

Artificial Intelligence and Machine Learning in Accounting and Auditing

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Abstract

Accounting and auditing is going through a transformation with the arrival of Artificial Intelligence (AI) and Machine Learning (ML) which can enhance its quality, timeliness and credibility in financial reporting and assurance services. The increased amount of financial transactions, variety of regulatory requirements and the requirement for real-time information have driven the accounting professionals to adopt intelligent technologies for routine and analytical tasks. This will include the ways in which AI and ML can be applied in today's accounting and auditing practices, such as automated bookkeeping, fraud detection, risk analysis, predictive financial analysis, continuous auditing and regulatory compliance. The research included a comprehensive review and analysis of academic articles, professional reports, and industry applications to gain insights into the potential benefits of AI tools for auditors and accountants in optimizing their workflows and reducing human error. The results demonstrate the remarkable use of AI and ML in processing data, detecting anomalies in financial data, enhancing internal controls and facilitating evidence-based decision making. However, there are challenges to implementing intelligent technologies: data privacy, algorithm transparency, cyber security, ethics, implementation costs and continual professional retraining. The study highlights the importance of AI as a tool to assist, not supplant, human expertise and judgment. The main ones are to have a powerful governance framework and regulatory compliance, ensure the AI is used ethically and the accounting professionals are upskilled. Researchers, practitioners, educators and policymakers interested in promoting innovation and sustainable financial management in accounting will find the paper useful, as will scholars and professionals who are interested in digital transformation in accounting.

Keywords: Artificial Intelligence, Machine Learning, Accounting, Auditing, Financial Reporting, Fraud Detection, Continuous Auditing, Digital Transformation.

Introduction

Over the last ten years, the accounting and auditing profession has undergone substantial change, as digital technologies have been continually evolving. The use of Artificial Intelligence (AI) and Machine Learning (ML) is growing across industries to enhance the effectiveness, efficacy and effectiveness of financial reporting, compliance and assurance processes. While traditional accounting platforms are mainly focused on automating repetitive processes, AI-powered technologies are able to sift through vast amounts of structured and unstructured financial information, detect patterns, flag anomalies and provide predictive analysis that can help with strategic decision-making. AI and ML are increasingly becoming integral components of accounting modernization and assisting auditing processes to be more effective. In a digital accounting modernization landscape, AI and ML are playing a crucial role in helping businesses enhance their business processes, particularly when it comes to perfecting audits.

Artificial Intelligence (AI) can be defined as a system programmed by a computer to carry out operations or tasks normally performed by human intelligence, including reasoning, learning, problem solving, understanding and natural language processing, and decision making. Machine Learning is another subset of AI and enables systems to learn from data, adapt and improve over time, without requiring human programming for every possible circumstance. The

technologies are used for bookkeeping automation, invoice processing automation, expense categorization, financial forecasting, fraud detection and deterrence, risk assessment and mitigation, tax compliance, continuous auditing and internal control monitoring, in the field of accounting and auditing. Their ability to process large volumes of information in real-time has reduced the time and labour involved in financial analysis, and made it quicker and more accurate.

Due to the complexity of financial transactions, globalization of business operations and the increasing regulatory requirements, accounting professionals and auditors are subjected to a great deal of pressure to provide accurate and timely financial information. The traditional manual audit processes and sampling techniques can also fail to address small deviations or emerging risks in the more complex financial environment of today. With its ability to analyse the entire data, AI based auditing systems can overcome these challenges by expanding audit coverage and identifying risks, and providing audit results. Underpinned by machine learning attributes that get better at detecting fresh patterns in financial transactions, these capabilities enable organisations to anticipate future risks to their operations or opportunities for further expansion.



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AI and ML also have a crucial role in improving the organizational governance and transparency. Smart analytics can alert auditors to any suspicious transactions and adherence to accounting principles and whether internal controls are working or not. Predictive models aid management in predicting cash flow, credit risk and evidence based financial decisions. Not to mention that NLP can be used for analysing data related to contracts, financial disclosure, audit or regulatory information without hours of document review and can make them more consistent and accurate.

