

The Role of Artificial Intelligence in Accounting on Financial Reporting and Audit Quality

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Submitted: 10/06/2026; Accepted: 12/06/2026; Published: 30/06/2026

Abstract–The rapid development of Artificial Intelligence (AI) has transformed accounting and auditing practices by enabling automated data processing, real-time analysis, and enhanced decision-making capabilities. However, previous studies have generally examined the impact of AI separately on financial reporting quality or audit quality, resulting in limited integrated understanding of its role in both areas. Therefore, this study aims to analyze the role of Artificial Intelligence in improving financial reporting quality and audit quality within accounting practices. This research employed a qualitative approach using the Systematic Literature Review (SLR) method. The study analyzed 20 relevant national and international scientific articles published between 2020 and 2025. Data were collected through a systematic literature selection process and analyzed using descriptive qualitative techniques. The findings indicate that AI improves financial reporting quality through transaction automation, efficient data processing, and the generation of more accurate, relevant, and timely financial information. In auditing, AI enhances audit effectiveness through big data analytics, anomaly detection, risk assessment, and fraud detection capabilities. Nevertheless, AI implementation continues to face challenges related to technological infrastructure, human resource competencies, implementation costs, and trust in technology. Overall, AI plays a strategic role in supporting the digital transformation of accounting and auditing practices while improving financial reporting quality and audit quality.

Keywords: Artificial Intelligence; Accounting; Financial Reporting Quality; Audit Quality; Systematic Literature Review

1. INTRODUCTION

The rapid development of information technology has significantly transformed accounting practices. One of the most influential technological innovations is Artificial Intelligence (AI), which refers to intelligent systems capable of processing large volumes of data and generating automated decisions with a high level of accuracy (Russell & Norvig, 2021). The adoption of AI in accounting has become increasingly important in improving financial reporting quality and audit quality. According to the Conceptual Framework for Financial Reporting issued by the Indonesian Institute of Accountants (IAI, 2024), high-quality financial reporting should possess characteristics such as relevance, faithful representation, comparability, verifiability, timeliness, and understandability.

Before the adoption of Artificial Intelligence, accounting and auditing processes were generally performed manually or through semi-digital systems, making them vulnerable to human error and limitations in data processing capabilities (Deloitte, 2020). These limitations often affected the quality of financial reporting and hindered the achievement of qualitative characteristics required by accounting standards. However, recent advances in AI have enabled substantial improvements through automated transaction recording, real-time data analysis, and enhanced decision-making accuracy. In developed countries, AI adoption in auditing has been associated with improved financial reporting quality, reduced recording errors, and enhanced fraud detection capabilities (PwC, 2021).

The use of Artificial Intelligence in accounting continues to expand globally, particularly in developed economies. AI implementation has been proven to improve efficiency and productivity through process automation and real-time analytical capabilities (PwC, 2021). Previous studies also indicate that Artificial Intelligence contributes to the modernization of auditing and financial reporting through automation and advanced analytical capabilities (Azizah et al., 2025). Furthermore, AI-supported auditing enables more comprehensive data analysis, leading to greater accuracy in financial reporting and more effective fraud detection processes (Deloitte, 2020).

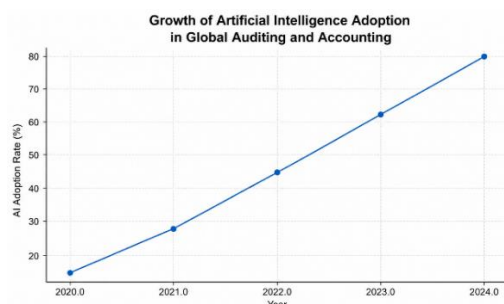


Figure 1. Growth of Artificial Intelligence (AI) Adoption in Global Auditing and Accounting
Source: Authors' Compilation Based on Deloitte (2020) and PwC (2021)

Based on Figure 1, the use of Artificial Intelligence (AI) in auditing and accounting has increased significantly over time. In 2020, AI adoption remained relatively low because most auditing and financial reporting processes were still conducted manually or through semi-digital systems. However, along with technological advancements, the utilization of AI continued to increase until 2024. This trend indicates that companies and public accounting firms have increasingly adopted AI to improve audit efficiency, accelerate data analysis, reduce recording errors, and enhance financial reporting quality. Furthermore, AI assists auditors in detecting fraud more quickly and accurately, thereby supporting higher audit quality.

In developed countries such as the United States and the United Kingdom, the implementation of Artificial Intelligence in auditing has demonstrated positive impacts on financial reporting quality (PwC, 2021). This technology enables auditors to analyze entire data populations, thereby improving the accuracy and reliability of financial reports. Mwachikoka (2024) also reported that AI adoption reduces recording errors and improves the effectiveness of fraud detection processes.

