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Mapping the Intersection of Artificial Intelligence and Audit Quality: A Bibliometric Analysis of Research Trends

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Abstract: The integration of artificial intelligence into audit practice has attracted considerable academic interest, particularly about its impact on improving audit quality. This study aims to examine the emerging trends in academic research at the intersection of artificial intelligence and audit quality through a bibliometric lens. A comprehensive dataset was extracted from the Scopus database based on documents published between 2008 and 2025, with a total of 122 documents included in the final analysis. The results show a notable increase in publications, reflecting the growing academic interest in the application of AI in auditing. The keyword analysis revealed that audit quality and artificial intelligence are the most frequently used and cited terms, highlighting them as fundamental topics. To summarize, this study provides a comprehensive bibliometric overview of the current state and future development of research on artificial intelligence and audit quality. It provides valuable insights for academics, practitioners and policy makers who want to understand the development of the field, identify influential contributions and uncover potential gaps for future research. As artificial intelligence continues to reshape the auditing profession, continued interdisciplinary collaboration is essential to ensure that technological advances do not jeopardize audit quality and professional integrity.

Keywords: *Artificial intelligence, Audit quality, Bibliometric analysis, biblioMagika, OpenRefine*

1. Introduction

Amid swift technological advancement, artificial intelligence (AI) has emerged as a major driver of transformation across various fields, including auditing. AI is characterized as the implementation of information technology and systems engineering involving intelligent machines and computers capable of demonstrating human-like interpretation, learning, autonomous action, and the capacity to analyze extensive data and independently make informed decisions (Griffin, 2019). AI technologies have emerged as a critical consideration for auditing businesses in their operational planning, seeking to capitalize on the growing volume of accessible big data. AI is an information technology that can gather, arrange, process and disseminate vast amounts of data in more reliable and accurate information (Laudon et al., 2020). This will enable the accountants to interpret data and draw conclusions from the findings. The use of AI has resulted in a paradigm shift from traditional data processing to highly automated data collection procedures that are more creative and advanced. This has improved the quality of audits and financial reporting by making them more accurate, reliable, and timely (Aguguom & Ebun, 2021; Albawwat & Frijat, 2021; Deniz & Jeffery, 2022).

An audit is a verification activity that takes place on-site and entails checking if a process or quality system conforms to requirements. It will facilitate an auditor to express an opinion on whether management has fairly and truthfully presented the information in the financial statements and business affairs for the financial period. An audit may focus on a specific function, process, or manufacturing step, or it may encompass the entire organization. Audits are crucial for verifying adherence to laws, rules, and accounting standards. Companies must follow accounting rules and reporting guidelines as one of their legal obligations. In order to guarantee the accuracy of financial statements and their ability to provide economic value to investment choices, audit quality is concerned with comprehensive, trustworthy, and comparable data (Adeoye et al., 2023).

Technological advances have changed the landscape of auditing. Auditors are endeavoring to use audit tools to ensure high audit quality in audit procedures. The application of AI in the audit process offers the ability to increase audit quality, as auditors may utilize AI-powered tools to do advanced data analytics and uncover

trends, patterns and inconsistencies in financial data. A high-quality audit provides independent assurance that the organization is meeting compliance requirements and can reduce the risk of fines, legal repercussions or reputational damage (Taha, 2024). It also fulfills stakeholder demands for greater efficiency, accuracy and transparency in the audit process. Furthermore, a quality review offers an impartial evaluation of the business's financial reporting, which promotes effective corporate governance and management accountability. Audits ensure the integrity and reliability of financial statements and protect the company's assets, investments and jobs, which fosters stability and trust in corporate governance (Qader et al., 2024). Moreover, the interests of other stakeholders such as employees, customers, suppliers and financiers can be safeguarded through audits. Audits increase the transparency and accountability of organizations by highlighting weaknesses and areas for improvement. This can be done by reviewing the organization's internal controls and risk management (Ogbu, 2023).

Moreover, the application of AI could significantly raise audit quality, which includes the reliability, relevance and transparency of audit findings. Auditors can analyze whole samples of transactions much more quickly using AI approaches (Issa et al., 2016). This benefit allows auditors to use their professional abilities efficiently by concentrating on interpreting AI-generated findings rather than performing manual work. Additionally, AI facilitates the automation of some procedures, for example, reviewing sources of documents such as bank checks and payment vouchers. It also helps in processing paperwork and extracting metadata from emails and memos. The conventional financial characteristics employed in audits can be enhanced by such supplementary evidence (Issa et al., 2016). High-risk transactions are easily detected through the use of AI-based auditing technology. This is something that the manual auditing process cannot properly detect due to sampling, but AI technology allows the entire population to be audited (Noordin et al., 2022). Incorporating intelligent technology into accounting and auditing procedures increases accuracy and efficiency, which lowers costs and workloads and, in turn, improves audit quality. Several companies have spent billions of dollars on the auditing sector to create new methods and technologies that would assist auditors in completing challenging and complex tasks within a tight deadline (Stoel & Havelka, 2021).

AI is an important tool that can help auditors to increase audit quality and efficiency during performing audits. This approach has also been demonstrated to be a dependable way to lower the likelihood of human error. AI should be considered as an innovative approach to enhance the auditing procedure. Therefore, this study provides a comprehensive bibliometric overview of the current state and future development of research on AI and audit quality. The bibliometric results highlight important connotations and research trends in the literature and provide an insight into the intellectual structure of the field by methodically analyzing research patterns, citation networks and prominent publications.

The structure of this paper is as follows. The literature review is explained in Section 2, the research methodology is explained in Section 3, the results are presented in Section 4, and the study's conclusion, which includes a summary of the findings and suggestions for further research, is presented in Section 5.

2. Literature Review

Artificial Intelligence in Accounting and Auditing

The rapid advancement of AI has triggered significant transformation within financial domains, particularly in accounting and auditing. AI tools such as machine learning, natural language processing, and predictive analytics provide effective solutions to longstanding challenges involving data accuracy, operational efficiency and compliance oversight. These intelligent capabilities are increasingly embedded into financial systems, raising transformative questions about automation, assurance and accountability.

AI refers to the capability of machines or systems to perform tasks that typically require human intelligence, including learning, reasoning, problem solving, perception and language understanding (Lin & Chang, 2023). It is commonly associated with algorithmic processes and signifies the simulation of human cognitive abilities by computer systems (Sheikh et al., 2023), encompassing the concept of man-made machines or sentient beings that can think, learn and make autonomous decisions (Hasan, 2022).

