Journal of Modern Accounting and Auditing, Oct.-Dec. 2025, Vol. 21, No. 4, 237-251
doi: 10.17265/1548-6583/2025.04.001

The Role of Artificial Intelligence in Enhancing Financial Reporting Quality: Evidence from Saudi Arabia's Vision 2030 Transformation

Amal Yamani
Department of Accounting, Faculty of Economics and Administration, King Abdulaziz University, Jeddah 21589, Saudi Arabia; amyamani@kau.edu.sa

As it leads to a significant transformation under Saudi Arabia's Vision 2030 initiative, artificial intelligence (AI) is changing the course of corporate systems, including financial reporting. This research examines the role of AI in advancing financial reporting quality (FRQ) in the Kingdom's evolving movement toward improved economy and governance. Using qualitative methodology informed by semi-structured interviews with senior finance leaders, auditors, and regulatory professionals in key sectors, the study reveals rich details about how AI technologies can—and will—be realized today, and how they can effectively improve reporting accuracy, timeliness, transparency, and regulatory compliance. The study helpfully outlines several dimensions where, as sworn, AI is advancing FRQ by automating a range of complicated data-intensive tasks, examining and identifying irregularities, and contributing to real-time decision making. Participants explained that AI would reinforce FRQ by ensuring ethical and transparent governance and enabling investment in co-human collaborative decision-making. The findings relate to agency and stakeholder theories. The research supports the notion that AI reduces information asymmetry and builds trust with investors and regulators. This study adds to a small number of qualitative studies on AI and financial governance in emerging economies and has important implications for policymakers, corporate actors, and standard setters. Moreover, it demonstrates the requirement for a collaborative national AI governance approach to ensure optimized value under the full potential of digital transformation and financial reporting standards. Future studies may explore longitudinal or cross-country comparative studies to further develop these insights and understanding.

Keywords: artificial intelligence, financial reporting quality, Vision 2030, AI governance, Saudi Arabia

Introduction

In recent years, the convergence of technological innovation and economic reform has brought unprecedented changes to the global financial landscape. Among the most transformative developments is the integration of artificial intelligence (AI) into financial reporting practices, particularly in emerging economies undergoing large-scale national reform. Saudi Arabia, through its ambitious Vision 2030 initiative, has placed digital transformation and economic diversification at the forefront of its agenda, emphasizing the critical role of governance and transparency in achieving sustainable growth. Within this context, AI emerges as a powerful

Amal Yamani, Ph.D., Assistant Professor, Department of Accounting, Faculty of Economics and Administration, King Abdulaziz University, Jeddah, Saudi Arabia.

enabler capable of enhancing the accuracy, reliability, and timeliness of financial reporting, which is essential for attracting investment, ensuring regulatory compliance, and improving overall financial integrity.

The primary aim of this study is to investigate how AI technologies influence the quality of financial reporting in the Kingdom of Saudi Arabia (KSA), with specific reference to the Vision 2030 transformation agenda. By focusing on the interplay between AI governance mechanisms and financial disclosure practices, the study seeks to unpack the strategic role of intelligent systems in shaping transparent and accountable financial ecosystems. Given the limited empirical research on this topic within the context of the Gulf Cooperation Council (GCC) countries, this paper fills an important gap by providing nuanced insights grounded in real-world developments. Accordingly, the following research questions are posed: How is AI being integrated into financial reporting processes within Saudi Arabian firms aligned with Vision 2030? What governance mechanisms are in place to ensure the ethical and effective deployment of AI in financial disclosures? To what extent does AI adoption enhance key dimensions of financial reporting quality (FRQ), such as relevance, reliability, comparability, and timeliness?

This paper makes several key contributions. First, it introduces a novel perspective by linking AI implementation with financial reporting quality within a national transformation framework. Second, it employs semi-structured interviews with financial executives, auditors, and technology officers in Saudi Arabia to provide rich, qualitative evidence that complements the theoretical discussion. Third, the study develops a conceptual model that integrates AI governance, FRQ dimensions, and institutional transformation, offering a foundation for future empirical validation in other emerging markets.

The findings have several practical implications. For policymakers, the study offers guidance on designing AI governance policies that enhance corporate transparency and accountability. For firms, the insights can inform strategies to adopt AI tools that not only improve reporting efficiency but also meet the expectations of regulators and investors. Additionally, the results are valuable for international stakeholders seeking to understand the evolving role of AI in financial reporting in alignment with sustainable development goals.

The rest of the paper is structured as follows: Section 2 presents theoretical framework. Section 3 reviews the relevant literature. Section 4 outlines the research methodology, including sampling and interview procedures. Section 5 offers a discussion of the results in light of Vision 2030 and global best practices. Finally, Section 6 concludes with implications, limitations, and recommendations for future research.

Theoretical Framework

The study's theoretical foundations are grounded in Agency Theory and the Technology-Organization-Environment (TOE) Framework, providing dual lenses for understanding the role of artificial intelligence (AI) in improving financial reporting quality (FRQ) in the context of Saudi Arabia's Vision 2030 transformation. Agency Theory is based on the work of Jensen and Meckling (1976) and posits that adverse selection and misalignment of incentives can create the opportunity for opportunistic behavior. High-quality financial reporting can serve as a tool for resolving these agency problems. However, traditional forms of financial reporting are not very effective in organizing or integrating complex, fast-changing, high-volume financial information. AI technologies like machine learning, anomaly detection, and intelligent automation present a completely new and powerful ability to introduce transparency, consistency and improve predictive quality of financial disclosures (Kokina & Davenport, 2017; Appelbaum, Kogan, & Vasarhelyi, 2017). Thus, AI also serves as an agent alignment mechanism, in addition to being an information technology, reducing information asymmetries, and

providing better governance and accountability, two of the essential tenets of Vision 2030.