Several studies published within the last five years have reported mixed findings regarding the effectiveness of Artificial Intelligence in accounting practices. Mwachikoka (2024) found that AI improves financial reporting accuracy through the reduction of recording errors and enhanced data processing capabilities. However, other studies have indicated that AI implementation remains suboptimal due to limitations in technological infrastructure, insufficient human resource competencies, and low levels of trust in technology. These inconsistent findings indicate the existence of a research gap regarding the effectiveness of AI in improving financial reporting quality and audit quality. Therefore, further investigation is necessary to provide a more comprehensive understanding of the role of Artificial Intelligence in accounting and auditing practices.

The adoption of Artificial Intelligence in accounting and auditing has been widely implemented by global accounting firms, including PwC, Deloitte, EY, and KPMG, collectively known as the Big Four. AI technologies are utilized to support various activities such as transaction analysis, anomaly detection, and audit risk identification more efficiently and accurately. The implementation of these technologies has been recognized for improving audit efficiency and enhancing audit quality through broader and deeper data analysis capabilities (Deloitte, 2020). In addition, KPMG (2022) reported that Artificial Intelligence contributes to greater audit efficiency and more accurate risk assessment processes. Consequently, AI adoption has made auditing processes more effective and has contributed to the production of higher-quality and more reliable financial reports.

However, such conditions have not been fully achieved in developing countries, including Indonesia. In addition, the digitalization of accounting presents both opportunities and challenges, particularly regarding technological readiness, organizational adaptation, and human resource competencies (Lubis et al., 2025). The implementation of Artificial Intelligence in accounting and auditing remains limited and uneven. Previous studies indicate that digital technology adoption in Indonesian auditing practices is still at an early stage compared to developed countries, resulting in the underutilization of AI for improving financial reporting quality and audit quality. Challenges such as limited technological infrastructure, inadequate human resource competencies, and low levels of trust in technology remain the primary barriers to AI implementation.

On the other hand, the development of Artificial Intelligence (AI) provides significant opportunities for Indonesia to improve financial reporting quality and audit quality. Advanced data analytics capabilities enable AI to enhance transparency, accuracy, and effectiveness in detecting fraudulent activities (Mwachikoka, 2024). Therefore, it is important to examine the role of Artificial Intelligence in accounting practices and its contribution to improving financial reporting quality and audit quality, particularly in the Indonesian context.

This study offers a state-of-the-art perspective by providing an integrated analysis of the role of Artificial Intelligence (AI) in improving both financial reporting quality and audit quality. Unlike previous studies that primarily focused on either financial reporting or auditing separately, this study examines the contribution of AI to both areas simultaneously through a Systematic Literature Review (SLR) approach. The findings are expected to contribute to the development of accounting literature by providing a more comprehensive understanding of AI adoption in accounting and auditing practices. In addition, this study provides practical insights for organizations, auditors, and policymakers in optimizing the implementation of AI to improve financial reporting quality and audit quality.

Based on the aforementioned phenomena, the implementation of Artificial Intelligence in accounting has considerable potential to enhance financial reporting quality and audit quality. However, previous studies have reported inconsistent findings regarding the effectiveness of AI adoption. Some studies indicate that AI improves financial reporting quality and audit effectiveness (Mwachikoka, 2024), while others suggest that AI implementation has not yet achieved optimal results due to various technological and organizational challenges. Therefore, this study aims to analyze the role of Artificial Intelligence in accounting and its impact on financial reporting quality and audit quality.

2. RESEARCH METHODS

2.1 Basic Research Framework

This study is grounded in two main theoretical perspectives, namely the Resource-Based View (RBV) Theory and Information System Theory. These theories provide the conceptual foundation for explaining the role of Artificial Intelligence (AI) in improving financial reporting quality and audit quality.

2.1.1 Resource-Based View (RBV) Theory

The Resource-Based View (RBV) Theory was first introduced by Wernerfelt (1984) and further developed by Barney (1991). This theory emphasizes the identification, management, and utilization of organizational resources and capabilities to achieve sustainable competitive advantage. According to the RBV perspective, organizations can achieve superior performance when they possess resources that are valuable, rare, inimitable, and non-substitutable (VRIN). In this study, Artificial Intelligence (AI) is considered a strategic organizational resource because it enhances operational efficiency, improves data analysis accuracy, strengthens financial reporting quality, and increases audit effectiveness. These capabilities provide competitive advantages that are difficult for competitors to replicate. Therefore, RBV Theory is used to explain how Artificial Intelligence can contribute to improvements in financial reporting quality and audit quality while supporting organizational competitiveness.