Accounting is the systematic process of recording, classifying, summarizing and interpreting financial transactions to reflect an organization's performance, profitability and financial position. Its primary objective is to produce accurate and reliable financial information that facilitates informed decision making, ensures regulatory compliance and enables assessment of organizational performance and financial position (Gonzalez & James, 2024). Meanwhile, auditing is the independent examination and evaluation of financial statements and records to determine their accuracy, reliability and adherence to applicable standards (Public Company Oversight Board, 2016). It ensures transparency and assures stakeholders of the integrity of financial reporting. Recent advances illustrate how AI has transformed traditional accounting practices. AI technologies have reshaped accounting operations by automating repetitive tasks, improving classification accuracy and enabling real-time insights (Panwar, 2023). Tools based on machine learning and data analytics are employed to automate transaction classification, flag inconsistencies and generate predictive financial models (Hasan, 2022). These innovations enable faster processing, improved accuracy and dynamic responsiveness to dynamic data flows. AI also significantly improves the accuracy and efficiency of financial reporting by automating repetitive processes, including data entry, transaction categorization and reconciliation (Odonkor et al., 2024). Furthermore, intelligent systems enhance the completeness and timeliness of reporting by detecting duplicate entries, validating invoice data and aligning financial records with regulatory requirements, thereby strengthening the integrity of accounting outputs and audit readiness (Odonkor et al., 2024).

In auditing, AI supports risk assessments and evidence gathering through anomaly detection, natural language processing and continuous monitoring systems (Leocadio et al., 2024). These capabilities reduce manual errors and facilitate deeper insights, enhancing audit reliability and comprehensiveness. AI systems also assist auditors in professional judgment areas, such as materiality assessment and fraud prediction by analyzing historical data patterns and generating dynamic risk scores. Tools employing machine learning and linguistic analysis enable more accurate identification of control weaknesses and irregularities, thereby strengthening decision-making in audit and execution. Furthermore, AI enhances the sufficiency and appropriateness of audit evidence by automating transaction sampling, confirming ledger balances, and verifying source documentation with greater speed and precision. These functions help auditors assemble robust digital audit trails and support transparent evidence-based conclusions. AI tools are increasingly aligned with international auditing standards, contributing to transparent and efficient compliance verification. These advancements improve audit depth, timeliness and compliance monitoring particularly in high-volume environments (Fidyah et al., 2024).

The integration of AI into accounting and auditing is often conceptualized using technology acceptance models such as the Technology Acceptance Model and Diffusion of Innovation Theory. These frameworks suggest that perceived usefulness and ease of use are critical predictors of AI adoption in financial services (Rogers, 2003). Moreover, the Accounting Information Systems model situates AI as a transformative component within organizational financial infrastructure that enhances internal controls, data governance and decision-making capabilities (Romney & Steinbart, 2021). As intelligent systems become more embedded in assurance processes, international standard-setting bodies, including the Public Company Accounting Oversight Board and the International Auditing and Assurance Standards Board (IAASB), are updating their frameworks to accommodate AI-enabled audit techniques. These adjustments aim to ensure that AI-driven procedures remain transparent, ethical, and compliant with established principles such as audit independence, evidence sufficiency, and risk-based planning (IAASB, 2023; PCAOB, 2016).

Audit Quality

Auditors play a key role in ensuring technological excellence in quality assurance, where rapid changes in computer-based systems have transformed the auditing landscape (Willborn, 1989). Auditors must adopt innovative, integrative approaches and support policies that advance auditing technologies. Audit quality refers to the reliability of the audit report and the audited financial statements (Francis, 2023). It encompasses auditor competence, independence, and judgment, and is best assessed through audit outcomes rather than processes. High-quality audits constrain aggressive accounting and enhance the credibility of financial reporting for stakeholders and investors. Francis (2004) stated that audit quality refers to the degree to which audits meet legal and professional standards, minimizing audit failures. It exists on a continuum from low to high and is influenced by auditor independence, firm size, industry expertise, legal environments and audit outcomes. High audit quality enhances financial reporting credibility and investor confidence. Al-Qatamin and

Salleh (2020) concluded that audit quality lacks a single, universally accepted definition. It is often described in terms of an auditor's ability to identify and report material misstatements, and their adherence to auditing standards such as Generally Accepted Auditing Standards (GAAS) and Generally Accepted Accounting Standards (GAAP).

Audit quality influences stakeholder trust and decisions, including shareholders, creditors, regulators, and investors. It relies heavily on professional judgment shaped by training, experience and culture. Technology, such as big data, plays a growing role by improving audit procedures, increasing sample sizes, and enhancing the overall effectiveness and reliability of audits (Qatamin & Salleh, 2020). In commercial banks, it is found that audit quality is mainly influenced by the auditor's specialized competence, followed by the characteristics of commercial banks, time pressure, audit methods, and quality control systems (Pham et al., 2025). Other factors include auditor independence, compliance with standards, and firm conditions. Interestingly, this study also discovered that there is no significant difference in audit quality between Big Four and Non-Big Four firms.

Zahid et al (2022) found that the environmental, social and governance (ESG) performance negatively affects return on assets (ROA), supporting the trade-off hypothesis, but positively influences revenue, showing customer preference for responsible firms. This research then connected audit quality, measured by Big Four auditors and audit fees, strengthens ESG's positive impact on revenue and its negative effect on ROA. This indicates how audit quality contributes to increasing the credibility and financial impact of ESG practices. Other than that, audit quality plays an important role in strengthening the link between CSR and financial performance. Dakhli (2022) found that 200 French firms audited by Big Four firms showed stronger positive effects of CSR on ROA, return on equity, and Tobin's Q. This means high-quality audits make CSR disclosures more trustworthy, which helps build stakeholder confidence.

Audit quality emerges as a central theme across the various studies, highlighting its critical role in shaping corporate financial behavior and governance outcomes. Audit quality was examined regarding tax avoidance among Indonesian mining firms (Monika & Noviari, 2021). Interestingly, the findings revealed that audit quality, whether provided by Big Four or non-Big Four auditors, did not significantly influence tax avoidance behavior. This suggests that in certain sectors or contexts, audit quality alone may not be a strong deterrent against aggressive tax strategies. In contrast, Masmoudi (2021) found that audit quality plays a more prominent role in enhancing financial reporting quality in Dutch firms. Specifically, the existence of Big Four auditors was shown to strengthen the positive aspects of audit committee characteristics such as independence, financial expertise, and meeting frequency in reducing real earnings management. This underscores the value of high-quality audits in reinforcing internal governance mechanisms. Similarly, Zahid et al. (2023) examined how audit quality influences the relationship between dividend policy and ESG performance among Western European firms. Their results indicated that while ESG performance is positively associated with dividend payouts, the presence of Big Four auditors tends to moderate this relationship negatively, leading to more conservative dividend growth. This suggests that high audit quality may encourage firms to adopt more prudent financial policies, particularly when balancing sustainability commitments with shareholder returns. Collectively, these studies illustrate that audit quality, especially when delivered by reputable firms, can significantly influence how companies manage financial transparency, governance, and stakeholder expectations.

