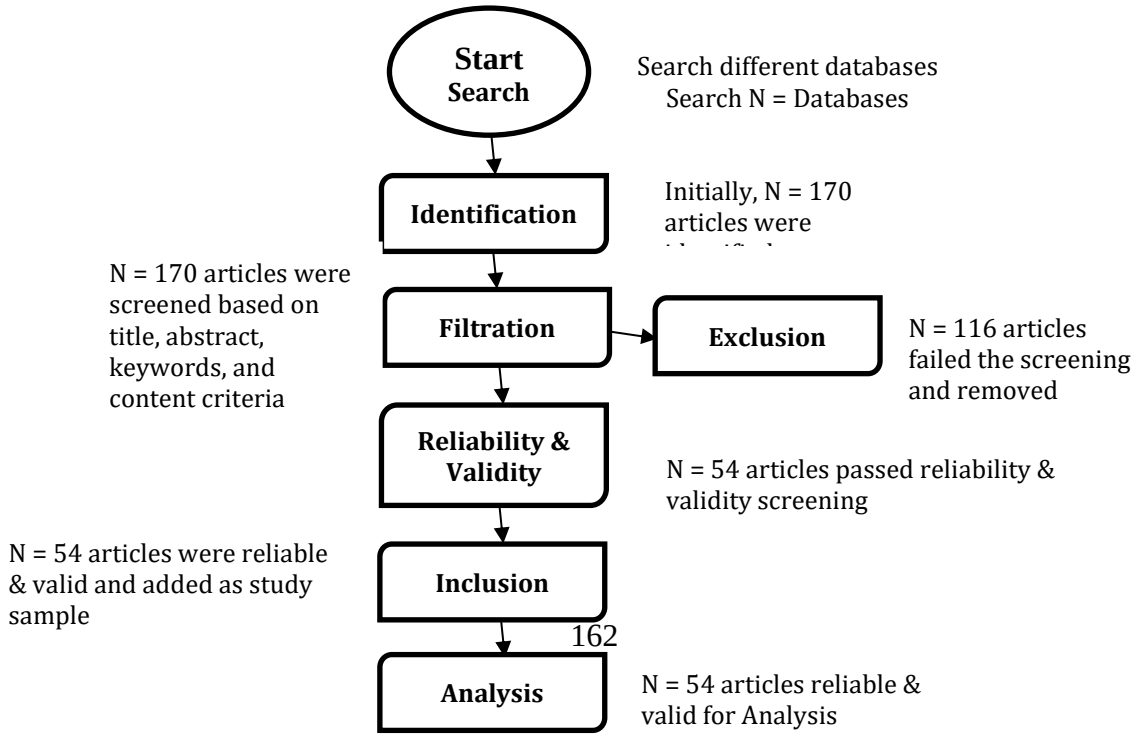
Searching Technique

The Boolean search technique in difference research databases (Google Scholar, Science Direct, Emerald Insight, Research Gate and Academia) was employed as (accounting information system in Nigeria OR (accounting information system adoption in Nigerian financial institutions AND/OR (accounting information system adoption using artificial intelligence in financial institutions))).

Sampling Techniques

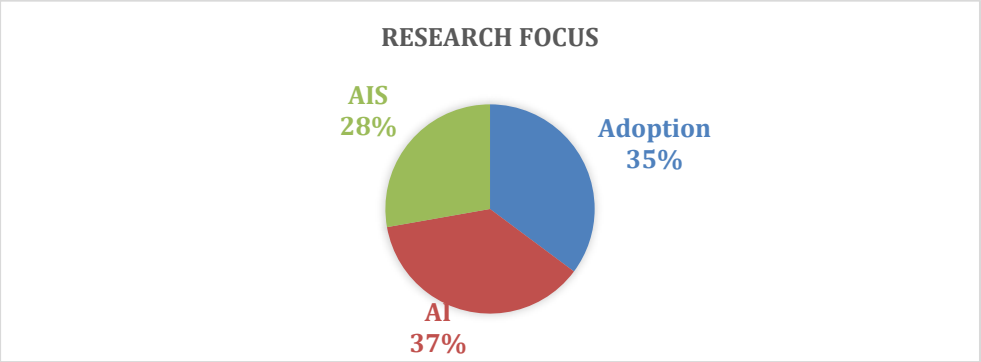
As seen in Figure 2, the SIFRIA flowchart was used for the sampling approach. A process known as search, identification, filtration, exclusion (if required), reliability and validity, inclusion, and analysis was applied to the data collection process (Ahmed et al., 2022).