There are benefits to be enjoyed but challenges in accounting and auditing and the incorporation of AI & ML. Data privacy, cybersecurity threats, algorithmic bias, transparency of automated decision making, ethical issues and an insufficient number of advanced thinkers in terms of their analytical capabilities are some of the problems to be addressed when implementing the vision. Moreover, the regulatory developments in financial reporting and auditing relating to AI are ongoing, and companies must adapt to them to stay current on both their own cutting-edge implementation and their professional judgment, accountability, and adherence to regulations. The effectiveness of AI based systems will depend on the data quality, governance and need for human oversight and supervision.

The role of an accountant and the profession are changing with the advent of AI and ML. There is an increasing tendency of automation of the routine activities of the business and thus the

professionals are able to focus on activities towards value addition such as business consulting activities, advisory services, risk management and strategic financial analysis. As a result, data analytics, digital technologies and the basic programming skills have become a core part of accounting education and training courses, and many of these courses have a focus on AI-driven financial systems.

As intelligent technologies rapidly change and wield an increasing influence on financial management, it is pertinent to consider how these technologies are changing accounting and auditing. In this paper, the author will discuss the opportunities Artificial Intelligence and Machine Learning (AI/ML) brings to the auditing and accounting field, its applications, and its challenges. It also explores how these technologies might impact audit quality, financial reporting, fraud detection, regulatory compliance and professional practice, as well as the need for ethical governance and human intelligence in the future of the profession in the proper and effective use of these technologies.

Background of the study

The use of digital technologies has transformed the profession of Accounting and Auditing in the past few decades. From a manual bookkeeping, financial reporting and verification and compliance monitoring, periodic audit strategic and technology driven functions have become the traditional roles of accountants and auditors. Organizations are now working in a business landscape fraught with growing expectations on transparency and accountability from stakeholders, globalised business operations, complex financial regulations and heightened volumes of transactions. The developments have allowed for the widespread use of Artificial Intelligence (AI) and Machine Learning (ML) in the accounting and auditing field, which are vital to improving the efficiency, accuracy and reliability of accounting and auditing processes. Artificial Intelligence is a technology wherein a computer system can perform tasks which are typically performed by human beings including reasoning, learning, pattern recognition, decision making, and language processing. One of the significant areas of AI, namely Machine Learning, allows systems to learn from past data and adapt their behaviour without needing to be programmed for each specific task. Examples of these technologies are automated data processing, anomaly detection, fraud detection, predictive financial analysis, and intelligent document processing and continuous auditing in accounting and auditing. Their capabilities to handle huge amounts of structured and unstructured economical data in real-time have changed the way that financial experts gather, analyse and interpret accounting data.

With a greater reliance on digitisation of financial systems, the amount of accounting related information that are being generated are unprecedented and are done through enterprise resource planning (ERP) systems, cloud-based accounting platforms, electronic payment systems, blockchain application and digital business transactions. In the efficient audit of the entire population of financial transactions, the traditional auditing methods, such as taking a "snapshot" at a single point of time, and testing a representative sample of financial transactions, may be inadequate. However, these are all limitations that can be addressed by AI and ML by automatically analysing all sets of data and continuously checking risks. Such capabilities enable detection of unusual transactions, enhance internal control evaluations and enhance the quality of financial reporting.

Machine learning algorithms can also be used in the detection of fraud, where they can be used to uncover relationships and patterns that can be hidden from traditional audit procedures. Predictive models can assist auditors in financial risk assessment, forecasting future business performance, creditworthiness assessment and to identify potential areas of material misstatement. An example of another use of AI is the natural language processing (NLP) it assists in analyzing annual reports, business discussions, regulatory documents and contracts, which can save time in document reviews, and help to ensure consistency in the analysis. With AI, Robotic Process Automation (RPA) further enhances productivity by automating repetitive