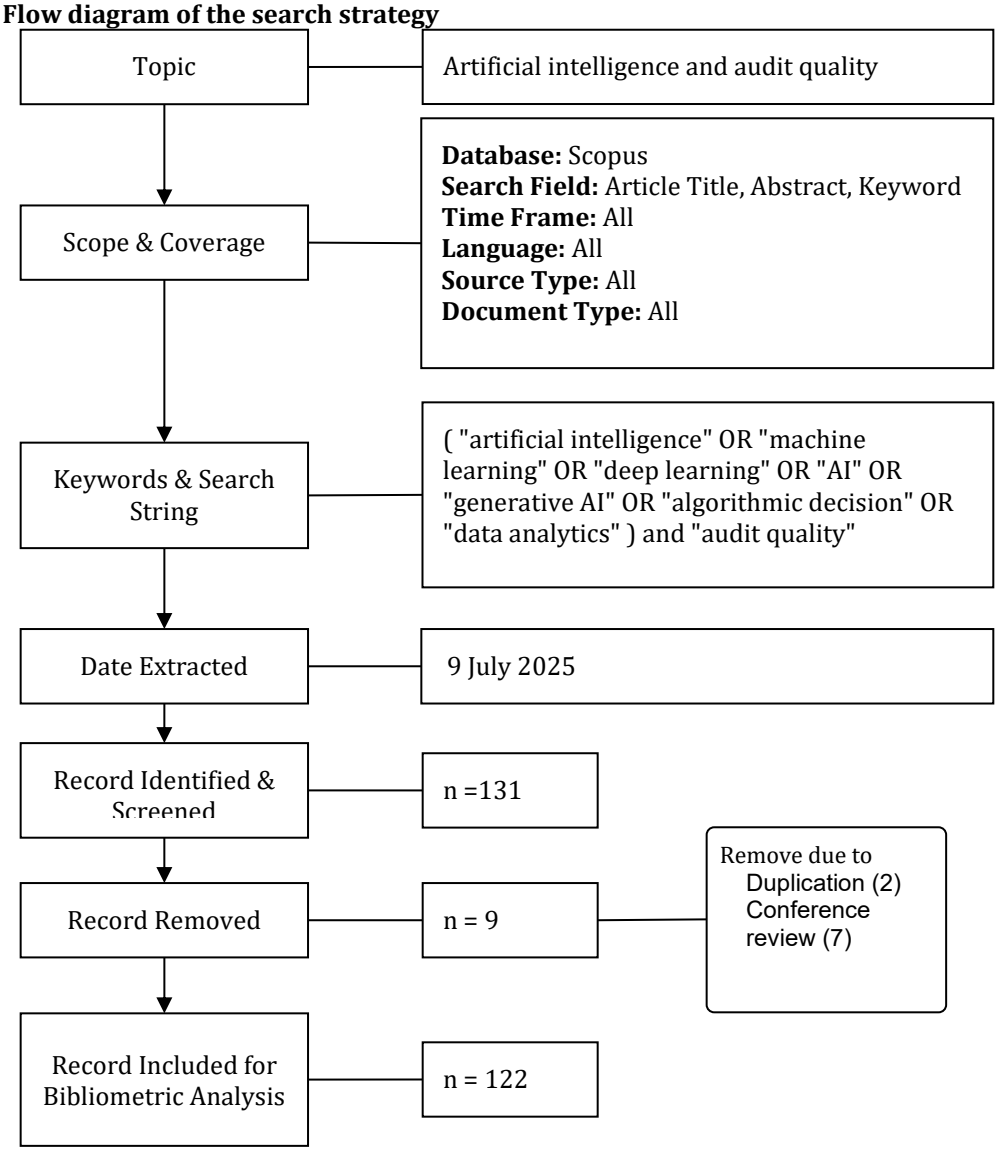
Noordin et al. (2022) highlight that AI significantly enhances audit quality by improving accuracy, efficiency, and fraud detection. Auditors in the UAE view AI as a valuable tool that supports risk assessment and automates routine tasks, allowing more focus on complex judgments. Both local and international firms share similar positive perceptions of AI's role in improving audit outcomes. Therefore, it is vital to address challenges by means of appropriate training, quality data, and strong governance to improve audit quality and reliability. It is to ensure that AI is beneficial to auditing as well as the general public. Auditors must understand AI-related risks and implement preventive measures, with cybersecurity serving as both a defense against external threats and a modern tool for risk management (Shazly et al., 2025).

3. Methodology

This study uses a bibliometric analysis to examine the research trends at the intersection of AI and audit quality. Bibliometric analysis is a quantitative method for assessing patterns in scholarly publications, authorship, keyword usage and highly cited documents. The bibliometric data were extracted from the Scopus database, which is known for its broad multidisciplinary coverage and reliable indexing of peer-reviewed literature. The search was conducted using the title, abstract and keywords (TITLE-ABS-KEY) fields of the article to ensure relevance and specificity as depicted in Figure 1.

All document types, including journal articles, conference papers and reviews, were considered. The original dataset comprised 131 records. Manual screening was performed to ensure relevance and quality. Duplicate entries and unrelated papers were excluded. Specifically, 9 records were removed, 2 of which were due to duplicates, leaving 122 documents for the final bibliometric analysis. The metadata of the selected publications, including title, abstract, keywords, authors, affiliation, number of citations and source titles, were exported from Scopus in CSV format. The data was cleansed and standardized to ensure the accuracy of the analysis with biblioMagika® (Ahmi, 2024).

Figure 1: **Flow diagram of the search strategy**



Source: Zakaria et al. (2021), Moher et al. (2009)

4. Findings and Results

A total of 122 publications on the topic of AI and audit quality were identified, which corresponds to an active period of 18 citable years, as shown in Table 1. The results show 339 contributing authors with an average of 2.78 authors per paper. This indicates that research in this field is generally a collaborative endeavor, often involving interdisciplinary teams. The 5.35 citations per author also suggest that the field is gaining recognition, which could further encourage future research. Of the 122 publications, 83 were cited, which reflects a relatively strong academic interest in this topic. The total number of citations was 1,815, resulting in an average of 14.88 citations per article, indicating that studies in this area have attracted considerable attention. The citation rate of 106.76 per year emphasizes the upward trend in this research area. This trend reflects the academic community's increasing realization that AI has the potential to impact audit quality, audit efficiency and audit practice.

Table 1: Data description

MAIN INFORMATION	DATA
Publication Years	2008 - 2025
Total Publications	122
Citable Year	18
Number of Contributing Authors	339
Number of Cited Papers	83
Total Citations	1,815
Citation per Paper	14.88
Citation per Cited Paper	21.87
Citation per Year	106.76
Citation per Author	5.35
Author per Paper	2.78
Citation sum within h-Core	1,718
h-index	22
g-index	41
m-index	1.222

Source: Generated by the author(s) using biblioMagika® (Ahmi, 2024).