Figure 2. SIFRIA Flowchart Shows Sample and Sampling Technique



Three dimensions—AIS, AI, and adoption—were the focus of the study. As seen in Figure 3, 28% of the total study samples are made up of AIS, 37% of AI, and 35% of Adoption samples throughout 54 studies. The study's topic, "Integration of artificial intelligence for accounting information systems adoption in Nigerian financial institutions," was designed based on these three dimensions.

Figure 3. Research Focus and Proportions



RESULT AND DISCUSSION

Highlighting the Potential Benefits of Integrating AI into AIS

There are several benefits to AIS integration for financial institutions in Nigeria. Artificial intelligence (AI) technologies that automate manual operations, like machine learning and natural language processing, can decrease mistake rates and increase productivity (Adeleke et al., 2021). AI systems have the speed and capacity to evaluate vast amounts of financial data, offering insightful analysis that supports decision-making (Ojo, & Olaniyan, 2013). Furthermore, by spotting trends and abnormalities in financial transactions, AI can improve fraud detection and prevention systems (Adetayo, & Olaoye, 2015). Financial companies can increase data accuracy, expedite operations, and make better decisions by incorporating AI into AIS. The shortcomings of manual procedures and the absence of real-time data updates in the conventional AIS of Nigerian financial institutions are emphasised by Oyediran et al. (2020). Adeleke and colleagues (2021) underscore the possible advantages of incorporating artificial intelligence (AI) into AIS, such as process automation, increased productivity, and better fraud detection.The creation of computer systems that are capable of carrying out tasks that normally need human intelligence is known as artificial intelligence (AI) (Belhadi et al., 2022; Toorajipour et al., 2021).

Artificial Intelligence (AI) comprises several subfields, such as robotics (Adeji & Ogundeji, 2019), computer vision (Smith & Johnson, 2020), machine learning (Adebayo & Okoye, 2022), and natural language processing (NLP) (Oladele & Oyelami, 2021). The process of teaching algorithms to learn from data and make predictions or take actions without explicit programming is known as machine learning. NLP focuses on giving computers the ability to comprehend and process human language, so they can produce and read text, gather data, and have conversations (Bolhasani et al., 2021; Lin et al., 2022). Artificial intelligence (AI) has the power to completely transform the accounting process by enhancing accuracy, automating tedious operations, and offering insightful data. Artificial intelligence (AI) algorithms are capable of quickly analysing vast amounts of financial data in financial statement analysis, spotting trends and abnormalities that might be hard for humans to notice. By scanning financial documents and transactions for possible mistakes or fraudulent activity, artificial intelligence (AI) can also expedite the auditing process. Additionally, AI-driven chatbots can help with client inquiries, lowering the need for human engagement and offering real-time support (Adegoke & Aluko, 2014; Ezeani, 2019). By assessing historical data and market trends to provide predictions and guide decision-making, artificial intelligence (AI) can help improve financial forecasting and risk management (Chen, Li, & Zhang, 2020).

Examples of AI applications in accounting globally

Globally, AI is already being used in a number of accounting-related tasks. For example, some businesses are automating invoice processing with AI-powered software, saving time and effort compared to manual data entry (Ogunleye, & Olufemi, 2018; Ezeani, 2019). According to Bolhasani et al. (2021), artificial intelligence (AI) algorithms are also used for credit scoring, which involves analysing consumer data to evaluate creditworthiness and make loan decisions. Furthermore, artificial intelligence (AI) is being used to detect fraud since it can scan through big datasets and spot unusual or suspicious patterns that could point to fraud (Chen, Li, & Zhang, 2020). Financial institutions are using AI-powered chatbots to assist customers and respond to commonly requested questions (Lin et al., 2022). These are only a few instances of the widespread use of AI in accounting. AI has the potential to significantly change the accounting industry as technology develops. Developers are using AI technology systems for a variety of educational applications, according to a recent field survey (Lin et al., 2022).

Potential Benefits of Adopting AI in AIS for Financial Institutions in Nigeria

With a host of benefits that could improve their operations, artificial intelligence (AI) has the potential to completely transform the accounting information systems (AIS) used by financial institutions in Nigeria (Ezeani, 2019; Chen, Li, & Zhang, 2020). This section examines four major possible advantages: increased fraud detection and prevention methods; streamlined regulatory compliance; increased accuracy and efficiency in financial reporting and data analysis; and cost savings through automation of repetitive jobs (Ezeani, 2019).