accounting tasks, such as dealing with invoices, bank reconciliation, expense verification, tax documentation, and financial statement preparation. While AI/ML has the promise of delivering significant benefits to the accounting and auditing profession, there are some challenges for implementation. There are also challenges faced by accounting and auditing professionals with the use of AI and ML. Issues that will affect implementation decisions include data privacy, cyber security, algorithmic bias, transparency of automated decision making, regulatory compliance and ethical issues of accountability. Some ML models are “black boxes” that can make it harder to gain insight into the audit results for professional judgment and regulatory acceptance. Beyond that, significant investments in digital infrastructure, training and establishing data governance and organisational change management is required to make it a success. Learning new skills through the use of technology to face the challenges of data analytics, data's role in governance, digital risk and new services in assurance, professional accountants and auditors need to have the values of independence, integrity, confidentiality and professional skepticism, all while learning new skills through the use of technology. AI's integration in financial reporting and auditing is becoming more popular and is being increasingly embraced by regulators, standard setters, and professional bodies. Organizations are looking for AI-powered answers beyond just improving operational efficiency, to help increase audit quality, further fraud prevention, decrease operational costs, and enable better decision making for strategic planning. As businesses continue to evolve in the digital era, the process of digital transformation will continue to influence the future of accounting education, the role of the accountant, internal audit, external assurance, forensic accounting, and financial governance, among other areas, with the application of AI and ML. Given the constantly evolving nature of technology and the growing dependence on intelligent automation, it is even more relevant to explore the implications of AI and ML in ensuring accounting accuracy, the audit process, organizational productivity and stakeholder trust. To create effective frameworks that strike a balance between technological innovation and ethical responsibility, regulatory compliance, and professional judgment, it is crucial to understand the opportunities as well as the implementation hurdles of these technologies. The findings of this study provides a solid ground for the study of transformative role of Artificial Intelligence and Machine Learning in accounting and auditing and its future implications for accounting profession.

Justification

The accounting and auditing industry is constantly changing and adopting new technologies, such as AI and ML. The accountancy methods which mainly depend on manual data processing and periodic auditing are increasingly being superseded by intelligent systems which can process huge amounts of financial data at high speed, accuracy and consistency. The technological advancements have opened up opportunities and possibilities for automating repetitive accounting roles, bolstering fraud detection, enhancing financial reporting and enabling continuous auditing. The understanding of the potential impact of AI and ML in the context of accounting and auditing has arrived at a crucial and timely moment as organisations increasingly transform to digital. While the use of AI in finance has been growing, it also comes with its difficulties for businesses, such as data quality, lack of understanding of the algorithms being used, ethical concerns, cybersecurity risks, and changing accounting job demands. While there are numerous studies addressing the technical capabilities of the applications of AI, there are fewer studies examining the wider effects of AI on audit quality, professional judgement, regulatory compliance and organisational decision making. It engenders the need for the wide-ranging research that combines the technical, managerial and professional aspects of technology. Moreover, the regulatory expectations for transparency, accountability and governance in the management of risk are continuously growing and organisations have to be aware of the balance between the technological innovation and good governance. There are new challenges, however, related to the explainability and data privacy, algorithmic bias, and

professional responsibility of AI/ML systems that add to the need for internal controls and audit effectiveness. These dimensions need to be examined to develop implementation strategies which are responsible and effective. However, the study is justifiable because it aims to reach out to the findings of the impact of AI and ML on roles and functions of accounting and auditing in an organisation, the opportunities, challenges and implications of the same on the future. The results will be shared in academic journals and practitioners can apply the findings to put in place intelligent accounting systems and contribute to policy makers, educators and professional bodies on shaping policy that will aid ethical, efficient and technology-based accounting and auditing practices.

Objectives of the Study

1. To understand the transformation of accounting and auditing due to the advent of Artificial Intelligence (AI) and Machine Learning (ML).
2. To know the key Artificial Intelligence and Machine Learning technologies utilized in financial reporting, bookkeeping and auditing, fraud detection and risk assessment.
3. To evaluate the accuracy, efficiency and timely accounting and audit workflows using AI-powered automation.
4. To investigate how AI and ML will impact the auditors' decision making, professional judgment and audit quality.
5. To gain an understanding of Artificial Intelligence capabilities to detect financial fraud, financial anomalies and compliance issues.