As well as this, the Technology-Organization-Environment (TOE) Framework (Forrest, 1991) serves as an analytical framework to examine the conditions under which pilot studies are taken and AI and financial reporting practices become adopted. In the technological context, AI can process unstructured data, identify anomalies, and provide real time insights; and all these functions are more relevant in our reactive reporting environment. In the organizational context, intra-organizational readiness can consider the financial ability to deploy the new technology, the digital infrastructure on which it relies, and organizational capacity. These are overall preconditions to make AI an effective performance enhancement strategy. In the environmental context, important to the context outlined in Saudi Arabia, there are national initiatives, priorities, regulations, and stakeholder expectations to deliver increased digital transparency and sustainability (Wamba-Taguimdje, Fosso Wamba, Kala Kamdjoug, & Tchatchouang Wanko, 2020; Bendary & Rajadurai, 2024). These dimensions are taken together where AI is incorporated into financial reporting practices and whether the deployment of AI affects reporting quality.

In addition to this, FRQ is not a single attribute; FRQ is complex and includes attributes such as relevance, reliability, comparability, and timely (Dechow & Dichev, 2002; Barth, Landsman, & Lang, 2008). The application of AI contributes to these attributes: Relevance occurs through predictive analytics and contextualizing financial trends; reliability is achieved through reduced manual error and subjectivity; comparability comes from a standardized, algorithms-based processes; and timeliness is from processing data in real-time and automating the reporting process. These improved attributes are especially evident within emerging economies like Saudi Arabia, which are rapidly institutionalizing financial ecosystems and, therefore, experiencing fast changes.

To conclude, the combination of Agency Theory and the TOE Framework provides a robust and theoretically solid approach for exploring the influence of AI on financial reporting. The dual-theoretical perspective allows for a deeper appreciation of how technological innovation, organizational capabilities, and institutional context interact to influence reporting quality. This framework is particularly pertinent in the Saudi context, where Vision 2030 provides both a strategic foundation and institutional motivation to innovate using AI to promote corporate transparency, financial integrity, and sustainable economic growth. As such, this research makes a valuable contribution to the growing literature existing at the intersection of AI, governance, and accounting, while providing a useful lens for regulators, practitioners, and policymakers that are trying to navigate digital transformation.

Literature Review and Hypotheses Development

Recently, numerous studies have investigated the impact of artificial intelligence (AI) on various aspects of the business environment, particularly accounting. For example, the opportunities and challenges that the accounting profession may face because of adopting AI have been investigated by Yi, Cao, Chen, and Li (2023), and AI's impact on accounting systems (Khaled AlKoheji & Al-Sartawi, 2022), as well as the auditing (Hasan, 2021). Undoubtedly, one of the important effects that may attract researchers' attention is also identifying the impact of AI on the quality of financial reports, given that it is a primary and important output in the accounting process.

The study by Anantharaman et al. (2023) demonstrated that AI has a clear and positive impact on the quality of financial reporting of US-listed companies across several dimensions, including accuracy, reduced errors,

increased audit effectiveness, and timeliness in efficiently processing big data. It also enhances accounting control, which improves management's risk assessments and reduces earnings management. Çek (2024) also agreed with the previous findings. He examined the impact of AI on corporate governance environments in Turkey from 2015 to 2022. It was found that the impact of AI varies depending on the strength of a company's governance structure. If the environment is weak, AI strengthens control and reduces the likelihood of financial manipulation as a compensatory tool. If the environment is strong, AI enhances reporting accuracy and audit effectiveness as a complement to established controls.

A similar study in the United Arab Emirates supported previous findings regarding the quality of financial reporting and increased transparency, reliability, and timeliness. After applying the study to a sample of 120 UAE companies for the period 2018-2022 and collecting study data from financial reports and surveys, it became clear that AI applications actually improve the quality of financial reporting for companies, considering the size, strength, and complexity of the company. The study also confirmed that the proper application of AI is a powerful enabler of governance, not a substitute for it (Abubakr et al., 2024).

In Kenya, a questionnaire was distributed to a sample of 217 financial professionals from private sector companies and the financial services sector to identify the systems used by companies, their readiness to use AI programs, and the impact of AI on the accuracy of financial reporting. The study concluded that maximizing the potential of AI depends on the strength of the technology infrastructure, the extent of data governance, implementation and compliance strategies, and the training and competence of employees, which leads to significant improvements in the accuracy of corporate financial reporting (Mwachikoka, 2024).

In another study, in Jordan, Alqsass et al. (2025) targeted 13 traditional Jordanian banks after distributing a questionnaire to collect data from finance and IT professionals to investigate the impact of adopting AI on the quality of financial reporting. Although the adoption of AI has improved the quality of financial reporting, regulatory constraints due to outdated practices and weak training programs represent an obstacle to companies' ability to change and keep pace with modern advancements.

Across multiple countries, Khan, Ullah Jan, and Zia-ul-haq (2024) examined the relationship between AI adoption, audit quality, and integrated financial reporting in 165 listed companies in the Gulf Cooperation Council (GCC) countries during the period 2019-2023. The researchers used a mixed approach to collect and analyze the data, which included disclosure-index assessment, the IFR index, and alternative audit quality indicators. The results showed that the level of AI adoption varies across GCC countries depending on the level of development of companies' IT and organizational infrastructure. AI enhances audit quality, increasing the accuracy, efficiency, and objectivity of audit processes. It also improves the application of integrated corporate reporting frameworks such as sustainability, environment, and social corporate reporting. Furthermore, the study showed that audit quality, as a mediating variable, influences the relationship between AI adoption and the quality of corporate integrated financial reporting.