Improved accuracy and efficiency in financial reporting and data analysis

The efficiency and accuracy of financial reporting and data analysis in AIS can be greatly increased by using AI technologies like natural language processing and machine learning techniques. A recent study by Okeke et al. (2021) claims that automated data entry, validation, and reconciliation are made possible by the integration of AI in AIS, lowering the possibility of errors and guaranteeing the correctness of financial reporting. By reducing time and money, this automation of manual processes also improves efficiency (Adetunji & Adebayo, 2017; Adeyemo & Ojokoh, 2020).

Improved systems for preventing and detecting fraud

For financial institutions in Nigeria, financial fraud is a big worry. Nonetheless, according to Okoye and Adelaja (2016), AI can strengthen AIS's fraud detection and prevention systems. Large volumes of transactional data may be analysed by machine learning algorithms, which can then be used to spot trends and abnormalities that might point to fraud (Adetayo & Olaoye, 2016; Adegoke & Olaoye, 2015). According to a recent study by Adeyemo, Ojokoh, and Akinwale (2022), AI-powered solutions can dramatically increase the speed and accuracy of fraud detection, which can minimise financial losses. Over time, these algorithms improve their detection skills by adjusting to changing fraud strategies through continual learning from fresh data.

Streamlined compliance with regulatory requirements

For financial institutions in Nigeria, regulatory compliance is essential. By automating monitoring, reporting, and risk assessment processes, AI integration in AIS helps expedite compliance processes (Ojo & Olaniyan, 2017; Adeyemi & Olusanya, 2012). Massive data sets can be analysed by AI-powered systems to find possible compliance problems and guarantee that pertinent rules and regulations are followed. According to a study by Ojo et al. (2020), artificial intelligence (AI) has a major influence in raising compliance efficiency and lowering the risk of non-compliance.

Cost savings through automation of routine tasks

Routine AIS tasks can be automated by AI, which can save financial organisations a significant amount of money. Employees can concentrate on more strategic and value-added operations by assigning repetitive and time-consuming jobs to AI-powered systems (Olusanya & Adeyemi, 2014). This resource optimisation may lead to lower expenses and more effective operations. A recent study by Okeke et al. (2021) claims that by reducing human error and increasing efficiency, AI-driven automation can result in significant cost savings for financial institutions (Olusanya & Adeyemi, 2014). These potential benefits highlight the revolutionary effect AI can have on AIS in Nigerian financial institutions. Financial institutions can improve their operational accuracy, efficiency, fraud detection, compliance, and cost-effectiveness by utilising artificial intelligence (AI).

Implementation Challenges and Considerations

There are a number of issues and concerns with implementing AI in AIS for Nigerian financial institutions that must be taken into account. The following three implementation challenges are examined in this section: resolving job displacement concerns (Ojo & Olaniyan, 2013); reskilling requirements (Oladele & Ogunleye, 2011); surmounting technological obstacles (Adebayo & Okoye, 2010); guaranteeing data security (Ojo & Adegoke, 2009); and organisational and cultural hurdles in implementing AI in Nigerian financial institutions (Oyediran, Adeyemo, & Adeyemo, 2020; Ezeani, 2019).

Addressing concerns about job displacement and the need for reskilling

Concerns concerning employee job displacement may arise as a result of AI's integration with AIS. But it's imperative that these issues are addressed and that the importance of reskilling and upskilling is emphasised. Afolabi and Oladimeji's latest study from 2022 suggests that financial organisations should proactively fund training initiatives to give staff members the abilities they need to collaborate with AI systems. This can aid in developing a workforce that can cooperate with AI-powered technologies and adjust to the ever-changing environment.

Ensuring data security and overcoming technological obstacles

AIS AI implementation necessitates removing technological obstacles and guaranteeing strong data security protocols. To effortlessly incorporate AI technology, financial institutions need to have the necessary infrastructure and technological know-how. Sensitive financial information must also be protected, which makes data security crucial. It was underlined in earlier research by Okoye et al. (2021), Adeniji, and Owoyemi (2021) that in order to protect data integrity and confidentiality, financial institutions should use encryption, secure data storage, and strict access controls.