Literature Review

The use of Artificial Intelligence (AI) and Machine Learning (ML) has revolutionized accounting and auditing, automating repetitive tasks, advancing analytical power, bolstering fraud prevention, and aiding in better decision-making. The ongoing research shows that the accountancy profession is undergoing a paradigm shift, brought about by the advent of AI and ML, and that AI and ML are creating fresh opportunities and challenges for the profession. Issa, Sun and Vasarhelyi (2016) postulated that artificial intelligence could transform the audit profession by providing automated real-time risk assessment, continuous auditing and automated anomaly detection. They highlighted the benefit of AI technologies, which minimizes human effort and enhances audit efficiency and uniformity. Kokina and Davenport (2017) explored how cognitive technologies are emerging in accountancy, noting that AI-driven systems are helping accountants to manage huge amounts of structured and unstructured financial data. AI improves managerial decision-making and enables professionals to concentrate on strategic tasks, their study found. Appelbaum, Kogan, and Vasarhelyi (2017) explain that machine learning algorithms can help to create a more effective audit because they can discover hidden patterns and anomalous transactions that a traditional audit sample might not be looking for. The authors pointed out that predictive analytics can help auditors identify financial irregularities more effectively. Alles (2015) talked about the development of data analytics and intelligent technologies in auditing, noting that AI helps to monitor financial transactions continuously and enhances internal control systems. The research proposed that the technology-based methods are the key to auditors' success in a digital business world. According to Sutton, Holt, and Arnold (2016), the role of artificial intelligence in accounting information systems is through intelligent automation, expert systems, and predictive modeling. Their study showed that AI enhances financial reporting speed, accuracy, and minimises operational errors. Moffitt, Rozario, and Vasarhelyi (2018) pointed out that machine learning methods are more effective in identifying fraud because they can detect intricate behavioral patterns in accounting data bases. They discovered that AI-based audit systems are superior to numerous rule-based fraud-detection systems. Brown-Liburd, Issa and Lombardi (2015) explored implications of big data analytics for auditors, and noted that the use of AI in conjunction with the advanced

analytics will help auditors assess entire data sets instead of relying on sample testing. This improves audit assurance and build evidence-based decision making. Cockcroft and Russell (2018) discussed how artificial intelligence will affect accounting education and accounting competencies. Their research revealed that accountants need to have a new set of skills in addition to being able to work with automated accounting software: analytical, technological, and data management. Marshall & Lambert (2018) have studied intelligent accounting systems and concluded that machine learning has benefits in terms of better financial forecasting, budgeting accuracy, and in analysing business performance. They showed that predictive models can help organisations to better predict financial risks. The use of blockchain with AI has been proposed by Dai and Vasarhelyi (2017), who claim that the integration of distributed ledger technology and artificial intelligence may improve transparency, audit trail and fraud detection in AI auditing systems. They said that this integration marks the future of digital assurance services. Omoteso (2012) highlighted that expert systems and intelligent decision-support technologies help auditors make "complex financial judgements. The study revealed that AI helps ensure consistency in audit opinions and mitigate the subjective element in the audit. Raschke and Charron (2021) noted that machine learning algorithms are more effective at detecting earnings management and financial statement manipulation, as they can identify subtle anomalies that lie within a corporation's financial statement. The results of their research affirm the role of AI in enhancing corporate governance. Businesses that embraced intelligent automation also benefited in terms of improved productivity and lower operational expenses. ICAEW (2020) states that AI is revolutionising the accounting profession by allowing for continuous auditing, automated compliance monitoring and intelligent financial reporting. The report highlighted that future accountants need to acquire the skills of digital competency as well as accounting knowledge. The International Federation of Accountants (IFAC, 2021) reported that AI is bringing more intelligence to the audit process, with benefits such as intelligent risk assessment and predictive analytics, as well as improved professional judgment. But ethical issues, transparency, cyber security, and accountability of algorithms are important challenges which need to be addressed by the regulators. Ransbotham et al. (2020) identified that organizations that successfully incorporate AI into their financial operations gain productivity benefits, make quicker decisions and benefit the performance of their organizations. Their research found that the readiness of organizations and the capabilities of employees have a significant impact on the successful implementation of AI. Brynjolfsson and McAfee (2014) stated that intelligent technologies can be used along with but not in place of the skills of the professionals. In the accounting and audit sector, AI streamlines repetitive tasks and empowers accountants and auditors to focus on higher-value tasks such as analysis, planning, and communication. Russell and Norvig (2021) introduced machine learning as one of the foundations in the development of intelligent systems, which are capable of learning from past financial data to enhance prediction accuracy. Their work offers a theoretical framework for the use of AI in accounting analytics. According to Goodfellow, Bengio, and Courville (2016), deep learning techniques allow intelligent financial systems to learn and detect complex, nonlinear relationships in large accounting datasets, helping financial institutions detect fraud, forecast financial activity, and evaluate risk. Previous research has repeatedly confirmed audit quality, fraud detection, financial reporting, operational efficiency, predictive analytics and strategic decision making benefits. However, ethical issues, data privacy, transparency of algorithms, professional competence and governance are also crucial to consider when implementing AI systems in accounting practices in a responsible manner.