2.1.2 Information System Theory

Information System Theory explains that information technology is implemented within organizations to generate high-quality information that supports effective decision-making processes. One of the most widely recognized frameworks within this theory is the DeLone and McLean Information Systems Success Model, originally developed in 1992 and updated in 2003. According to DeLone and McLean (2003), information system success is influenced by system quality, information quality, service quality, system use, user satisfaction, and net benefits. Artificial Intelligence represents a component of modern information systems that can be applied in accounting and auditing activities.

Based on the DeLone and McLean model, the use of Artificial Intelligence with high system quality and information quality can improve the effectiveness of financial data processing, generate more accurate, relevant, and timely financial information, and increase user satisfaction with accounting systems. In auditing, Artificial Intelligence supports the detection of errors and fraudulent activities more efficiently, thereby enhancing audit quality. Consequently, Information System Theory is considered relevant for explaining the relationship between Artificial Intelligence implementation and improvements in financial reporting quality and audit quality.

2.1.3 Relationship between Artificial Intelligence (AI), Financial Reporting Quality, and Audit Quality

Artificial Intelligence (AI) has the capability to automate the recording, processing, and analysis of financial data, resulting in financial information that is more accurate, relevant, and timely. These capabilities make Artificial Intelligence a valuable organizational resource that is difficult for competitors to imitate. According to the Resource-Based View (RBV) Theory, Artificial Intelligence can be considered a strategic resource that enhances financial reporting quality and supports the achievement of sustainable competitive advantages. The implementation of AI in accounting practices improves both efficiency and effectiveness in the preparation and presentation of financial information. Furthermore, Artificial Intelligence represents an important component of modern accounting information systems. The higher the quality of the AI system utilized, the greater the quality of the financial information produced, thereby contributing to improved financial reporting quality. Hall (2021) explained that technology-based accounting information systems assist organizations in enhancing data processing efficiency and improving financial information quality. As described in Information System Theory, particularly through the DeLone and McLean Information Systems Success Model, financial reporting quality is influenced by both system quality and information quality.

The application of Artificial Intelligence in auditing demonstrates the role of technology in enhancing audit effectiveness through automation, big data analytics, anomaly detection, and risk assessment. Technologies such as Machine Learning enable auditors to identify unusual data patterns, while Natural Language Processing (NLP) facilitates the extraction of information from unstructured documents, including financial statement notes and audit-related documents. Consequently, Artificial Intelligence is regarded as a strategic technological resource capable of improving both the efficiency and effectiveness of audit processes. According to Information System Theory, audit quality is influenced by the quality of information systems utilized during audit activities. Through the implementation of Artificial Intelligence, auditors can obtain information that is faster, more accurate, and more relevant to support audit procedures. Therefore, the adoption of Artificial Intelligence is expected to improve audit effectiveness and contribute to higher audit quality.

2.1.4 Research Framework

The research framework of this study is developed based on two main theories, namely the Resource-Based View (RBV) Theory and Information System Theory. These theories are used to explain how the implementation of Artificial Intelligence (AI) can influence financial reporting quality and audit quality. According to the Resource-Based View (RBV), organizations can achieve sustainable competitive advantages by effectively managing and utilizing their strategic resources. In this study, Artificial Intelligence is considered a strategic technological resource due to its ability to enhance operational efficiency, improve data analysis accuracy, and increase the effectiveness of accounting and auditing processes. Meanwhile, Information System Theory emphasizes that the primary objective of information technology implementation is to generate high-quality information that supports organizational decision-making. Therefore, the adoption of Artificial Intelligence in accounting systems is expected to produce financial information that is more accurate, relevant, and timely.

Based on these theoretical perspectives, this study employs the Systematic Literature Review (SLR) method to collect, analyze, and evaluate previous studies related to the implementation of Artificial Intelligence in accounting and auditing. The SLR approach is utilized to provide a comprehensive understanding of the role of Artificial Intelligence in improving financial reporting quality and audit quality based on existing scientific evidence. The main variable examined in this study is Artificial Intelligence (AI). Within accounting practices, AI includes technologies such as Machine Learning, Big Data Analytics, and Natural Language Processing (NLP), which facilitate automated and efficient financial data processing.

Regarding financial reporting quality, Artificial Intelligence is expected to improve information relevance, faithful representation, and timeliness, which are essential qualitative characteristics of financial reporting. In terms of audit quality, AI is expected to improve audit accuracy, support fraud detection, and enhance audit efficiency. Therefore, the research framework proposes that Artificial Intelligence, as a strategic organizational resource and a component of modern information systems, has a positive influence on financial reporting quality and audit quality.