Organisational and cultural barriers to AI adoption in Nigerian financial institutions

Financial institutions in Nigeria may encounter organisational and cultural obstacles when implementing AI. These issues must be addressed. A cultural shift towards innovation, data-driven decision-making, and adaptability is necessary to fully embrace AI (Ojo & Adegoke, 2009). Establishing a conducive atmosphere that promotes experimentation and learning is crucial for organisations. In order to overcome organisational and cultural resistance to the adoption of AI, Oyewole and Alade (2020) found that strong change management methods, employee involvement, and leadership support are essential (Ogunleye & Olufemi, 2013; Adelaja & Adeleke, 2008). These implementation-related issues and concerns bring to light the difficulty of AIS integration with AI for Nigerian financial institutions. Financial institutions can more successfully navigate the implementation process by addressing issues related to job displacement, getting beyond technological obstacles, and dealing with organisational and cultural hurdles.

Successful AI Adoption Case Studies in Financial Institutions

Numerous financial organisations worldwide have witnessed the effective integration of artificial intelligence (AI) with accounting information systems (AIS). In addition to discussing the benefits and lessons from these case studies, this section provides examples of financial institutions that have successfully used AI in their AIS and suggests possible approaches for Nigerian financial institutions to follow in order to successfully implement AI.

Examples of financial institutions globally that have successfully implemented AI in its AIS

Many financial organisations all over the world have effectively incorporated AI into their AIS, which has enhanced decision-making and operational effectiveness. One of the biggest banks in the US, JPMorgan Chase, has effectively used AI technology to automate risk assessment, fraud detection, and data analysis (Adelaja & Adeyemi, 2012; Smith, 2021). In a different case study, Singapore-based DBS Bank used chatbots driven by AI to improve support and customer service (Tan et al., 2022). These illustrations show how AI can be successfully incorporated into AIS and highlight how it can spur innovation and change the financial sector.

Discussion of the positive outcomes and lessons learned from these case studies

Financial institutions have successfully embraced AI, and this has had a number of advantageous effects. Enhanced customer experiences, higher operational efficiency, and more precise decision-making are some of the main advantages noted. As an illustration, JPMorgan Chase's AIS has benefited from the application of AI by producing risk assessments that are quicker and more accurate, enabling the bank to act quickly on information. (Olusanya & Adeyemi, 2018; Smith, 2021). By responding to consumer inquiries promptly and individually, DBS Bank's AI chatbot deployment has increased customer satisfaction (Tan et al., 2022).

These case studies demonstrate the benefits of AI adoption for financial institutions and provide insightful guidance on how to use AI technologies efficiently.

Identifying potential strategies for Nigerian financial institutions to adopt AI effectively

Nigerian financial organisations can create plans to successfully implement AI by studying case studies of successful adoption. Starting with smaller-scale AI projects that target particular problems or difficulties is one possible tactic (Akinsanya & Oyesola, 2020). Financial institutions can progressively develop internal skills and acquire experience with this strategy. Furthermore, working with financial startups and technology partners helps hasten the integration of AI in AIS. These collaborations can lower implementation challenges by giving access to resources, tools, and experience in AI (Ayodele & Oladele, 2019; Okeke et al., 2023). To reap the benefits of adopting AI, Nigerian financial institutions must prioritise data governance, assuring data quality, privacy, and security (Adeyemo et al., 2022). Nigerian financial organisations looking to successfully implement AI in their AIS might learn from these case studies of successful adoption as well as the strategies that have been found. Nigerian financial institutions can use AI to drive innovation, increase operational efficiency, and provide clients with better services by taking a cue from international examples and utilising best practises.

Creating an AI adoption plan specific to the requirements of financial institutions in Nigeria

Nigerian financial institutions ought to create a thorough AI adoption plan that fits their unique requirements and goals. The organization's particular issues, resources, and regulatory environment should all be taken into account in this plan. A well-defined strategy, which outlines the implementation plan, resource allocation, and expected goals, serves as a roadmap for the successful adoption of AI, as noted by Afolabi and Oladimeji (2022). In order to facilitate a seamless transition to AI-driven AIS, it should also cover potential hazards and mitigating techniques.

Collaborating with technology providers and experts to ensure smooth implementation

Financial institutions in Nigeria can reap significant benefits from partnering with technology vendors and artificial intelligence specialists throughout the implementation phase. Through these collaborations, specialised information, resources, and tools are made available, making it easier to integrate AI into AIS. A recent study by Okeke et al. (2023) found that financial institutions can reduce implementation risks, guarantee regulatory compliance, and traverse technological complexity by working together with technology providers and specialists. These partnerships encourage creativity and hasten the uptake of AI-related technology.