As shown in Table 2, most of the 122 publications were categorized as journal articles (n = 71, 58.20%), followed by conference papers (n = 33, 27.05%). This distribution suggests that while journals remain the primary source of research findings dissemination in this area, conferences also play a significant role, reflecting the dynamic and evolving nature of AI-related topics, which are presented at international academic conferences.

Table 2: Document type

DOCUMENT TYPE	TOTAL PUBLICATION	PERCENTAGE
Article	71	58.20
Conference paper	33	27.05
Book chapter	12	9.84
Review	4	3.28
Book	1	0.82
Short survey	1	0.82

Source: Generated by the author(s) using biblioMagika® (Ahmi, 2024).

As shown in Table 3, all 122 publications (100%) were written in English, confirming the dominance of English in academic research worldwide, particularly in the fields of accounting, auditing and AI. The universal use of language promotes accessibility and facilitates cross-border collaboration among researchers, ensuring that findings and developments in the field reach a broader audience.

Table 3: Language

LANGUAGE	TOTAL PUBLICATION	PERCENTAGE
English	122	100

Source: Generated by the author(s) using biblioMagika® (Ahmi, 2024).

The distribution of documents by type of authorship in the form of single authorship and multiple authorship from 2008 to 2025 shows an important pattern in the development of scholarly collaboration in the field of AI and audit quality. Figure 1 shows a steady increase in publications with multiple authors, indicating increasing interdisciplinary and institutional collaboration. A notable acceleration in overall research output over the last three years, which could be attributed to the increasing use of AI technologies in auditing, digitalization trends and global regulatory attention to audit quality.

Figure 2: Authorship by year

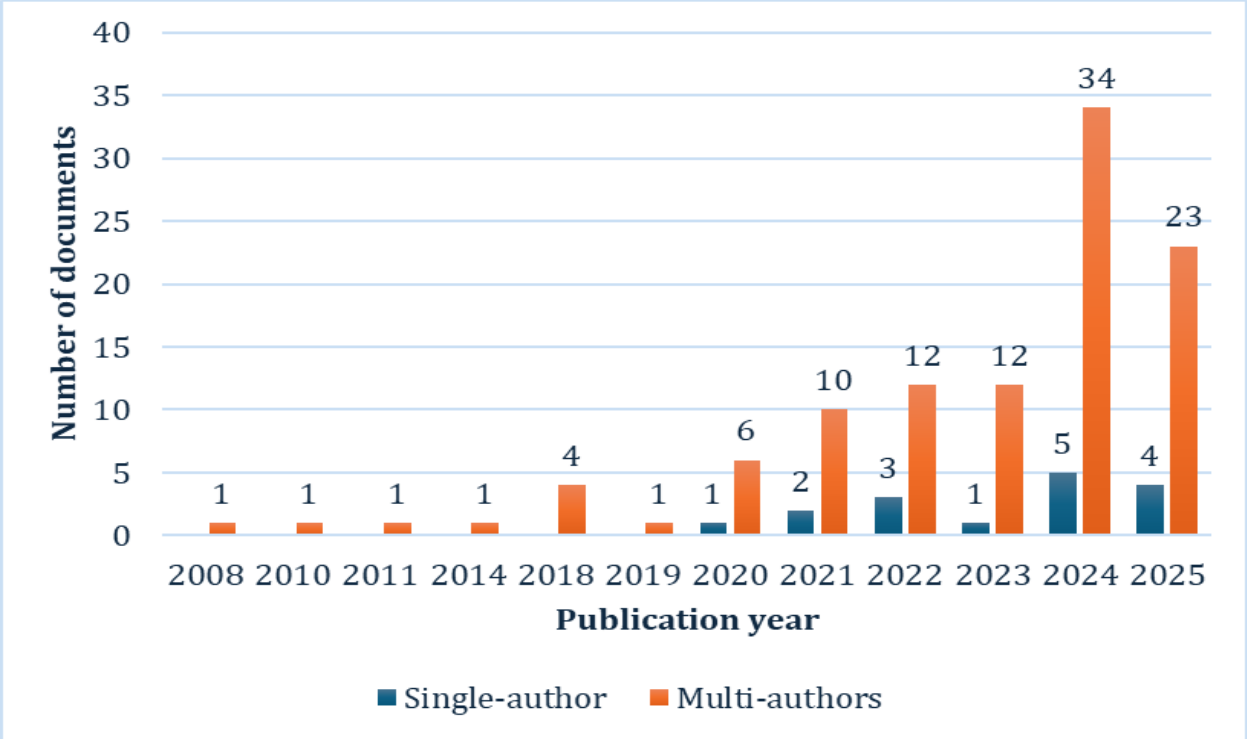
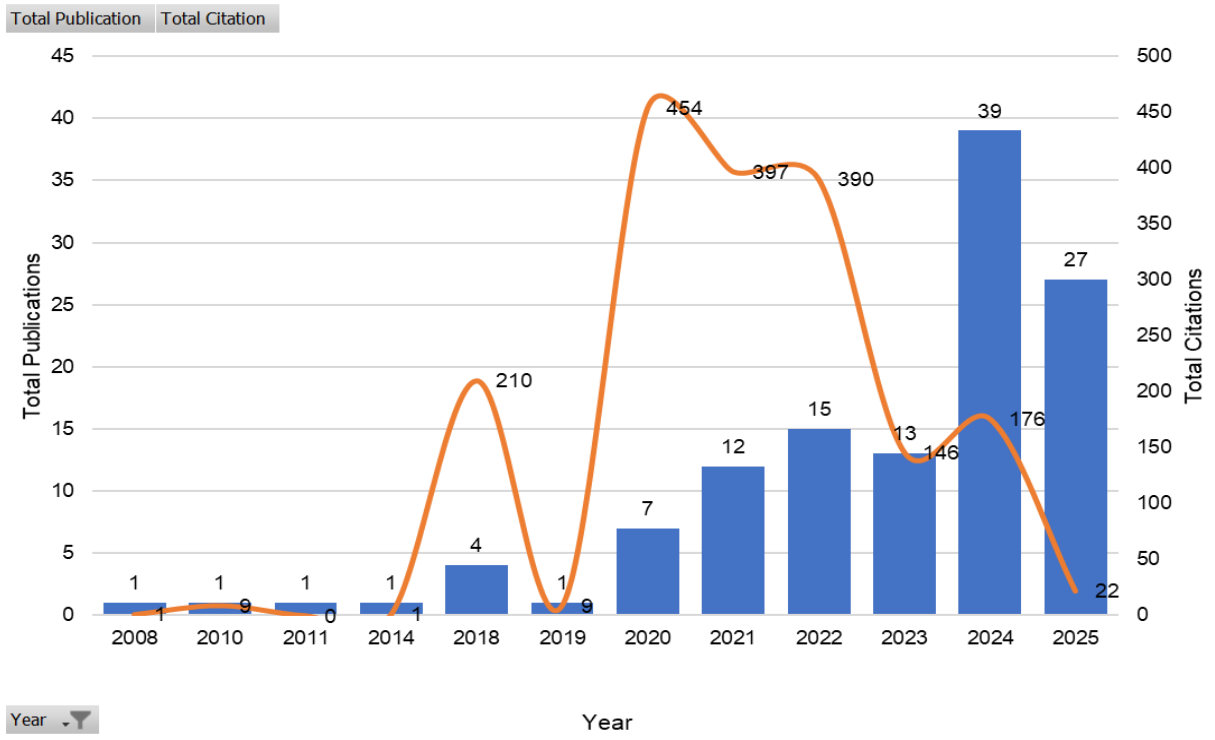