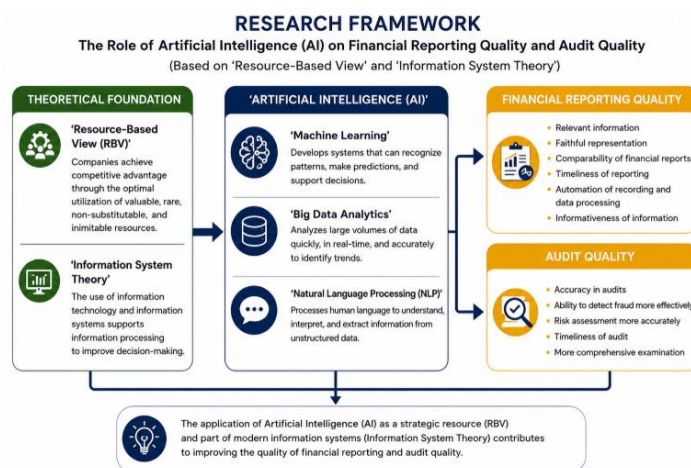


Figure 2. Research Framework

Source: Developed by the authors based on literature review (2026)

2.2 Research Design

This study employed a qualitative approach using the Systematic Literature Review (SLR) method. Systematic Literature Review is a research method conducted systematically to identify, evaluate, and analyze previous studies relevant to a particular research topic (Kitchenham & Charters, 2007). This approach was adopted to obtain a comprehensive understanding of the role of Artificial Intelligence (AI) in accounting and its influence on financial reporting quality and audit quality based on reliable scientific evidence. The study focused on literature discussing the implementation of Artificial Intelligence in accounting, particularly in relation to financial reporting quality and audit quality. Secondary data were collected from national and international scientific journal articles, conference proceedings, and other relevant academic sources.

The literature search process was conducted systematically through several academic databases, including Google Scholar, ScienceDirect, Springer, and Semantic Scholar. The keywords used in the search process included "Artificial Intelligence," "AI in Accounting," "Financial Reporting Quality," "Audit," "Audit Quality," and "Artificial Intelligence in Accounting." The selected literature was published between 2020 and 2025 to ensure consistency with recent developments in Artificial Intelligence technology. The literature selection was based on topic relevance, research objectives, and its relationship with the application of Artificial Intelligence in accounting and auditing.

The inclusion criteria consisted of scientific articles discussing the implementation of Artificial Intelligence in accounting and auditing, published between 2020 and 2025, originating from national and international journals, and addressing financial reporting quality and audit quality. The exclusion criteria included articles unrelated to the research topic, articles without full-text access, and duplicate publications. The initial literature search identified approximately 45 scientific articles. After screening based on title relevance, abstracts, content, and alignment with the research objectives, 20 articles were selected as the primary sources for this study.

The Systematic Literature Review process consisted of several stages. First, relevant literature related to Artificial Intelligence in accounting, financial reporting quality, and auditing was identified. Second, the literature was screened according to title relevance, abstracts, content, and alignment with the research objectives. Third, data analysis and synthesis were conducted to identify similarities, differences, and developments in previous studies regarding the role of Artificial Intelligence in improving financial reporting quality and audit quality.

Data analysis was performed using descriptive qualitative techniques through data reduction, categorization of findings, content analysis, and conclusion drawing. The analysis aimed to examine the contribution of Artificial Intelligence to improving efficiency, accuracy, audit effectiveness, and financial information quality. In addition, this study explored both the opportunities and challenges associated with the implementation of Artificial Intelligence in

accounting and auditing practices. Through the Systematic Literature Review approach, this study is expected to provide a comprehensive understanding of the role of Artificial Intelligence in accounting and its contribution to improving financial reporting quality and audit quality, while also serving as a reference for future research on Artificial Intelligence adoption in accounting and auditing.

3. RESULTS AND DISCUSSION

3.1 Results

Based on the literature selection process using the Systematic Literature Review (SLR) method, a total of 20 scientific articles relevant to the role of Artificial Intelligence (AI) in accounting, financial reporting quality, and audit quality were selected for analysis. The selected articles were obtained from national and international journals published between 2020 and 2025. The screening process was conducted based on topic relevance, research objectives, and the relationship between Artificial Intelligence implementation and improvements in financial reporting quality and audit quality.