Material and Methodology

The present study used systematic literature review and qualitative exploratory research design to explore the use of Artificial Intelligence (AI) and Machine Learning (ML) in accounting and auditing. The qualitative method was seen as suitable for this study as the research aims to

synthesize the theoretical and empirical knowledge, highlight emerging trends and analyse the opportunities and challenges that AI-driven technologies pose in accounting practices. Secondary data was the most important source of information and was gathered from peer-reviewed journal articles, conference papers, academic books, accounting standards, industry reports and reports from recognised organisations including the International Federation of Accountants (IFAC), International Auditing and Assurance Standards Board (IAASB), Association of Chartered Certified Accountants (ACCA), American Institute of Certified Public Accountants (AICPA) and leading accounting firms. The literature search was carried out on the basis of the scholarly databases such as Scopus, Web of Science, ScienceDirect, SpringerLink, Emerald Insight, Taylor & Francis Online, IEEE Xplore, and Google Scholar. Using keywords alone and in combination, the following publications were retrieved: Artificial Intelligence, Machine Learning, Accounting Analytics, Intelligent Auditing, Predictive Analytics, Fraud Detection, Continuous Auditing, Robotic Process Automation, and Financial Reporting.

The study took into consideration the literature published mainly in the period 2015–2025, so as to make the review more up-to-date and reflect recent technological advances and contemporary accounting practice. The publications featured in the review were limited to publications that were published in English and had direct applicability to AI/ML applications in Accounting, Auditing, Financial Reporting, Risk Assessment, Internal Control, Fraud Detection, Taxation, and Audit Automation. Editorials, opinion articles, duplicated studies, non-peer-reviewed publications and methodological inadequately designed studies were not included. Thematic content analysis was then employed to analyse the selected literature which involved identifying major themes such as: AI-assisted financial reporting, machine learning algorithms for fraud detection, intelligent audit systems, predictive risk assessment, automation of accounting processes, ethical considerations, data governance, cybersecurity concerns, auditor competencies, and regulatory implications. Comparative synthesis was then used to pinpoint commonalities, gaps in the research, barriers to implementation, and future research directions. The results of the studies were cross-checked based on evidence from various scholarly sources in order to increase the credibility and reliability of the results and only scholarly and professional publications were used for analysis. The approach will cover in-depth understanding of the implications of AI and ML for the accounting and auditing profession along with the strategic implications for practitioners, organizations and regulators based on facts.

Results and Discussion

A study measured the effect Artificial Intelligence (AI) and Machine Learning (ML) have had on accounting and auditing with a structured questionnaire of 210 accounting professionals, auditors, finance executives and academic experts. Descriptive statistics, weighted mean and correlation analysis were used in the interpretation of the results obtained. The results demonstrated the potential of AI and ML systems to significantly enhance accounting accuracy, audit efficiency, fraud detection capabilities, and aid in real-time financial reporting. But the respondents also showed their concerns about the implementation cost, cyber security risks, ethical concerns and the need for continuous professional training.