Figure 2 illustrates the annual distribution of total publications and total citations related to the field of AI and audit quality from 2008 to 2025. Between 2008 and 2014, research output in this area was minimal, with only one publication per year. From 2018, the landscape began to change, and from 2020, there was a significant increase in publications. In terms of citation trends, the peak of citations was between 2018 and 2020, suggesting that several influential studies published before or around these years received a lot of attention. However, from 2022 onwards, the total number of citations per year begins to decline, although the number of publications has increased significantly.

Figure 3: Total publications and total citations by year



Source: Generated by the author(s) using biblioMagika® (Ahmi, 2024).

Table 4 shows the 10 most influential sources, based on the total number of citations, and indicates where the most influential research at the intersection of AI and audit quality has been published. The most cited source is Technological Forecasting and Social Change, with 270 citations from a single publication. Although it contributed only one article, the exceptionally high number of citations shows the great influence of the work, which is likely to provide forward-looking insights into the adoption of AI in accounting or auditing. In addition, the International Journal of Accounting and Information Management is listed as the most productive journal on the list, with 3 cited articles and a total of 168 citations.

Table 4: 10 Most Influential Source Titles by Total Citations

SOURCE TITLE	TP	NCP	TC	C/CP	h	g
Technological Forecasting and Social Change	1	1	270	270.00	1	1
International Journal of Accounting and Information Management	3	3	168	56.00	2	3
Review of Accounting Studies	1	1	137	137.00	1	1
International Journal of Digital Accounting Research	1	1	101	101.00	1	1
Journal of Econometrics	1	1	98	98.00	1	1
Contemporary Accounting Research	1	1	81	81.00	1	1
Journal of Accounting Research	1	1	74	74.00	1	1
Meditari Accountancy Research	2	2	70	35.00	2	2
Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics	3	3	61	20.33	3	3
Accounting and Finance	1	1	57	57.00	1	1

Note: TP=total number of publications; NCA=number of contributing authors; NCP=number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited publication; h=h-index; g=g-index; m=m-index.
Source: Generated by the author(s) using biblioMagika® (Ahmi, 2024).

Table 5 lists the 10 most cited papers in the field of AI and audit quality in terms of total number of citations and citations per year. The most influential work is that of Manita et al. (2020) with 270 citations, which deals with the digital transformation of auditing and corporate governance. This is followed by Albitar et al. (2021) with 147 citations, which deals with audit quality in the COVID-19 era, and Fedyk et al. (2022) with 137 citations, which critically examines the effectiveness of AI in the audit process. Other notable studies deal with smart contracts in auditing, machine learning applications and auditor interaction with AI. Most of the articles are recent (2020–2023) and have high citation rates per year, reflecting the growing academic interest and current relevance of AI in modern audit practice. These publications are seminal and influential contributions that have shaped the discourse in this emerging field of research.