The literature review findings indicate that most previous studies have examined the application of Artificial Intelligence in enhancing financial reporting quality and audit quality. The majority of studies reported that AI contributes positively to accounting practices by improving efficiency, accelerating financial data processing, increasing reporting accuracy, and assisting auditors in identifying risks and fraudulent activities more effectively. The most frequently applied AI technologies identified in previous studies include Machine Learning, Big Data Analytics, and Natural Language Processing (NLP).

Based on the analysis, previous studies can be classified into several major research themes, including financial reporting quality, audit quality, Artificial Intelligence implementation, opportunities associated with AI adoption, and challenges related to AI implementation in accounting and auditing. The findings further indicate that Artificial Intelligence improves financial reporting quality through transaction automation, reduction of human error, improved reporting timeliness, and real-time data processing capabilities. In auditing, AI supports large-scale data analysis, anomaly detection, audit risk identification, and enhanced fraud detection effectiveness.

Despite these benefits, several studies also reveal that Artificial Intelligence implementation continues to face various challenges, particularly in developing countries. These challenges include limited technological infrastructure, inadequate human resource competencies, high implementation costs, and low levels of trust in digital technologies. A summary of the selected studies regarding the role of Artificial Intelligence in accounting, financial reporting quality, and audit quality is presented in Table 1.

Table 1. Summary of Literature Review Findings on Artificial Intelligence in Accounting, Financial Reporting Quality, and Audit Quality

No.	Author(s) and Year	Research Title	Research Focus	Research Findings	Role of AI
1	Indriani (2025)	Artificial Intelligence in Financial Reporting Efficiency	Financial reporting quality	AI improves the efficiency of financial statement preparation and enhances the quality of financial information	Financial reporting automation
2	Fitrohan et al. (2025)	The Role of Artificial Intelligence in Improving Financial Reporting Quality	Financial reporting	AI improves reporting accuracy and reduces human error	Improving reporting accuracy
3	Mwachikoka (2024)	Artificial Intelligence and Audit Quality Improvement	Audit quality	AI enhances audit effectiveness and fraud detection capabilities	Fraud detection
4	Mulyandini (2024)	Artificial Intelligence in Fraud Detection and Forensic Audit	Forensic auditing	AI accelerates fraud detection and improves audit accuracy	Audit analysis
5	Shamaya et al. (2024)	AI Applications in Auditing Processes	Auditing	AI improves audit efficiency and audit process quality	Audit automation
6	Ucoglu (2020)	Machine Learning Applications in Auditing and Risk Detection	Audit risk	Machine Learning supports faster identification of audit risks	Audit risk analysis

No.	Author(s) and Year	Research Title	Research Focus	Research Findings	Role of AI
7	Chen et al. (2023)	Natural Language Processing Applications in Accounting and Auditing	Audit data processing	Natural Language Processing assists in understanding unstructured documents	Audit document analysis
8	Venkatesh et al. (2003)	User Acceptance of Information Technology: Toward a Unified View	Technology adoption	Successful technology adoption is influenced by human resources and organizational readiness	Technology adoption
9	Janssen et al. (2020)	Challenges and Opportunities of Artificial Intelligence	AI implementation challenges	AI implementation faces challenges related to costs, data security, and organizational readiness	AI system implementation
10	Deloitte (2020)	AI and Analytics in Audit and Assurance	Auditing and reporting	AI improves audit efficiency and real-time data analytics	Audit data analytics
11	PwC (2021)	AI in Audit and Assurance Services	Modern auditing	AI improves audit quality and reporting accuracy	Audit examination
12	Russell & Norvig (2021)	Artificial Intelligence: A Modern Approach	AI concepts	AI processes large datasets and generates automated decisions	Data processing
13	Amelia et al. (2024)	Artificial Intelligence in the Accounting Profession	Accounting profession	AI helps accountants perform tasks more efficiently	Accounting efficiency
14	Zahro (2024)	Financial Reporting Quality and Characteristics of Accounting Information	Financial reporting quality	Reporting quality is influenced by the relevance and accuracy of information	Information quality
15	Arens et al. (2025)	Auditing and Assurance Services	Auditing	Auditing requires accurate and independent information	Audit support
16	Barney (1991)	Firm Resources and Sustained Competitive Advantage	Resource-Based View	Strategic technologies enhance competitive advantage	Strategic resource
17	Wernerfelt (1984)	A Resource-Based View of the Firm	RBV Theory	Technological resources support organizational performance improvement	Technology strategy
18	The Institute of Internal Auditors (2024)	Global Internal Audit Standards	Audit standards	Audit quality is influenced by accuracy and timeliness	Audit standards
19	Indonesian Institute of Accountants (2024)	Conceptual Framework for Financial Reporting Guidelines for Performing Systematic Literature Reviews	Financial reporting quality	Financial information should be relevant and understandable	Reporting guidelines
20	Kitchenham & Charters (2007)	Guidelines for Performing Systematic Literature Reviews	Research methodology	SLR supports systematic literature analysis	Research methodology

Based on Table 1, most previous studies indicate that Artificial Intelligence contributes positively to improvements in both financial reporting quality and audit quality. The literature review findings demonstrate a consistent relationship between the implementation of Artificial Intelligence and enhanced accounting and auditing outcomes. These findings are discussed further in the discussion section.