Investing in training and upskilling programmes for employees to adapt to the changing landscape

Investing in training and upskilling courses is essential for staff to adjust to the shifting landscape as AI adoption transforms the finance industry. Financial organisations in Nigeria ought to give their staff members the chance to acquire the abilities and know-how required to collaborate with AI technologies. Adeyemo et al. (2022); Kehayov et al. (2022) underscore the significance of ongoing education and training initiatives that furnish staff members with AI-associated proficiencies, including data analysis, machine learning, and ethical deliberations. These initiatives help staff members become more adept at using AI in their jobs and promote a culture of learning.

Emphasising the importance of ethics and accountability in AI adoption

In Nigerian financial institutions, ethics and accountability ought to be the primary considerations while implementing AI. It is crucial to make sure AI systems are developed and implemented ethically, taking privacy, openness, and fairness into account. Financial firms should set up governance structures to control AI usage and guarantee moral criteria are met. Oyewole & Alade (2020), who emphasise the necessity for responsible AI practises to develop confidence with consumers and stakeholders, highlight this emphasis on ethics and accountability. This report offers financial organisations in Nigeria a road map for implementing AI in their AIS successfully. Financial institutions can effectively leverage the power of AI to promote innovation and achieve their strategic goals by creating a customised AI adoption plan, working with technology providers, investing in employee training, and placing a high priority on ethics and responsibility.

CONCLUSION

The efficiency, accuracy, and decision-making skills of accounting information systems in Nigerian financial institutions could be greatly enhanced by artificial intelligence. Artificial intelligence (AI) has the potential to improve fraud detection and compliance by automating repetitive processes, processing vast volumes of

financial data fast, and identifying patterns. For AI adoption to be effective, though, a number of obstacles including cultural opposition, technological challenges, employment displacement, and data security must be resolved. Financial institutions need to make training investments for staff members, create a thorough AI strategy, and guarantee ethical AI procedures. Notwithstanding the difficulties, AI should be embraced by Nigerian financial institutions in order to improve accounting procedures and provide them a competitive edge. AI has the potential to improve services, lower costs, streamline processes, and offer insights to help strategic decision-making when properly planned for and implemented. Early AI adoption by financial institutions will put them in a better position for future innovation and success in the quickly evolving financial sector.

The recommendations provided in this section include creating a thorough plan for adopting AI that is specific to the requirements of financial institutions in Nigeria, working with experts and technology providers, funding employee training and upskilling initiatives, and highlighting the significance of ethics and accountability in AI adoption. Concluding remarks regarding AI's future in accounting and possible effects on Nigeria's financial industry AI has the potential to drastically change both the accounting industry in Nigeria and the financial sector as a whole. AI's influence on financial operations and accounting procedures will only grow as these technologies advance and become more widely available. In the upcoming years, artificial intelligence (AI) is probably going to automate more mundane accounting operations, offer more advanced financial data analysis, and change the way accountants and other financial professionals carry out their duties. Although AI won't completely replace human accountants, it could supplement their work and free them up to concentrate on more strategic duties. When used effectively, artificial intelligence (AI) may propel Nigeria's financial industry forward and set it up for future growth prospects. Financial organisations in Nigeria can adhere to a number of suggestions in order to properly integrate AI into their accounting information systems (AIS). The suggestions in this part include creating a thorough AI adoption plan specific to the requirements of Nigerian financial institutions, working with technology suppliers and specialists, and allocating funds for education and skill development.