Table 5: 10 Highly cited documents

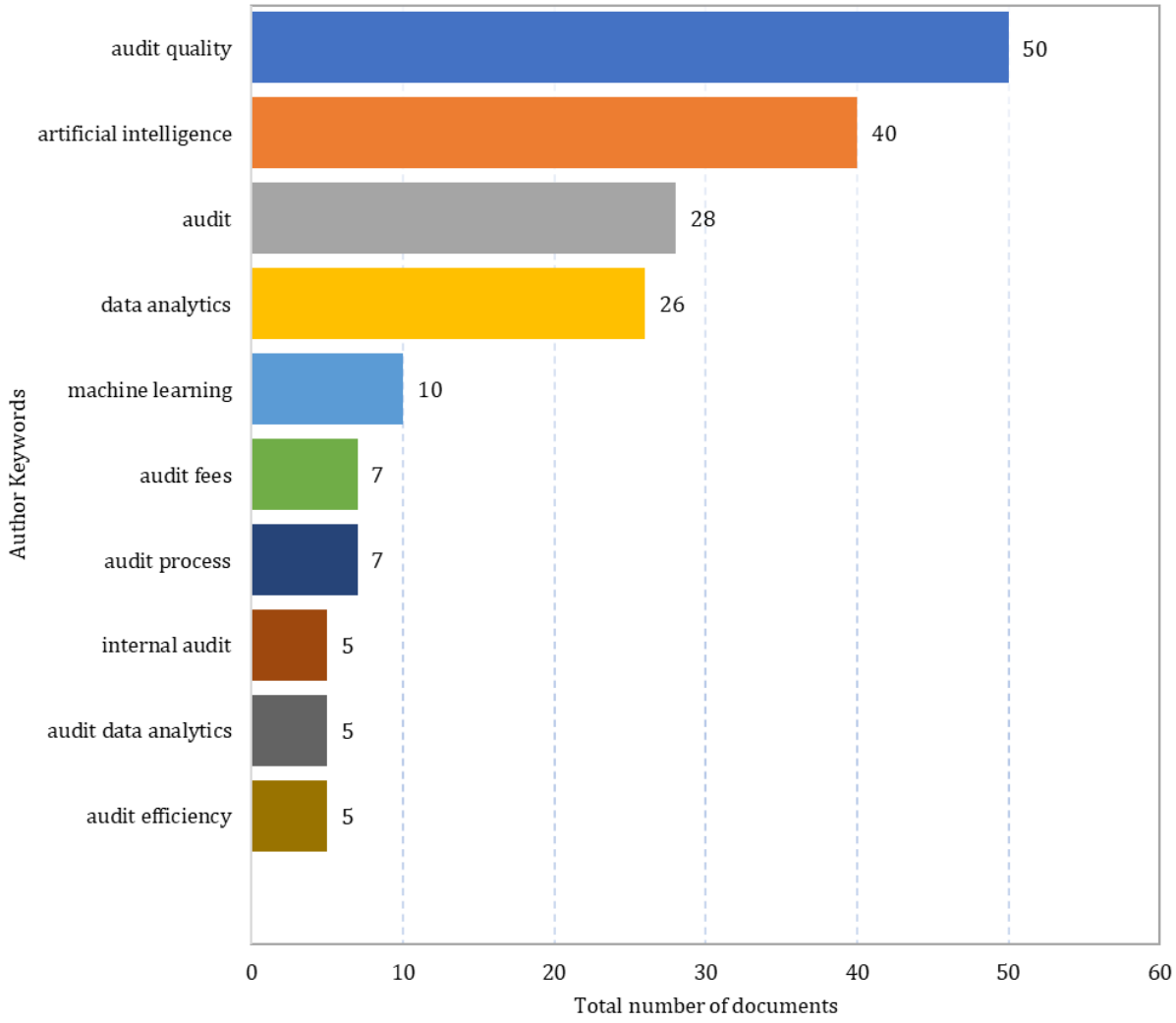
AUTHOR(S)	TITLE	SOURCE TITLE	TC	C/Y
Manita R.; Elommal N.; Baudier P.; Hikkerova L. (2020)	The digital transformation of external audit and its impact on corporate governance	Technological Forecasting and Social Change	270	45.00
Albitar K.; Gerged A.M.; Kikhia H.; Hussainey K. (2021)	Auditing in times of social distancing: the effect of COVID-19 on auditing quality	International Journal of Accounting and Information Management	147	29.40
Fedyk A.; Hodson J.; Khimich N.; Fedyk T. (2022)	Is artificial intelligence improving the audit process?	Review of Accounting Studies	137	34.25
Rozario A.M.; Vasarhelyi M.A. (2018)	Auditing with smart contracts	International Journal of Digital Accounting Research	101	12.63
Yang J.-C.; Chuang H.-C.; Kuan C.-M. (2020)	Double machine learning with gradient boosting and its application to the Big N audit quality effect	Journal of Econometrics	98	16.33
Austin A.A.; Carpenter T.D.; Christ M.H.; Nielson C.S. (2021)	The Data Analytics Journey: Interactions Among Auditors, Managers, Regulation, and Technology*	Contemporary Accounting Research	81	16.20
Commerford B.P.; Dennis S.A.; Joe J.R.; Ulla J.W. (2022)	Man Versus Machine: Complex Estimates and Auditor Reliance on Artificial Intelligence	Journal of Accounting Research	74	18.50
Jiang Y.; Jones S. (2018)	Corporate distress prediction in China: a machine learning approach	Accounting and Finance	57	7.13
Noordin N.A.; Hussainey K.; Hayek A.F. (2022)	The Use of Artificial Intelligence and Audit Quality: An Analysis from the Perspectives of External Auditors in the UAE	Journal of Risk and Financial Management	56	14.00
Seethamraju R.; Hecimovic A. (2023)	Adoption of artificial intelligence in auditing: An exploratory study	Australian Journal of Management	48	16.00

Note: TC=total citations; C/Y=average citations per year
Source: Generated by the author(s) using biblioMagika® (Ahmi, 2024).

The cleaning and harmonizing analysis was conducted beforehand using OpenRefine. This was done to eliminate errors due to spellings, plurals and synonyms. These keywords were further analyzed using biblioMagika®. Figure 3 shows the 10 most frequently used author keywords in the context of publications on AI and audit quality. The author keywords provide an insight into the conceptual focus of research in this area. The most frequent keyword is "audit quality", which appears in 50 documents, underlining that it is at the centre of this bibliometric analysis. Its frequency confirms the continuing academic interest in assessing and improving the reliability, credibility and effectiveness of audit results. This is followed by "artificial

intelligence" with 40 documents, confirming that AI is not just the technological context but a key research topic. The prominence of both terms emphasizes the strong interdisciplinary intersection in which auditing practice meets intelligent technologies. In addition, keywords such as "audit fees", "audit process," and "audit efficiency" reflect the growing interest in how AI affects audit processes and performance.

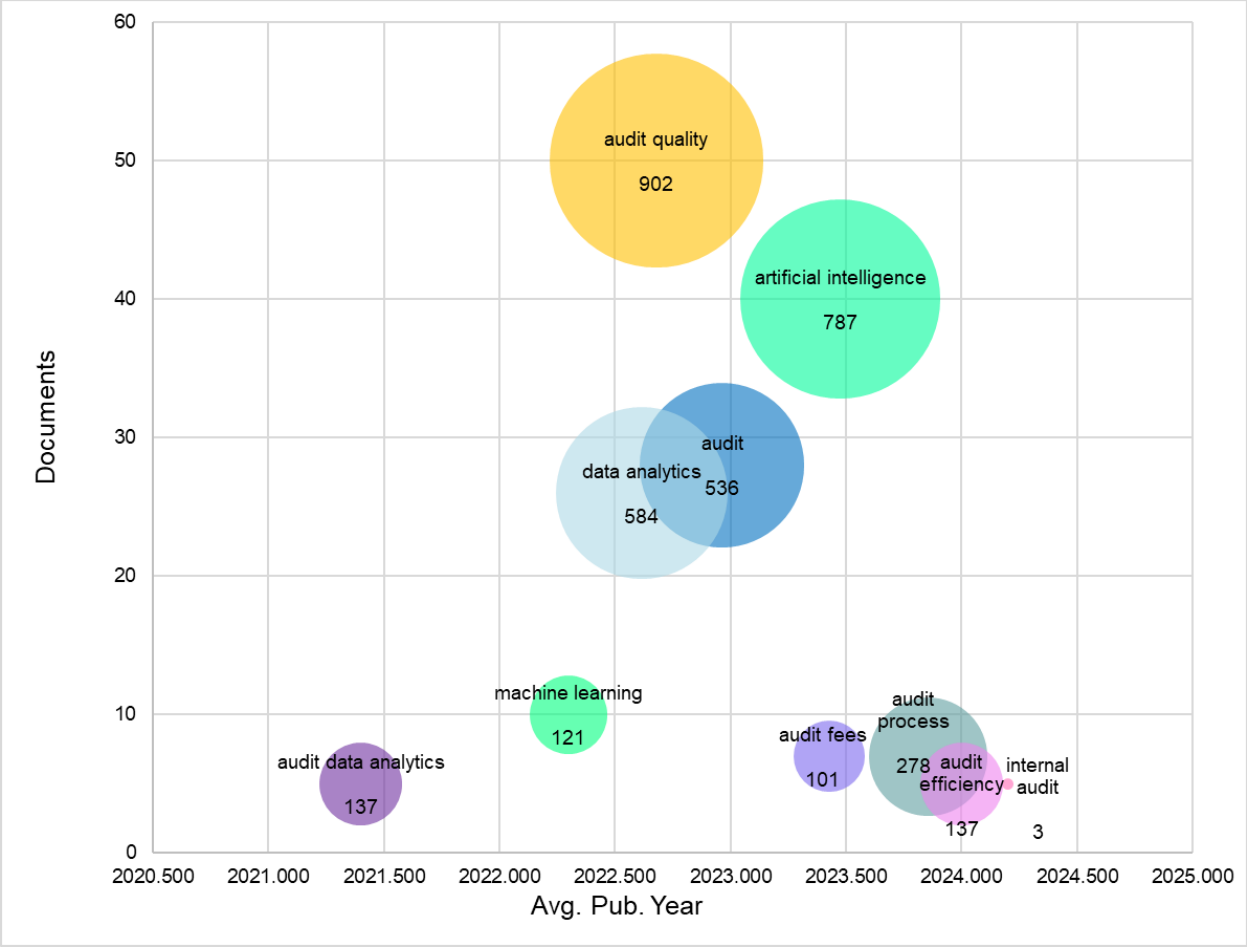
Figure 3: Top 10 author keywords by document frequency