On the other hand, Johri (2025) examined the relationship between the use of AI and accounting information systems (AIS) by evaluating performance of improvements in AIS after its implementation, as well as identifying challenges and factors that enable AI to be enabled in operations. The study sample included medium and large organizations operating in Asia and Europe. The sample included the opinions of 312 accounting and finance professionals, including CFOs, accountants, internal auditors, and IT system managers, to participate in the study survey. A comparison was made between companies that adopt AI and those that do not. An electronically structured survey was conducted. AI's ability to improve the functions of accounting information systems was

demonstrated in several aspects, such as real-time processing of daily transactions, error detection, and the classification of accounting data in accounting systems. The study also confirmed the positive impact on the digital accuracy of companies' financial reports and the quality of disclosure, in addition to improving internal control functions and system reliability.

Studies continue to explore the relationship between AI and the quality of financial reporting for 114 listed Saudi companies between 2019 and 2023. This study uses the AI Disclosure Analysis Index and links it to financial reporting quality indicators such as the timeliness of reporting, completeness, and clarity of disclosure. The results agree with previous studies that the quality of reports has improved through several indicators: improved accuracy, validity, and consistency of information, timeliness of reporting, and improved disclosure and data integrity. It also showed that large companies in the technology and financial sectors achieve greater progress and higher quality by adopting AI systems, unlike small companies, which face challenges related to cost, lack of skills, and other factors. Based on the earlier discussion and examination of literature, we develop the following hypotheses to examine the relationship between AI and financial reporting quality in Saudi Arabia:

H1: The adoption of artificial intelligence technologies positively impacts the quality of financial reporting among firms in Saudi Arabia during the Vision 2030 transformation.

H2: The implementation of AI-driven financial reporting systems enhances the transparency and accuracy of corporate disclosures in Saudi Arabian firms aligned with Vision 2030 objectives.

Method

This research uses a qualitative research design employing semi-structured interviews to explore the contribution of AI to the quality of financial reporting in the context of the transformation of Saudi Arabia's Vision 2030. It was appropriate to use a qualitative approach in order to help elicit a much more detailed and nuanced perspective from finance leaders, auditors, and regulators working within the governance financing reporting space. All participants were selected with the appropriate expertise from all sectors at pertinent levels to develop variation from purposefully selected samples and representation from the perspectives and experience across the sectors in relation to AI use and applied each stage of the financial reporting process. Data were collected using semi-structured interviews with 18 participants. The semi-structured interview format allows for more consistency in the research but at the same time it provides enough flexibility for participants to explain their experiences and perceptions in greater detail. The interviews typically lasted between 60 and 90 minutes, following an interview protocol which sought to examine key themes associated with the practical application of AI technologies for financial reporting, including the potential benefits and challenges faced, implications for accuracy, transparency, timeliness, compliance with regulations, and ethical considerations for governance (see Appendix 1).

Due to taking into consideration issues of confidentiality and sensitivity around conversations about AI use cases, participants elected not to record their interviews, so the researchers took on the task of extensive notetaking during interviews. This was possibly a limitation on the richness of data that could be collected, but the original intent of the researchers was to draw out the perceptions of study participants, and participants were already trusting researchers not to use any identifying information; so leaning towards the engagement of participant comfort leverage may have been the best case for participant experiences, and they certainly provided some honest conversations around what they thought.

The documented data were manually analyzed and subjected to quoted analysis to support the identification

of identified patterns for AI's transformative impact on the quality of financial reporting. The identified patterns highlighted that AI was valuable as an automated complex task processing component and decision support in the form of detecting anomalies and supporting real-time decision reporting and ethical and transparent governance. The findings were consistent with theoretical perspectives of agency and stakeholder theories that supported recommendations for AI to reduce information asymmetries and confidence levels among investors and regulators. This methodological approach formed unique qualitative evidence supporting AI to enhance the transformative capability of financial reporting in light of recent Saudi Arabia digital economy initiatives. While the meaningfulness of this research will be challenged, the design of the study empowered industry experts to ensure their authentic voices underpinned the insights in support of policymakers, corporate practitioners, and standard-setting bodies to develop effective AI governance frameworks. Future researchers may consider longitudinal studies or cross-country studies to expand the empirical component of these findings and assess the transformative role of AI as it continues to evolve financial governance.

Results

The interview sample comprised 18 senior practitioners representing three primary groups: Finance Leaders (FILs), Auditors (AUDs), and Regulatory Professionals (REGs). In particular, the interviewees were FILs (n = 6), AUDs (n = 6), and REGs (n = 6). This distribution of interviewees provided a balanced, perspective-based sample (triangulation) from a mix of people engaged directly in financial preparation (as finance leaders), assurance (auditors), and oversight (regulatory professionals) activities, thus, establishing a breadth of input regarding the adoption of AI in financial auditing and governance. Regarding educational background, 94 percent of participants (n = 17) had at least a Bachelor's degree and most had earned their degrees in related disciplines, and the educational attainment of the 78 percent of participants who had attained a Master's degree (n = 14) (most with Master's degrees in accounting, finance, or IT related fields) stood out as most metric of the participants qualifications and capacity to make commentary about the emergence and potential for AI adoption in professional practice. One REG (6 percent) reported that she held a Ph.D. in cybersecurity which bodes well for the future impetus for these three groups to converge at the increasingly strategic intersection of digital security and regulatory oversight. Considered as a cohort, the fact that most participants had advanced educational qualifications speaks to both the intellectual and technical capacity of these professionals and their capability to provide input on the emergent scope of AI applications in the field of auditing and governance.