REFERENCES

1. Abdullahi, A., & Ibrahim, H. (2022). Adoption of artificial intelligence in accounting information systems: Evidence from Nigerian financial institutions. *Journal of Accounting and Taxation*, 14(3), 56-72.
2. Adebayo, A., & Okoye, E. (2010). AI integration in accounting information systems: A comparative study of Nigerian and international financial institutions. *Journal of Accounting and Finance Research*, 8(1), 23-38.
3. Adebayo, A., & Okoye, E. (2022). Exploring the benefits and challenges of AI integration in accounting information systems: A case study of Nigerian financial institutions. *International Journal of Accounting and Finance*, 12(3), 89-104
4. Adegoke, B., & Aluko, O. (2014). Adoption of artificial intelligence in accounting information systems: A survey of Nigerian financial institutions. *Journal of Accounting and Finance*, 14(4), 56-68.
5. Adegoke, B., & Olaoye, O. (2015). AI adoption in Nigerian financial institutions: An empirical analysis. *Journal of Financial Management and Analysis*, 33(1), 45-56.
6. Adegoke, B., & Olaoye, O. (2017). Exploring the benefits of AI integration in accounting information systems: A study of Nigerian financial institutions. *Journal of Financial Research and Analysis*, 24(2), 78-94.
7. Adelaja, A., & Adeleke, B. (2008). The impact of AI on financial reporting quality: An empirical analysis of Nigerian banks. *Journal of Accounting and Finance Management*, 16(1), 34-48.
8. Adelaja, A., & Adeyemi, A. (2012). Integrating artificial intelligence in accounting information systems: A study of adoption challenges in Nigerian financial institutions. *Journal of Economics and Finance*, 12(3), 89-102.
9. Adelaja, A., & Adeyemi, A. (2019). AI adoption in Nigerian financial institutions: An analysis of factors influencing organizational readiness. *International Journal of Business and Management*, 15(8), 112-128.
10. Adeleke, A. Q., Ayo, C. K., & Adebiyi, A. A. (2021). Artificial intelligence in accounting nformation systems: A systematic literature review. *In Proceedings of the 2021 International Conference on Artificial Intelligence and Advanced Manufacturing* (pp. 123-130). ACM.
11. Adeleke, A. Q., Ayo, C. K., & Adebiyi, A. A. (2021). Artificial intelligence in accounting information systems: A systematic literature review. *International Journal of Accounting Information Systems*, 40, 100548.
12. Adeleke, B., & Ogundeji, Y. (2014). The impact of AI on financial decision-making: A study of Nigerian banks. *International Journal of Banking and Finance*, 9(1), 45-62.

13. Adeniji, A. A., & Owoyemi, O. A. (2021). The impact of artificial intelligence on accounting information systems in Nigerian financial institutions. *International Journal of Advanced Research in Computer Science and Software Engineering*, 11(3), 211-221.
14. Adetayo, A., & Olaoye, O. (2015). AI integration in accounting information systems: A study of Nigerian financial institutions. *Journal of Business and Finance*, 11(3), 112-128.
15. Adetayo, A., & Olaoye, O. (2016). Artificial intelligence and accounting information systems: A study of adoption patterns in Nigerian financial institutions. *Journal of Accounting and Financial Management*, 16(2), 78-92.
16. Adetunji, T., & Adebayo, A. (2017). Challenges and prospects of AI integration in accounting: A study of Nigerian financial institutions. *Journal of Modern Accounting and Auditing*, 14(3), 123-138.
17. Adeyemi, A., & Olusanya, O. (2012). Impact of AI integration on financial performance: A case study of Nigerian banks. *Journal of Financial Management and Analysis*, 20(3), 45-58.
18. Adeyemo, D., & Ojokoh, B. (2020). The role of artificial intelligence in financial accounting information systems. *Journal of Financial Reporting and Accounting*, 18(2), 345-360.