The classification of research findings shows that eight studies focused on the role of Artificial Intelligence in improving financial reporting quality, while seven studies examined the contribution of AI to audit quality. In addition, three studies explored opportunities associated with Artificial Intelligence implementation in accounting and auditing, whereas two studies focused on challenges related to AI adoption, including human resource limitations, data security concerns, and implementation costs.

3.2 Discussion

3.2.1 The Role of Artificial Intelligence in Financial Reporting Quality

The literature review findings indicate that the implementation of Artificial Intelligence (AI) contributes significantly to improving financial reporting quality through several aspects, including reporting efficiency, data accuracy, reduction of human error, and timeliness of financial information. The integration of AI technologies into accounting practices reflects an ongoing digital transformation that enables organizations to produce financial information that is more effective, reliable, and relevant for decision-making purposes.

a. Efficiency in Financial Reporting Preparation

Pravita Indriani (2025) explained that Artificial Intelligence improves the efficiency of financial reporting processes through more systematic and automated data processing. AI implementation enables organizations to accelerate transaction recording and financial information processing activities, resulting in more efficient financial statement preparation. Similarly, Deloitte (2020) reported that AI technologies support real-time data analysis, allowing organizations to prepare financial reports more quickly. In addition, AI systems are capable of processing large volumes of financial data with greater efficiency compared to conventional accounting methods.

b. Accuracy of Financial Reporting

Fatika Firli Fitrohan et al. (2025) found that the implementation of Artificial Intelligence improves the accuracy of financial reports while reducing human errors in financial data recording and processing activities. AI-based systems assist organizations in generating more reliable and relevant financial information for stakeholders. Furthermore, the Indonesian Institute of Accountants (IAI, 2024) emphasized that financial reporting quality is influenced by relevance, faithful representation, comparability, verifiability, timeliness, and understandability. In this context, Artificial Intelligence contributes to improving information quality through automated systems and more accurate data processing mechanisms.

c. Timeliness of Financial Information

Artificial Intelligence enables organizations to generate financial reports more quickly and in a timely manner. Deloitte (2020) explained that AI technologies facilitate automated and real-time data processing, ensuring that financial information is available when required by users. Moreover, AI accelerates data analysis and reporting processes, providing significant benefits for managers, investors, and other stakeholders in making timely economic decisions. The availability of timely financial information enhances organizational responsiveness and supports more effective decision-making processes.

d. Artificial Intelligence as a Strategic Organizational Resource

Wernerfelt (1984) and Barney (1991), through the Resource-Based View (RBV) Theory, argued that strategic technologies can serve as valuable organizational resources capable of creating sustainable competitive advantages. In accounting practices, Artificial Intelligence is considered a strategic resource because it improves efficiency, information quality, and the overall effectiveness of financial reporting processes. Furthermore, Information System Theory, particularly the DeLone and McLean Information Systems Success Model, suggests that information quality is influenced by the quality of information systems utilized by organizations. In this regard, Artificial Intelligence functions as a modern information system that enhances financial reporting quality through faster, more accurate, relevant, and understandable information processing.

3.2.2 The Role of Artificial Intelligence in Audit Quality

The literature review findings indicate that Artificial Intelligence (AI) plays a significant role in improving audit quality through enhanced audit effectiveness, fraud detection capabilities, audit risk analysis, and audit process automation. The implementation of AI technologies enables auditors to perform data analysis more comprehensively and efficiently compared to conventional auditing methods.

a. Audit Effectiveness Enhancement

Veren Putri Shamaya et al. (2024) explained that the implementation of Artificial Intelligence in auditing improves both audit efficiency and audit quality through the automation of audit procedures and more comprehensive data analysis. AI technologies enable auditors to process large volumes of audit data more quickly and accurately. Consistent with these

findings, PwC (2021) reported that the use of Artificial Intelligence in modern auditing enhances audit quality and the accuracy of audit outcomes through technology-based data analysis. AI implementation allows auditors to examine entire data populations rather than relying solely on sampling techniques, resulting in more effective and efficient audit processes. The use of data analytics further strengthens audit procedures by enabling auditors to process large volumes of information and identify anomalies more effectively, thereby improving audit quality (Ovami & Muda, 2023).