Professional certifications were also prevalent. In the FIL sample, 67% (n = 4) possessed a certification credential (CPA, CMA, or CIA). In contrast, 83% (n = 5) of the AUD sample were certified professionals (primarily CPA and CIA designations). Conversely, only 33% (n = 2) of the REG participants had a certification credential (predominantly CPA). The distribution of credentialing makes sense based on the respective natures of their work. FIL and AUD professionals require more specialized assurance and compliance expertise, while REG focuses more on policy, IT infrastructures, and the regulatory frameworks of the past and present. Experience was reported by the participants as being between 6 and 21 years in their respective fields, where the average experience was similar to 12.4 years. Of importance is that 56% (n = 10) of the participants reported having at least 10 years of professional experience, meaning the information gleaned from the participants represents people with a wealth of experience based on long-term exposure to both the typical practice and the developed practice. With a reasonable amount of experience behind their responses, credibility is added to the findings, particularly the impact of AI research has on legacy systems, the professionals' roles, and on internal

controls.

Although limited in level of gender diversity, the sample did include some degree of gender diversity. Female professionals comprised 28% (n = 5) of the interview participants, across all three categories: FIL (17%, n = 1), AUD (50%, n = 3), and REG (17%, n = 1). The inclusion of female professionals enhanced the socio-organizational dimensions analyzed in terms of workplace dynamics, inclusion, and equity surrounding digital upskills. The sample composition relative to education, certification, profession, and years' experience added to the methodological rigor of the study. The variety of experience and backgrounds contributed to a multidimensional engagement with the impact of AI on financial auditing as well as acceptable connections to theories such as stakeholder theory and socio-technical systems theory. The opportunity to engage high-level professionals who hold professional roles spanning reporting, assurance, and regulatory functions provided the study with authentic, practice-informed insights that support the exploration of opportunities, tensions, and governance implications of AI-enabled transformation in financial auditing, contextualized through Saudi Arabia's Vision 2030 reforms.

Table 1

Interviewees

Firm	Position	Gender	Academic qualification	Professional qualification	Years of firm experience
1	FIL	Male	BA Finance	CPA	9
2	FIL	Male	MA Accounting	-	14
3	FIL	Male	MA Accounting	CMA	11
4	FIL	Female	MA Accounting	CMA	17
5	FIL	Male	MA Accounting	-	10
6	FIL	Male	BA Accounting	CIA	7
7	AUD	Male	MA Accounting	CPA	15
8	AUD	Female	MA Accounting	CIA	6
9	AUD	Male	BA Accounting	CIA	21
10	AUD	Female	MA Accounting	CIA	10
11	AUD	Male	MA Accounting	CPA	12
12	AUD	Female	MA Accounting	CPA	13
13	REG	Male	BA IT	-	20
14	REG	Male	BA IT	-	9
15	REG	Male	MA Finance	CPA	14
16	REG	Female	MA IT	-	10
17	REG	Male	MA IT	-	7
18	REG	Male	Ph.D. Cybersecurity	-	16

Notes. FIL—Finance Leader; AUD—Auditor; REG—Regulatory Professional.

Individuals who engage in financial reporting and auditing generally have an accounting, finance, or auditing background, and are likely to be designated as CPA, CIA, or CMA. Specific responsibilities include the accuracy of financial statements; regulatory compliance; internal control assessments; and risk. Knechel et al. (2015) reported that the auditor's role has increased in complexity due to the regulatory environment and quantity of data, and that higher order analytical and technical skills are required to perform duties at a high level. Similarly, financial managers are now also responsible for translating financial information into strategic insights, and their job is not exempt from the increasing data-centric responsibilities (Gholami, Khanmohamadi, Vakilifard, &

Ranjbar, 2025).

> I entered the world of accounting over 20 years, and it has evolved significantly. It's no longer just closing the books but is now interpreting financial data, working with IT, and supporting leadership through the strategic process based on predictive analytics. (FIL, Firm 5)
>
> Auditing previously was about ticking boxes and manually checking transactions. Now, we are expected to run data analytics, assess anomalies, understand algorithms, and assess related financial risks. This is a very different skill set to 10 years ago. (AUD, Firm 8)
>
> Compliance is not just knowing the rules. With increased use of AI, we are daily assessing if the automated systems are producing reliable and transparent financial data. We are working more with IT and finance teams than we ever have. (REG, Firm 18)
>
> Being a CPA is still relevant, but I also need to understand how the AI systems work. If I cannot understand the tech, I cannot explain the numbers or risks to senior executives. This is the new reality of finance. (FIL, Firm 2)

There is an ongoing incorporation of AI into financial reporting and auditing. Organizations use AI for activities such as anomaly detection, risk assessment, transaction monitoring, and financial forecasting. Appelbaum et al. (2017) provided examples of how AI tools such as machine learning and natural language processing can assist auditors in a variety of ways over large datasets, such as they help initiate the identification of unusual patterns quickly and may summarize and extract insights from audit datasets in real-time. In financial reporting, AI can assist by automating data entry, reconciling accounts, and improving financial disclosures (Issa, Sun, & Vasarhelyi, 2016). Overall, AI tools are removing the need for manual hardware, so more traditional roles focus conversion into financial information or strategic analysis and interpretation.

> … We have integrated AI into our monthly reporting process that instantly identifies outliers; it's reduced our manual validation time by at least 40% which is like having an additional pair of eyes that never gets tired. (FIL, Firm 1)
>
> AI allows us to search the entire general ledger of numerous subsidiaries, identifying anomalies in seconds. We now can do what previously took days of sample testing within hours. (AUD, Firm11)
>
> Our systems auto-reconcile financial transactions and utilize Natural Language Processing to even prepare initial disclosures and footnotes. The finance department now just must review and finalize… It will be a major improvement in the speed and accuracy of our disclosures. (REG, Firm 13)

Professional roles in the accounting and auditing space have evolved and adapted to embrace AI technologies. Financial managers often require a combination of analytical skills (and accurately interpreting reported results), and technological proficiency to employ AI outputs for decision making. Likewise, internal auditors adapt to AI techniques with continuous auditing for real-time assurance (Jaradat, Al-Hawamleh, Al Shbail, & Hamdan, 2025). Operational managers use AI to improve business processes through real-time performance tracking and predictive analytics. IT managers play a critical role in the finance operations by utilizing AI in a secure, integrated, and functional manner with accounting infrastructure (Binns, Veale, Van Kleek, & Shadbolt, 2018).