Source: Generated by the author(s) using biblioMagika® (Ahmi, 2024).

Figure 4 illustrates the temporal and citation impact of the top 10 most frequent keywords in the field of AI and audit quality. Core keywords such as “audit quality” and “artificial intelligence” are cited and used most frequently, reflecting their central role in the literature. Newer and emerging terms such as 'machine learning', 'audit efficiency' and 'internal audit' are cited less frequently but are gaining prominence, indicating evolving research interests.

Figure 5: Temporal and Citation Impact of Top 10 Most Frequent Author Keywords (Min. Freq. = 5, Bubble Size = Citations)



Source: Generated by the author(s) using biblioMagika® (Ahmi, 2024)

5. Conclusion and Recommendations

This study contributes to a comprehensive bibliometric analysis of academic research at the intersection of AI and audit quality. It maps the development of this field in the period from 2008 to 2025 and analyses 122 documents from the Scopus database. The increasing number of publications and citations demonstrates a rising academic interest in understanding the integration of AI technologies into audit practice and their impact on audit quality. The study emphasizes the dominance of keywords in the co-occurrence analysis. "Artificial intelligence" and "audit quality" are consistently among the main topics, which indicates their importance in the current academic discussion.

The findings demonstrate the vibrant and growing state of this field of research, supported by fast-evolving technology progress and increasing demands for audit reliability, efficiency, and transparency. This bibliometric review not only reveals major trends, prolific authors, and influential journals but also offers a better comprehension of how the research community is addressing the infusion of AI in auditing. This study provides researchers, practitioners and policy makers with insightful information on how AI can increase the auditing standards by providing support and detecting fraud at an early stage. AI makes audits more effective and efficient by analyzing data, identifying complex fraud trends and monitoring them in real time.

In spite of the positive growth in literature, several areas are still under addressed. Future studies need to further address the practical aspects of AI implementation in auditing settings, especially its influence on

auditor judgment, ethical issues, and compliance with regulations. Empirical studies and case studies using actual audit firms may shed meaningful light on the efficiency and boundaries of AI tools. Cross-nation comparative studies can also reveal how geographic variations in regulation and technology infrastructure impact AI implementation in auditing.

In addition, interdisciplinary research that brings together ideas from accounting, computer science, law, and ethics will be very important for dealing with the difficult problems that come up when AI is used. Researchers should also look into how AI will affect the long-term viability of the audit profession, the need for training, and the trust of stakeholders. By filling in these gaps, future research can help shape a fair, well-informed, and ethical usage of AI that improves the quality of audits without hurting professional integrity.

Limitations and Future Directions

This study provides insightful information on the topic of AI and audit quality and emphasizes the strong interdisciplinary intersection in audit practice. However, this study has some limitations, including the dependence on the Scopus-indexed database and the limitation of the keyword search strategy. The first limitation is sole reliance on the Scopus-indexed database for extracting data. Scopus is a well-known source, but it may not contain all publications in this field, which is changing rapidly. For future studies, it would be advisable to use other academic databases such as Web of Science, ScienceDirect or IEEE Xplore to retrieve a wider range of literature. This would make the results more reliable and applicable to a wider range of situations. The second limitation relates to the search strategy used in this study. The keyword search is limited to precise terms such as "artificial intelligence", "machine learning", "deep learning", “AI”, "generative AI", "algorithmic decision", "data analytics" and "audit quality". Although these terms are very pertinent, they may not reflect the full range of terminology used in interdisciplinary AI audit studies. Future researchers are encouraged to expand the keyword list by using synonyms, related concepts, and variations by utilizing tools such as thesauri or domain-specific dictionaries. This broader range may allow for greater coverage of the literature and identify more research trends and underlying contexts in the field.

References

Adeoye, I. O., Akintoye, R. I., Aguguom, T. A., & Olagunju, O. A. (2023). Artificial intelligence and audit quality: Implications for practicing accountants. *Asian Economic and Financial Review*, *13*(11), 756.

Aguguom, T. A., & Ebun, O. (2021). Financial reporting quality and economic value added of listed companies in Nigeria. *Augustine University Journal of Social Sciences, 1*(1), 13-30.

Ahmi, A. (2024). Bibliometric Analysis using biblioMagika® Second Edition. Academic Research Society of Malaysia.

Albawwat, I., & Frijat, Y. (2021). An analysis of auditors' perceptions towards artificial intelligence and its contribution to audit quality. *Accounting,* 7(4), 755-762.

Albitar, K., Gerged, A. M., Kikhia, H., & Hussainey, K. (2021). Auditing in times of social distancing: the effect of COVID-19 on auditing quality. *International Journal of Accounting & Information Management, 29*(1), 169-178.

AL-Qatamin, K. I., & Salleh, Z. (2020). Audit quality: A literature overview and research synthesis. *IOSR Journal of Business and Management (IOSR-JBM)*, *22*(2), 56-66.

Dakhli, A. (2022). The impact of corporate social responsibility on firm financial performance: Does audit quality matter? *Journal of Applied Accounting Research, 23*(5), 950–976. https://doi.org/10.1108/JAAR-06-2021-0150

Deniz, A., & Sorenson, J. (2022). Artificial intelligence and the auditor: Are you ready? *Retrieved online: https://idea. Cases are. com/ai-audi tor-are-you-ready/(Accessed on 3 June 2023)*.

Fedyk, A., Hodson, J., Khimich, N., & Fedyk, T. (2022). Is artificial intelligence improving the audit process?. *Review of Accounting Studies, 27*(3), 938-985.

Fidyah, N., Usman, A., Pradita, R., & Setyawati, I. (2024). The role of artificial intelligence in enhancing audit quality and compliance monitoring. *Journal of Accounting and Auditing Research*, *21*(1), 45–62.