b. Fraud Detection Capability

Mwachikoka (2024) reported that Artificial Intelligence significantly improves fraud detection effectiveness by identifying fraudulent activities more quickly and accurately. AI technologies assist auditors in recognizing unusual transaction patterns, enabling potential fraud risks to be detected at an earlier stage. Furthermore, strong internal audit functions and high audit quality contribute significantly to fraud prevention efforts within organizations (Lubis et al., 2024). Furthermore, Vita Citra Mulyandini (2024) found that the implementation of Artificial Intelligence in forensic auditing enhances auditors' ability to detect financial fraud and accelerates audit investigation processes. These technological capabilities allow auditors to conduct more in-depth examinations compared to traditional auditing approaches.

c. Audit Risk Analysis

Derya Ucoglu (2020) explained that Machine Learning technologies assist auditors in identifying audit risks based on historical data patterns more quickly and accurately. The implementation of such technologies supports more effective audit risk assessment and decision-making processes. In addition, Yansheng Chen et al. (2023) demonstrated that Natural Language Processing (NLP) assists auditors in understanding unstructured documents, including contracts, transaction records, and financial reports. Consequently, the audit process becomes more efficient while improving the comprehensiveness of audit examinations.

d. Artificial Intelligence in Supporting Audit Quality

The Institute of Internal Auditors (2024), through the Global Internal Audit Standards, emphasized that audit quality is determined by accuracy, objectivity, clarity, completeness, timeliness, and the constructive nature of audit reports. In this context, Artificial Intelligence contributes to improving audit quality through faster, more accurate, and technology-driven analytical capabilities. Furthermore, Resource-Based View Theory and Information System Theory suggest that the implementation of Artificial Intelligence in auditing represents the utilization of strategic technological resources capable of enhancing organizational audit effectiveness. AI-based systems support more efficient audit processes and contribute to the production of more reliable audit reports.

Despite the substantial benefits provided by Artificial Intelligence, the technology cannot entirely replace the role of professional auditors. Professional judgment remains essential in audit decision-making processes to ensure that audit conclusions remain objective, relevant, and trustworthy. Therefore, Artificial Intelligence should be viewed as a complementary tool that enhances auditor performance rather than a substitute for human expertise and professional judgment.

3.2.3 Opportunities and Challenges of Artificial Intelligence Implementation in Accounting and Auditing

The literature review findings indicate that the implementation of Artificial Intelligence (AI) in accounting and auditing presents both significant opportunities and substantial challenges for organizations and auditing professionals. The rapid development of digital technologies has encouraged organizations to adopt AI-based systems to improve operational efficiency, financial reporting quality, and audit effectiveness. Furthermore, AI implementation reflects the ongoing digital transformation within accounting and auditing practices by enabling organizations to generate financial information that is more accurate, timely, and relevant. Nevertheless, successful implementation requires adequate human resources, technological infrastructure, and internal control systems to ensure optimal outcomes.

The findings also suggest that digital transformation driven by Artificial Intelligence affects not only organizational systems and processes but also the competencies required of accounting professionals. Accountants and auditors are increasingly expected to possess technological knowledge, data analytics skills, and a strong understanding of digital systems to adapt effectively to AI developments. Therefore, the success of AI implementation depends not only on technological sophistication but also on human resource readiness, digital infrastructure, and regulatory support.

a. Opportunities for Artificial Intelligence Implementation in Accounting and Auditing

The implementation of Artificial Intelligence in accounting and auditing offers several opportunities that support organizational digital transformation and financial information management.

b. Transaction Automation and Real-Time Financial Data Processing

Artificial Intelligence provides organizations with opportunities to automate transaction recording and financial data processing activities in real time. Deloitte (2020) explained that AI-based systems accelerate accounting processes through automated mechanisms capable of recording and processing financial data more efficiently. Similarly, Oracle (2024) reported that Artificial Intelligence implementation in accounting and finance supports faster and more integrated financial information processing. These capabilities enable organizations to improve financial data management and accelerate financial reporting processes.

c. Large-Scale Data Analysis

Artificial Intelligence also creates opportunities for auditors to analyze large volumes of data more quickly and comprehensively. PwC (2021) explained that AI implementation in auditing improves audit quality through broader analytical capabilities compared to conventional auditing methods. Likewise, EY (2022) emphasized that digital transformation in auditing encourages the adoption of Artificial Intelligence to support more effective audit decision-making processes. AI technologies enable auditors to examine entire populations of data, thereby increasing the accuracy and reliability of audit outcomes.

d. Detection of Unusual Transactions and Fraud Risks

Artificial Intelligence provides significant opportunities for improving fraud detection effectiveness. Mwachikoka (2024) reported that AI technologies can automatically analyze transaction patterns and identify unusual activities, allowing potential fraudulent activities to be detected more quickly and accurately than traditional audit methods. These capabilities strengthen organizational financial control systems and improve risk monitoring processes.