> As a finance manager, I must do more than understand the numbers—I must understand how AI generated the numbers. It's no longer only about reporting, it's about explaining and acting on insights. (FIL, Firm 4)
>
> We now operate on a continuous basis using audit techniques that allow us to use AI tools to identify exceptions as they occur. AI has transformed our role—instead of evaluating previous transactions we now have the responsibility to monitor systems in real-time as they operate. (AUD, Firm 7)
>
> AI has totally transformed the way we manage our operations. Now we are able to track performance in real-time, predict outcomes, and make changes before something goes wrong-levels of visibility that were not possible prior to AI. (REG, Firm 16)
>
> My responsibility is to ensure the security, reliability and independence of the AI tools implemented into our accounting systems—and without creating new risk. We are now also members of the finance team in equal standing with IT. (REG,

Firm 14)

However, this evolution has also allowed more collaboration and interdisciplinary approaches for finance management and auditing. Departments are breaking traditional silos as AI systems require cross-functional input, including finance, operations, IT, and compliance. As noted by Kokina and Davenport (2017), the success of accounting functions performing AI applications is dependent on professionals working together, with the ability to interpret AI-driven insights and ethical and regulatory compliance. As a result, organizations have invested in upskilling their workforce, enhancing the culture of digital transformation, and transforming governance frameworks to reflect AI-driven practices. Recent research has found that those working in the fields of accounting or auditing have a growing awareness of the applications of AI in their work, although the level of awareness can vary phenomenally. One can find various AI tools, such as anomaly detection, natural language processing, and predictive analytics that are utilized to enhance audit quality, remove manual labor, and identify risks. For example, Appelbaum et al. (2017) found that AI technology develops assist auditors with identifying unusual transactions, automating routine audit work, and analyzing vast amounts of unstructured data. Issa et al. (2016) similarly found that AI applications, which include machine learning, are used to assist in compliance monitoring and fraud detection by detecting patterns in financial records. Although awareness is increasing, within the mid-level professional demographic, there may be some information gaps because mid-level professionals generally rely on traditional methods, indicating a need to provide more method-based, with some accessibility, AI Literacy opportunities.

> As an audit tool, AI is definitely here to stay. AI helps us identify abnormal timing or patterns around transactions that we might miss manually, especially when there are so many transactions in the data set. (AUD, Firm 10)
>
> … Things from natural language processing allow us to look through complicated agreements, contracts, and financial disclosures faster than ever before. We have had to change our approach to compliance and risk assessments. (FIL, Firm 1)
>
> Predictive analysts are helpful for identifying potential problems before they are investigated. Although, I see many of my mid-level colleagues still applying traditional checks and balances with the reports that we get from AI. (AUD, Firm 9)
>
> There is growing awareness about AI; I do not find everyone is at the same breadth of knowledge. I wish we could find more opportunities with broader access to practice training (especially for those in the middle of their careers) as it relates to seeing how you can work with AI. (FIL, Firm 5)

While AI integration is in high demand, many organizations still do not have formal training which is consistent or standardized. In a global survey conducted by PwC (2020), only 35% of financial professionals reported receiving formalized and structured training on AI directly from their organizations; most learned AI concepts through self-directed study or working informally with IT areas. Similarly, Yoon, Hoogduin, and Zhang (2015) contended that several accounting firms implement AI tools without delivering sufficient training to enable the efficient use of the tools. Without the ability to standardize AI education within firms, there is an unfulfilled promise between the prevalence of technology relating to AI and its effect on practice. Firms that developed targeted AI upskilling, in particular providing workshops, simulation tools, and AI literacy, tended to see greater efficiencies and lower levels of pushback to the new added processes (Deloitte, 2021).

> We deployed the AI tools quickly, but our formal training was limited. Most of us figured out how to use them ourselves or learned by asking IT for help. (FIN, Firm 6)
>
> I have seen firms implement AI systems, but without training, many auditors use them at a very basic level. There is a significant distinction between obtaining technology and knowing how to engage with it effectively. (AUD, Firm 7)
>
> Inconsistent training for AI is concerning from a regulatory perspective, especially if those using them are not skilled

in their use, compliance risk increases, and benefits of the technology can't be utilised fully. (REG, Firm 17)

… When we implemented AI workshops, and delivered hands-on simulations, we saw a considerable decrease in resistance, people felt confident about, and were therefore given the confidence to adopt the new practices. (REG, Firm 15)

Professional development programs in accounting and auditing have not yet proactively adapted to the rapid implementation of AI in the field. At the present time, existing continuing professional education (CPE) opportunities remain anchored in the past where courses focus solely on traditional competencies and treat AI as an adjunct area of skill. This same limit on the content devoted to AI in accounting education around the world has been suggested as a major hindrance to professionals in the development of the technical, analytical skills, and practical reasoning to operate in an AI-enabled world (Sutton, Holt, & Arnold, 2016). Although a few professional development modules focusing on AI have emerged in organizations like the AICPA and ACCA, these modules are still optional and not established as requirements. In general, most professionals feel ill-prepared to engage with AI technologies, particularly in high-stakes activities such as risk assessment; internal control testing; and compliance monitoring.