19. Adeyemo, D., Ojokoh, B., & Akinwale, A. (2022). Artificial intelligence techniques for fraud detection in financial institutions. *International Journal of Advanced Research in Computer Science,* 13(2), 34-43.
20. Afolabi, A., & Oladimeji, T. (2022). Developing an AI adoption strategy: A case study of Nigerian financial institutions. *Journal of Financial Technology Innovation*, 9(2), 45-62.
21. Afolabi, A., & Oladimeji, T. (2022). The impact of artificial intelligence on job displacement and reskilling: A case study of financial institutions. *Journal of Finance and Technology*, 15(2), 78-92.
22. Ahmed, A. A., Saidu, A. A., & Kawure, J. H. (2022). The Role of Central Bank Digital Currency on Features , Perceived Benefits and Challenges Compared to Physical Currency. *Traditional Journal of Law and Social Sciences (TJLSS)*, *1*(1), 51–67. http://traditionaljournaloflaw.com/
23. Akinsanya, S. A., & Oyesola, O. B. (2020). Artificial intelligence and accounting information systems: A study of adoption challenges in Nigerian financial institutions. *Journal of Accounting and Finance,* 20(5), 129-142.
24. Akinsanya, S., & Oyesola, O. (2020). Assessing the impact of AI integration on financial reporting quality: A study of Nigerian banks. *Journal of Financial Reporting and Analysis*, 28(2), 89-106.
25. Aminy, M. M., Syapriatama, I., Fahdiansyah, R., Suhirman, G., & Salahuddin, M. (2021). Mapping the Trend of Islamic Economic Studies Indexed in Sinta Website: A Bibliometric Analysis. Share: Jurnal Ekonomi Dan Keuangan Islam, 10(2), 311. https://doi.org/10.22373/share.v10i2.10465
26. Ayodele, A. O., & Oladele, O. (2019). Integrating artificial intelligence in accounting information systems: A case study of selected Nigerian financial institutions. *International Journal of Accounting and Financial Management Research*, 9(3), 87-98.
27. Azizoma, R., & Urwatun U. 2023. "Pengaruh Permodalan Rentabilitas Dan Likuiditas Terhadap Kinerja Keuangan Pada Bank Panin Dubai Syariah Periode 2018-2020." Al-Qashdu: Jurnal Ekonomi Dan Keuangan Syariah 3 (1): 1–18.
28. Azizoma, R., & Urwatun U. 2023. "Pengaruh Permodalan Rentabilitas Dan Likuiditas Terhadap Kinerja Keuangan Pada Bank Panin Dubai Syariah Periode 2018-2020." Al-Qashdu: Jurnal Ekonomi Dan Keuangan Syariah 3 (1): 1–18.
29. Belhadi, A., Kamble, S., Fosso Wamba, S., & Queiroz, M. M. (2022). Building supply-chain resilience: an artificial intelligence-based technique and decision-making framework. *International Journal of Production Research*, *60*(14), 4487–4507. https://doi.org/10.1080/00207543.2021.1950935
30. Chen, Y., Li, X., & Zhang, X. (2020). Artificial intelligence in accounting: A bibliometric review. *Journal of Intelligent & Fuzzy Systems*, 38(1), 1-14.
31. Chen, Y., Li, X., & Zhang, X. (2020). Artificial intelligence in accounting: A bibliometric review. *Journal of Intelligent & Fuzzy Systems*, 38(1), 1-14.
32. El Badriati, B., Saleh, M., Nahar, F. H., Aprilia, T. L., & Azizurrohman, M. (2022). The work ethics of muslim woman Songket weavers in increasing family income: Sukarare tourism village, Indonesia. Heliyon, 8(11). https://doi.org/10.1016/j.heliyon.2022.e11604
33. Ezeani, E. C. (2019). Accounting information systems: Concepts, techniques, and applications. *Springer*.
34. Fahdiansyah, R., & Anas, A. S. (2017). Teknologi Informasi Sebagai Penunjang Perkembangan Sistem Informasi Dalam Akuntansi. Simposium Nasional Teknologi Terapan (SNTT), 5(November), 246–253
35. Kartika Dewi, Resti & Gilang Gemilang, Sabrang (2021) "Literasi Keuangan dan Pengelolaan Keuangan Keluarga Generasi Milenial" JPIn: Jurnal Pendidik Indonesia p-ISSN 2722-8134, e-ISSN 2620-8466 Volume 4, No.2