Overall, the literature review findings indicate that the primary opportunities associated with Artificial Intelligence implementation include automated transaction processing, real-time financial data management, large-scale data analytics, and enhanced fraud detection capabilities. These opportunities demonstrate the potential of AI to support digital transformation in modern accounting and auditing practices.

e. Challenges of Artificial Intelligence Implementation in Accounting and Auditing

Despite its benefits, the implementation of Artificial Intelligence continues to face several challenges, particularly in developing countries such as Indonesia. Venkatesh et al. (2003) explained that human resources, organizational readiness, and technology acceptance are critical factors influencing the successful adoption of digital systems. Limited technological competencies and inadequate digital infrastructure often hinder the effective implementation of Artificial Intelligence in accounting and auditing. In Indonesia, AI adoption remains constrained by infrastructure limitations and relatively low levels of technological literacy among accounting professionals, resulting in slower implementation compared to developed economies.

Furthermore, Janssen et al. (2020) highlighted that Artificial Intelligence implementation involves challenges related to high investment costs, organizational preparedness, data security concerns, and the complexity of integrating digital systems. Not all organizations possess sufficient financial and technological resources to implement AI-based systems comprehensively, limiting adoption primarily to organizations with stronger resource capabilities.

Data security and information confidentiality also represent major concerns in AI implementation. The use of digital systems for financial data processing raises concerns regarding data breaches, cyber risks, and unauthorized use of organizational information. Consequently, organizations must establish stronger information security systems to ensure adequate protection of financial data. Another challenge involves the relatively low level of trust in Artificial Intelligence for accounting and auditing decision-making processes. Many organizations and auditors continue to believe that technology-based analyses should be complemented by professional human judgment to ensure reliable and trustworthy decisions. This perspective highlights the continuing importance of human involvement in maximizing the effectiveness of Artificial Intelligence implementation in accounting and auditing practices. Overall, the literature indicates that the major challenges of Artificial Intelligence implementation include limitations in human resources, organizational readiness, data security concerns, high implementation costs, and low levels of trust in digital technologies. Therefore, successful AI adoption depends not only on technological advancement but also on organizational preparedness in developing human capital, strengthening digital infrastructure, and establishing effective governance and control systems.

4. CONCLUSION

This study concludes that Artificial Intelligence (AI) plays a significant role in improving both financial reporting quality and audit quality within accounting practices. The findings of the Systematic Literature Review indicate that AI contributes to financial reporting quality through the automation of transaction recording, financial data processing, and the preparation of financial statements that are more accurate, relevant, and timely. Technologies such as Machine Learning, Big Data Analytics, and Natural Language Processing (NLP) support organizations in improving the efficiency and reliability of financial information. In the auditing field, Artificial Intelligence enhances audit effectiveness through large-scale data analysis, anomaly detection, risk assessment, and fraud detection capabilities, enabling auditors to perform audit procedures more efficiently and accurately. The findings also reveal that global accounting firms, including PwC, Deloitte, EY, and KPMG, have successfully adopted AI technologies to support modern auditing and financial reporting activities. However, the implementation of Artificial Intelligence in developing countries, including Indonesia, continues to face challenges related to technological infrastructure limitations, insufficient human resource competencies, high implementation costs, and low levels of trust in digital technologies. Therefore, the successful adoption of AI depends not only on technological advancement but also on organizational readiness, human capital development, and regulatory support. This study is limited to literature published between 2020 and 2025 and relies exclusively on secondary data sources. Future studies are recommended to conduct empirical or quantitative investigations to examine the direct impact of Artificial Intelligence on financial reporting quality and audit quality while incorporating additional variables such as risk management, ethics, governance, and data security.

ACKNOWLEDGMENT

The authors would like to express their sincere gratitude to the Faculty of Economics and Business, Universitas Muslim Nusantara Al-Washliyah, for its academic support and encouragement throughout the completion of this research. The authors also acknowledge the valuable contributions of researchers, scholars, and institutions whose published works provided important insights and references for this study. Appreciation is further extended to colleagues and all parties who offered assistance, support, and constructive feedback during the research process. Their contributions have been invaluable to the successful completion of this study.

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