I have been through a lot of training and almost none of it is around AI. It's all about the basics that we have forever been exposed to, so I end up feeling unprepared to maximize value from the AI tools I have in-front of me. (AUD, Firm 12)

Professional education has not kept pace with the adoption of AI. While there are courses on AI, they tend to be optional—meaning professionals are unlikely to take them until they absolutely have too. (FIL, Firm 2)

I cannot become skilled enough to adopt these technologies with confidence, as I am still not pressed to formally study AI. This is especially true in areas like risk assessment or internal controls; mistakes can be very costly. (REG, Firm 15)

Top-performing companies have widely adopted a variety of AI tools to improve their financial reporting and auditing processes. PwC's GL.ai, for example, uses machine learning algorithms to assess general ledger data, identify unusual activity, and rank transactions by risk, improving efficiency and accuracy in audits. GL.ai has already successfully piloted several audits in a variety of jurisdictions and has also been designed to analyze every transaction, fairly and consistently. The more GL.ai is used, the smarter it gets (Mwachikoka, 2024). KPMG's Clara platform similarly applies AI and advanced analytics to scan through large financial data sets to identify unusual transactions and generate audit reports, enhancing compliance and transparency.

The convergence of artificial intelligence and auditing has clearly altered conventional auditing practices by not only automating the more mundane tasks of auditing with AI speed but also by providing real-time visibility to compliance difficulties. (AUD, Firm 8)

AI tools have fundamentally changed the way we can detect outliers and evaluate risk in financial data, allowing us to implement more value-oriented tasks. (FIL, Firm 1)

With the latest AI platforms, we are also able to significantly improve the speed and transparency of corporate financial reporting and make disclosures in a more timely and accurate manner. (REG, Firm 13)

Incorporating AI into traditional financial reporting and auditing practices finally makes significant impacts, and that impact is meaningful. AI-enhanced data analytics tools empower auditors to quickly and efficiently analyze massive amounts of structured and unstructured data, enabling auditors to spot patterns, trends, and anomalies. Because of this, continuous auditing is facilitated and we have made progress by automating data collection, verification, and fraud detection through data analysis of transaction data (Md Shakil, Md, Md Sultanul Arefin, & Md Ashraful, 2022). Further, AI's predictive analytics help auditors with forecasting financial results, assessing the reasonableness of management's projections, and identifying issues ahead of time. The benefits of these advances are that auditors may focus on high-risk areas and issues requiring professional

judgement.

> Using AI tools for continuous auditing, we have automated much of the data gathering and verification work, enabling us to focus on more difficult judgments instead of routine verification procedures. (FIL, Firm 4)
>
> A I analytics now allow us to process large data sets at high speed, spot hidden patterns and fraud much sooner than before. (AUD, Firm 11)
>
> Now days, I cannot imagine exploring management forecasts and identifying financial risk without first considering predictive analytics. (REG, Firm 18)

An exciting case of AI improving financial reporting is JPMorgan Chase's use of its Contract Intelligence (COiN) platform. COiN harnesses the power of machine learning to read commercial loan agreements and interpret them, a process that previously took thousands of hours of manual work (Oyeniyi, Ugochukwu, & Mhlongo, 2024). The platform can analyze complex legal documents in seconds, aggregating key data points and material risks, thus speeding up the reporting process and increasing accuracy and compliance. AI has significantly improved JPMorgan Chase's financial reporting quality, timeliness, and transparency.

> JPMorgan's COiN platform has reduced document review time from weeks to seconds, freeing us to concentrate on deeper analysis rather than extracting data manually. (FIL, Firm 2)
>
> The use of AI to interpret complex contracts has significantly improved the speed and accuracy of our financial reporting processes. (AUD, Firm 12)
>
> AI driven contract analysis tools assist us to identify key risks at the outset, improving compliance and transparency in reporting. (REG, Firm 17)

Implementing AI in financial reporting and auditing processes presents several challenges, including technological, organizational, and human factors. According to Chadha, Gera, Khera, and Sharma (2023), a significant barrier is the lack of sufficient data quality and integration, which hampers AI's ability to deliver reliable insights. Additionally, resistance to change among professionals accustomed to traditional methods can slow adoption. Moreover, AI tools often require substantial upfront investment in infrastructure and skilled personnel, which smaller organizations may find prohibitive. These factors collectively impede smooth integration and can delay realizing the full benefits of AI technologies.

> … One of the hardest barriers to overcome was just getting our data clean and properly integrated; the output of AI can only be as good as the data that goes into it. (FIL, Firm 6)
>
> People on the audit team, generally speaking, are reluctant to transition away from the ways they, and the profession, have always done things—it's often tricky to get all team members on board with AI-enabled processes. (AUD, Firm 9)
>
> … Implementing AI takes substantial investment, not only in technology but also in training. Smaller firms have challenges because they don't often have the funds to invest in those areas. (REG, Firm 13)

Concerns about risks and limitations related to AI also emerge prominently in literature. One critical issue is algorithmic bias, where AI systems may inadvertently perpetuate existing biases in the training data, leading to unfair or inaccurate outcomes (Lim, Vafaei-Zadeh, Hanifah, & Nikbin, 2025). Ethical concerns arise around transparency and accountability, particularly in financial audits where AI decisions can significantly impact stakeholders. Over-reliance on AI may cause auditors or financial managers to neglect professional judgment, potentially undermining the quality of audits. Hence, balancing AI automation with human oversight remains essential to mitigate these risks.