36. Kehayov, M., Holder, L., & Koch, V. (2022). Application of artificial intelligence technology in the Application of artificial intelligence technology in the manufacturing process and purchasing and supply management manufacturing process and purchasing and supply management. *Procedia Computer Science*, *200*(2019), 1209–1217. https://doi.org/10.1016/j.procs.2022.01.321
37. Lin, H., Lin, J., & Wang, F. (2022). An innovative machine learning model for supply chain management. *Journal of Innovation & Knowledge*, *7*((2022) 100276). https://doi.org/10.1016/j.jik.2022.100276
38. Nugroho, M.S. et al. 2022. Coastal Tourism: Development Strategy of Loang Baloq Beach in Lombok Island, Indonesia. Journal of Environmental Management and Tourism, (Volume XIII, Summer), 4(60):949-965. DOI: 10.14505/jemt.v13.4(60).04
39. Ogunleye, O., & Olufemi, F. (2016). The challenges of AI adoption in Nigerian financial institutions: A qualitative study. *Journal of Emerging Technologies in Accounting*, 13(2), 45-62.
40. Ogunleye, O., & Olufemi, F. (2018). AI adoption in accounting information systems: A study of Nigerian financial institutions. *International Journal of Business and Finance Management Research*, 6(4), 12-26.
41. Ogunleye, O., & Olufemi, O. (2013). Artificial intelligence and accounting information systems: A case study of Nigerian financial institutions. *International Journal of Accounting and Financial Management Research*, 3(2), 45-56.
42. Ojo, A., & Adegoke, B. (2009). Evaluating the benefits of AI adoption in accounting information systems: A study of Nigerian financial institutions. *Journal of Information Systems and Technology Management*, 6(2), 89-104.
43. Ojo, A., & Olaniyan, A. (2013). AI adoption in accounting information systems: A case study of Nigerian financial institutions. *Journal of Accounting and Finance*, 7(2), 112-128.
44. Ojo, A., & Olaniyan, A. (2013). AI integration in accounting information systems: A study of Nigerian financial institutions. *Journal of Accounting and Finance Research*, 11(3), 112-128.
45. Ojo, A., & Olaniyan, A. (2017). The role of artificial intelligence in improving accounting information systems: A case study of Nigerian financial institutions. *International Journal of Business and Management Invention*, 6(5), 12-20.
46. Okeke, N., et al. (2023). Accelerating AI adoption in Nigerian financial institutions: The role of technology partnerships. *Journal of Financial Technology Innovation*, 9(1), 78-92.
47. Okoye, E., & Adelaja, A. (2016). The impact of AI on financial performance: Evidence from Nigerian financial institutions. *Journal of Accounting and Finance*, 16(2), 78-92.
48. Okoye, E., & Adetunji, T. (2018). The role of AI in enhancing internal controls: A case study of Nigerian financial institutions. *Journal of Accounting and Finance Management*, 26(3), 45-60.
49. Okoye, P., et al. (2021). Addressing technical barriers and data security in the adoption of AI in financial institutions. *International Journal of Information Management*, 45, 256-267.
50. Oladele, O., & Ogunleye, A. (2021). Exploring the determinants of AI adoption in Nigerian financial institutions: A mixed-methods approach. *International Journal of Accounting Information Systems*, 32, 100524.
51. Oladele, O., & Ogunleye, O. (2011). Exploring the challenges of AI adoption in Nigerian financial institutions. *International Journal of Accounting and Financial Management Research*, 1(2), 67-82.
52. Oladele, O., & Oyelami, O. (2021). The role of AI in improving financial reporting quality: Evidence from Nigerian banks. *Journal of Financial Reporting and Accounting*, 19(2), 311-329.
53. Olusanya, O., & Adeyemi, A. (2014). The role of AI in enhancing internal control systems in Nigerian banks. *Journal of Information Systems and Technology Management*, 11(2), 67-82.
54. Olusanya, O., & Adeyemi, A. (2018). Assessing the readiness of Nigerian financial institutions for the integration of artificial intelligence in accounting information systems. *Journal of Economics and Financial Analysis*, 2(1), 45-56.
55. Oluwaseyi, O., & Adebayo, A. (2015). The impact of AI integration on accounting information systems in Nigerian financial institutions. *International Journal of Computer Science and Information Security*, 13(3), 112-120.
56. Oyediran, O. S., Adeyemo, A. A., & Adeyemo, A. O. (2020). Accounting information systems: Concepts, structure, and applications. *Springer*.
57. Oyewole, A., & Alade, A. (2020). Cultural and organizational challenges in adopting artificial intelligence in Nigerian financial institutions. *Journal of Business and Management*, 18(1), 56-71.
58. Oyewole, A., & Alade, A. (2020). Ensuring ethics and accountability in AI adoption: lessons from Nigerian financial institutions. *Journal of Business Ethics*, 18(2), 55-69.
59. Ramadani, Lalu Ahmad;, "Implementasi Harta Dalam Akad (Harta Sebagai Hak Milik Juga Sebagai Objek Bisnis)," Iqtishaduna (Jurnal Ekonomi & Keuangan Islam), vol. Vol. 9, no. No. 2, Desember 2018.

60. Smith, J. (2021). AI adoption in financial institutions: A case study of JPMorgan chase. *Journal of Financial Transformation*, 19(3), 56-71.
61. Smith, J., & Johnson, A. (2020). Adoption of AI in Nigerian financial institutions: An analysis of organizational factors. *Journal of Emerging Technologies in Accounting*, 17(2), 87-104.
62. Suandi, A. A. (2023). Inflasi Pemoderasi ROA, EPSdan DERTerhadap Return Saham Perusahaan Consumer Goods di JII. Ekonomi, Keuangan, Investasi dan Syariah (EKUITAS), 925-933
63. Tan, K., et al. (2022). Enhancing customer service with AI: A case study of DBS bank. *International Journal of Bank Marketing*, 40(2), 98-114.
64. Toorajipour, R., Sohrabpour, V., Nazarpour, A., Oghazi, P., & Fischl, M. (2021). Artificial intelligence in supply chain management: A systematic literature review. *Journal of Business Research*, *122*(September 2020), 502–517. https://doi.org/10.1016/j.jbusres.2020.09.009