Francis, J. R. (2004). What do we know about audit quality?. *The British accounting review*, *36*(4), 345-368.

Francis, J. R. (2023). What exactly do we mean by audit quality? *Accounting in Europe*, *21*(2), 123–133. https://doi.org/10.1080/17449480.2023.2247410

Gonzalez, G., & James, K. (2024). Accounting information quality and decision usefulness: A post-pandemic perspective. *Journal of Contemporary Accounting Research*, *18*(2), 55–72. https://doi.org/10.1016/j.jcar.2024.02.004

Griffin, O. (2019). How artificial intelligence will impact accounting. Economia. Retrieved https://www.icaew.com/technical/technology/artificial-intelligence/artificial-intelligence-articles/how-artificial intelligence-will-impact-accounting

Hasan, A. R. (2022). Artificial intelligence (AI) in accounting & auditing: A literature review. *Open Journal of Business and Management*, *10*(1), 440–465. https://doi.org/10.4236/ojbm.2022.101026

IAASB. (2023). *Technology and the audit: Guidance for auditors on using automated tools and techniques*. International Auditing and Assurance Standards Board. Retrieved from https://www.iaasb.org

Issa, H., Sun, T., & Vasarhelyi, M. A. (2016). Research ideas for artificial intelligence in auditing: The formalization of audit and workforce supplementation. *Journal of emerging technologies in accounting*, *13*(2), 1-20.

Laudon, K., Laudon, J., & Elragal, A. (2020). Management information systems: Managing the digital firm (16th ed.). New Jersey: Pearson.

Leocadio, D., Malheiro, L., & Reis, J. (2024). Artificial intelligence in auditing: A conceptual framework for auditing practices. *Administrative Sciences*, *14*(10), 238. https://doi.org/10.3390/admsci14100238

Lin, Y., & Chang, H. (2023). Artificial intelligence and its implications for financial decision-making. *Journal of Financial Technology*, *8*(2), 101–118.

Manita, R., Elommal, N., Baudier, P., & Hikkerova, L. (2020). The digital transformation of external audit and its impact on corporate governance. *Technological Forecasting and Social Change*, *150*, 119751.

Masmoudi Mardessi, S. (2021). The effect of audit committee characteristics on financial reporting quality: The moderating role of audit quality in the Netherlands. *Corporate Ownership & Control, 18*(3), 19–30. https://doi.org/10.22495/cocv18i3art2

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & PRISMA Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *BMJ (Clinical Research Ed.)*, *339*(Jul 21 1), b2535. https://doi.org/10.1136/bmj.b2535

Monika, C. M., & Noviari, N. (2021). The effects of financial distress, capital intensity, and audit quality on tax avoidance. *American Journal of Humanities and Social Sciences Research (AJHSSR), 5*(6), 282–287.

Noordin, N. A., Hussainey, K., & Hayek, A. F. (2022). The use of artificial intelligence and audit quality: An analysis from the perspectives of external auditors in the UAE. *Journal of Risk and Financial Management, 15*(8), 339. https://doi.org/10.3390/jrfm15080339

Odonkor, B., Kaggwa, S., Uwaoma, P. U., Hassan, A. O., & Farayola, O. A. (2024). The impact of AI on accounting practices: A review. *World Journal of Advanced Research and Reviews*, *21*(1), 172–188. https://doi.org/10.30574/wjarr.2024.21.1.2721

Ogbu, F. C. (2023). Leadership and Corporate Governance. *Available at SSRN*.

Panwar, A. (2023). The impact of artificial intelligence on accounting practices: A comparative analysis of efficiency, accuracy, and ethical implications. *Journal of Scientific and Engineering Research*, *10*(4), 116–118.

PCAOB. (2016). *Auditing standards*. Public Company Accounting Oversight Board. Retrieved from https://pcaobus.org/oversight/standards

Pham, H. H., Nguyen, T. H. L., Doan, V. A., & Tran, M. T. (2025). Audit quality of financial statements of commercial banks: Whether or not there is a difference in audit quality provided by Big4 and Non-Big4 audit firms. *International Journal of Economics and Financial Issues, 15*(1), 159–181. https://doi.org/10.32479/ijefi.17541

Qader, K. S., & Cek, K. (2024). Influence of blockchain and artificial intelligence on audit quality: Evidence from Turkey. *Heliyon, 10*(9).

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York, NY: Free Press.

Romney, M. B., & Steinbart, P. J. (2021). *Accounting information systems* (15th ed.). Pearson.

Shazly, M.A., AbdElAlim, K. and Zakaria, H. (2025). The Impact of Artificial Intelligence on Audit Quality, Alshurafat, H. and Beattie, C. (Ed.) *Technological Horizons* (*Technological Innovation and Sustainability for Business Competitive Advantage*), Emerald Publishing Limited, Leeds, 1-10. https://doi.org/10.1108/978-1-83608-756-420251001

Sheikh, H., Prins, C., & Schrijvers, E. (2023). *Mission AI: The new system technology*. Springer. https://doi.org/10.1007/978-3-031-21448-6

Stoel, M. D., & Havelka, D. (2021). Information technology audit quality: An investigation of the impact of individual and organizational factors. *Journal of Information Systems*, *35*(1), 135-154.

Sulaiman, N.A. (2023). External audit quality: its meaning, representations and potential conflict in practice, *Accounting, Auditing & Accountability Journal*, 36(5), 1417-1440. https://doi.org/10.1108/AAAJ-02-2020-4443

Taha, A. A. (2024). Internal auditors' independence under workplace bullying stress: an investigative study. *Journal of Islamic Accounting and Business Research*, *15*(5), 762-783.

Willborn, W.W. (1989). Quality Audits and Technological Excellence, *International Journal of Quality & Reliability Management*, 6(4). https://doi.org/10.1108/02656718910134359

Zahid, R. M. A., Khan, M. K., Anwar, W., & Maqsood, U. S. (2022). The role of audit quality in the ESG-corporate financial performance nexus: Empirical evidence from Western European companies. *Borsa Istanbul Review, 22*(S2), S200–S212. https://doi.org/10.1016/j.bir.2022.08.011

Zahid, R. M. A., Taran, A., Khan, M. K., & Chersan, I.-C. (2023). ESG, dividend payout policy and the moderating role of audit quality: Empirical evidence from Western Europe. *Borsa Istanbul Review, 23*(2), 350–367. https://doi.org/10.1016/j.bir.2022.10.012

Zakaria, R., Ahmi, A., Ahmad, A. H., & Othman, Z. (2021). Worldwide melatonin research: a bibliometric analysis of the published literature between 2015 and 2019. *Chronobiology International*, 38(1), 27–37. https://doi.org/10.1080/07420528.2020.1838534