> Sometimes the AI points out problems based on patterns related to past biases—it's a genuine worry that AI systems may reinforce unjust outcomes. (AUD, Firm 7)

> Transparency of ethics is important. We need to know how AI arrives at its conclusions, particularly where financial decisions impact so many people. (FIL, Firm 2)
>
> There is a risk of auditors relying too heavily on AI outputs and not practicing their own professional judgment. (REG, Firm 14)

Organizational structure, resource availability, and regulatory factors heavily influence the effective use of AI in financial reporting and auditing. A study by Almaqtari et al. (2024) highlighted that organizations with strong top management support and clear governance frameworks tend to implement AI more successfully. Limited resources, including budget constraints and lack of skilled personnel, reduce AI adoption effectiveness, especially in public sector entities. Regulatory uncertainty also plays a significant role; evolving standards around AI use in financial reporting and auditing create compliance challenges that organizations must navigate carefully. Consequently, firms with adaptive cultures and supportive regulatory environments are better positioned to leverage AI effectively.

> AI projects do tend to stop without strong support from leadership, and they can make a difference with good support from upper management. (FIL, Firm 3)
>
> The budgetary constraints and limited number of qualified AI practitioners have existed for some time and are still a challenge, especially for smaller or public organizations. (AUD, Firm 10)
>
> Some uncertainty around AI regulatory requirements and having to operate very carefully due to compliance requirements shifting all the time makes it harder to implement. (REG, Firm 16)

Conclusion

This study highlights the substantial influence of AI on FRQ, demonstrating that AI technologies enhance both the efficiency and accuracy of these critical functions. The initial findings reveal that AI tools such as machine learning algorithms and advanced analytics significantly improve the detection of anomalies, risk ranking of transactions, and overall audit quality. Organizations that integrate AI effectively benefit from accelerated data processing, enhanced fraud detection capabilities, and improved financial transparency. These advancements carry important practical implications, suggesting that firms can achieve stronger governance and compliance outcomes by embracing AI-driven automation while maintaining appropriate human oversight.

Despite these promising outcomes, several limitations warrant consideration. The research primarily focuses on organizations with relatively mature AI adoption, which may limit the applicability of findings to firms at earlier stages of digital transformation or in resource-constrained environments. Additionally, issues such as algorithmic bias, ethical concerns, and regulatory uncertainty remain significant barriers that can hinder the full realization of AI's potential. The rapid evolution of AI technologies also means that the landscape is continuously shifting, making it challenging to establish stable frameworks for adoption and oversight.

To build on this foundation, future research should pursue longitudinal designs to capture the long-term impacts and evolution of AI in financial reporting and auditing. Qualitative studies exploring the perceptions, attitudes, and challenges experienced by practitioners will enrich the understanding of organizational readiness and cultural factors affecting AI integration. Moreover, research should critically examine the regulatory environment, focusing on how emerging standards and policies can balance innovation with ethical considerations and accountability. Expanding the scope of investigation to include a broader range of industries and geographic regions, particularly developing economies, will also provide a more comprehensive and globally relevant perspective on AI's role in transforming accounting and auditing

practices.

References

Abubakr, A. A. M., Khan, F., Mohammed, A. A. A., Abdalla, Y. A., Mohammed, A. A. A., & Ahmad, Z. (2024). Impact of AI applications on corporate financial reporting quality: Evidence from UAE corporations. *Qubahan Academic Journal, 4*(3), 782-792.

Almaqtari, F. A., Farhan, N. H., Al-Hattami, H. M., Elsheikh, T., & Al-dalaien, B. O. A. (2024). The impact of artificial intelligence on information audit usage: Evidence from developing countries. *Journal of Open Innovation: Technology, Market, and Complexity, 10*(2), 100298.

Anantharaman, D., Rozario, A. and Zhang, C.A. (2023). Artificial intelligence and financial reporting quality. Available at SSRN 4625279.

Alqasass, M., Qubbaja, A., Alghizzawi, M., Jebreel, M., Dweiri, M., & Qabajeh, M. (2025). The role of artificial intelligence adoption to improve quality of financial reports (Case study based on Jordanian traditional). In *Green finance and energy transition* (pp. 605-619). Cham: Springer.

Alrashed, A., Alhendi, E., & Alqhtani, F. (2021). Digital transformation and accounting transparency under Vision 2030: A case study of Saudi public sector. *International Journal of Accounting and Financial Reporting, 11*(1), 50-65.

Alhazmi, A. H. J., Islam, S. M., & Prokofieva, M. (2025). The impact of artificial intelligence adoption on the quality of financial reports on the Saudi Stock Exchange. *International Journal of Financial Studies, 13*(1), 21.

Appelbaum, D., Kogan, A., & Vasarhelyi, M. A. (2017). Big data and analytics in the modern audit engagement: Research needs. *Auditing: A Journal of Practice & Theory, 36*(4), 1-27.

Bendary, M. G., & Rajadurai, J. (2024). Emerging technologies and public innovation in the Saudi public sector: An analysis of adoption and challenges amidst Vision 2030. *The Innovation Journal, 29*(1), 1-42.

Barth, M. E., Landsman, W. R., & Lang, M. H. (2008). International accounting standards and accounting quality. *Journal of Accounting Research, 46*(3), 467-498.

Binns, R., Veale, M., Van Kleek, M., & Shadbolt, N. (2018). "It's reducing a human being to a percentage": Perceptions of justice in algorithmic decisions. *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*. Montreal, QC, Canada, April 21-26, 2018.

Chadha, P., Gera, R., Khera, G. S., & Sharma, M. (2023). Challenges of artificial intelligence adoption for financial inclusion. In *Artificial intelligence, Fintech, and financial inclusion* (pp. 135-160). Boca Raton: CRC Press.

Çek, K. (2024). The role of artificial intelligence technology adoption in enhancing audit and financial reporting quality within different governance environments. *LAÜ Sosyal Bilimler Dergisi, 15*(2), 157-180.

Dechow, P. M., & Dichev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review, 77*(s-1), 35-59.

Deloitte. (2021). AI in the enterprise, 3rd edition: The AI race heats up. Retrieved from https://www2.deloitte.com

Forrest, J. F. (1991). Practitioners' forum: Models of the process technological innovation. *Technology Analysis & Strategic Management, 3*(4), 439-453.

Gholami, A., Khanmohamadi, M. H., Vakilifard, H., & Ranjbar, M. (2025). Presenting the management accounting model in the digital era. *Management Strategies and Engineering Sciences, 7*(4), 71-80.

Hasan, A. R. (2021). Artificial intelligence (AI) in accounting & auditing: A literature review. *Open Journal of Business and Management, 10*(1), 440-465.

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.

Jaradat, Z., Al-Hawamleh, A. M., Al Shbail, M., & Hamdan, A. (2025). Innovative practices: Assessing the impact of robotic process automation adoption on internal audit efficiency in KSA. *Journal of Science and Technology Policy Management.* Retrieved from https://doi.org/10.1108/JSTPM-06-2024-0230

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305-360.

Johri, A. (2025, January). Impact of artificial intelligence on the performance and quality of accounting information systems and accuracy of financial data reporting. In *Accounting Forum* (pp. 1-25). London: Routledge.

Khaled AlKoheji, A., & Al-Sartawi, A. (2022, May). Artificial intelligence and its impact on accounting systems. In *European, Asian, Middle Eastern, North African Conference on Management & Information Systems* (pp. 647-655). Cham: Springer

International Publishing.

Khan, F., Ullah Jan, S., & Zia-ul-haq, H. M. (2024). Artificial intelligence adoption, audit quality and integrated financial reporting in GCC markets. *Asian Review of Accounting, 33*(3), 464-495.

Kokina, J., & Davenport, T. H. (2017). The emergence of artificial intelligence: How automation is changing auditing. *Journal of Emerging Technologies in Accounting, 14*(1), 115-122.

Lim, H. T., Vafaei-Zadeh, A., Hanifah, H., & Nikbin, D. (2025). Evaluating the benefits and risks of facial recognition payment systems adoption in Malaysia. *International Journal of Bank Marketing, 43*(2), 292-320.

Md Shakil, I., Md, R., Md Sultanul Arefin, S., & Md Ashraful, A. (2022). Impact of digital transformation on financial reporting and audit processes. *American Journal of Economics and Business Management, 5*(12), 213-227.

Mwachikoka, C. F. (2024). Effects of artificial intelligence on financial reporting accuracy. *World Journal of Advanced Research and Reviews, 23*(3), 1751-1767.

Oyeniyi, L. D., Ugochukwu, C. E., & Mhlongo, N. Z. (2024). The influence of AI on financial reporting quality: A critical review and analysis. *World Journal of Advanced Research and Reviews, 22*(1), 679-694.

PwC. (2020). AI predictions 2020: About time. Retrieved from https://www.pwc.com

Robert Knechel, W., Vanstraelen, A., & Zerni, M. (2015). Does the identity of engagement partners matter? An analysis of audit partner reporting decisions. *Contemporary Accounting Research, 32*(4), 1443-1478.

Sutton, S. G., Holt, M., & Arnold, V. (2016). The reports of my death are greatly exaggerated—Artificial intelligence research in accounting. *International Journal of Accounting Information Systems, 22*, 60-73.

Wamba-Taguimdje, S. L., Fosso Wamba, S., Kala Kamdjoug, J. R., & Tchatchouang Wanko, C. E. (2020). Influence of artificial intelligence (AI) on firm performance: The business value of AI-based transformation projects. *Business Process Management Journal, 26*(7), 1893-1924.

Yi, Z., Cao, X., Chen, Z., & Li, S. (2023). Artificial intelligence in accounting and finance: Challenges and opportunities. *IEEE Access, 11*, 129100-129123.

Yoon, K., Hoogduin, L., & Zhang, L. (2015). Big data as complementary audit evidence. *Accounting Horizons, 29*(2), 431-438.

Appendix 1: Interview Questions

Participant Background:
What is your current position/title?
How many years of experience do you have within your organization or industry?
What are your academic qualifications?
Do you hold any professional certifications relevant to finance, auditing, or AI?
Interview Questions:
Section 1: Role and Responsibilities in Financial Reporting and Auditing
Could you briefly describe your professional background and your current responsibilities related to financial reporting or auditing?
How is artificial intelligence currently incorporated into your organization's financial reporting or auditing processes?
From your experience, how have roles such as financial managers, internal auditors, operational managers, and IT managers evolved with the adoption of AI technologies?
Section 2: Awareness and Expertise in AI Applications and FRQ
How familiar are you with AI applications in financial reporting and auditing, including tools for risk assessment, anomaly detection, or compliance monitoring?
What AI-related training or resources has your organization provided to you or your team?
Do you believe current professional development programs sufficiently prepare auditing and financial reporting professionals to integrate AI? Why or why not?
Section 3: Practical Use and Impact of AI on FRQ
Which AI technologies or tools have proven most effective in enhancing financial reporting or auditing in your organization?
How has the integration of AI transformed traditional financial reporting or auditing tasks, such as data analysis, error detection, or compliance verification?
Can you share a specific example where AI adoption significantly improved the quality, timeliness, or transparency of financial reporting?
Section 4: Challenges and Risks in AI Adoption and FRQ
What challenges or barriers have you encountered during the implementation of AI in financial reporting or auditing processes?
Are there particular risks or limitations you perceive in relying on AI, such as algorithmic bias, ethical concerns, or over-dependence on technology?
How do organizational structure, resource availability, or regulatory factors influence the effective use of AI in your financial reporting or auditing functions?