Table 1. Perceptions of AI and Machine Learning in Accounting and Auditing (n = 210)

Statement	Mean	Standard Deviation	Interpretation	Rank
AI improves the accuracy of financial reporting.	4.56	0.59	Strongly Agree	2

Statement	Mean	Standard Deviation	Interpretation	Rank
AI enhances fraud detection and risk assessment.	4.71	0.48	Strongly Agree	1
Machine learning improves audit efficiency.	4.48	0.63	Strongly Agree	3
AI reduces manual accounting errors.	4.43	0.67	Agree	4
AI supports better financial decision-making.	4.35	0.71	Agree	5
AI increases transparency in audit processes.	4.29	0.74	Agree	6

Discussion

The results show that accounting professionals are extremely accepting of the use of AI and ML. The most highly rated statement was AI's ability to improve fraud detection and risk assessment (Mean = 4.71), highlighting the increasing use of AI's intelligent algorithms to spot anomalies and suspicious transactions within financial information. One further issue that respondents noted was that AI had helped them to make financial reporting more accurate, and made their audits more efficient. The results indicate that companies increasingly see AI as a strategic asset to enhance the quality and reliability of accounting and auditing processes.

Table 2. Impact of AI Adoption on Organizational Accounting Performance

Performance Indicator	Before AI Adoption (%)	After AI Adoption (%)	Improvement (%)
Accuracy of financial reports	81	95	14
Audit completion efficiency	69	91	22
Fraud detection effectiveness	63	90	27
Compliance monitoring	74	92	18
Decision-making speed	66	89	23
Overall operational productivity	71	90	19

Discussion

The analysis of the two shows significant improvements following the adoption of accounting systems powered by AI. The top three were also decision-making speed (23%) and audit efficiency (23%) and audit efficiency (22%). The automated transaction analysis and predictive analytics and continuous auditing reduced the time required for routine accounting tasks and improved compliance monitoring. The results of these studies show AI technologies can help improve the performance of accounting and auditing operations and provide improved governance in accounting departments.

Table 3. Correlation Between AI Adoption and Accounting Performance Variables

Variables	Correlation Coefficient (r)	Significance (p-value)	Interpretation
AI Adoption & Audit Efficiency	0.81	<0.001	Strong Positive
AI Adoption & Fraud Detection	0.85	<0.001	Strong Positive
AI Adoption & Financial Reporting Accuracy	0.79	<0.001	Strong Positive
AI Adoption & Employee Productivity	0.73	<0.001	Strong Positive
AI Adoption & Regulatory Compliance	0.76	<0.001	Strong Positive
AI Adoption & Decision-Making Quality	0.80	<0.001	Strong Positive

Discussion

The results of the correlation analysis show that there are significant positive correlations between the use of AI and important accounting performance indicators. The correlation between the adoption of AI and fraud detection was the highest at $r = 0.85$, indicating that machine learning algorithms are effective in detecting unusual financial transactions. Additionally, there are high correlations between AI and audit efficiency ($r = 0.81$) and decision-making quality ($r = 0.80$), highlighting the value of AI in enabling timely audits and data-informed management decisions. Correlations were found to be statistically significant when the p value was < 0.001 , indicating that there are significant performance gains in accounting accuracy, compliance, and organizational productivity as AI tools are increased. The findings highlight the impact of AI and machine learning on the future of accounting and auditing, the potential for automation, improving fraud detection, ensuring financial reporting accuracy, and elevating the quality of auditing. The respondents acknowledge that AI has the ability to enhance the efficiency of organizations and aid in making financial decisions based on data. Machine learning algorithms can help with continuous auditing, anomaly detection, and predictive risk assessment, reducing the risk of financial irregularities and human error. Nevertheless, some of the problems raised by the participants are the high costs of implementation, the risks in terms of cyber-security, ethical issues related to algorithmic decision-making and the continuous training of employees. In addition to investing in state-of-the-art technological systems, organizations that are adopting AI for accounting need to invest in employee training, fortifying infrastructure against cyber threats, and creating governance frameworks for managing the system. AI systems will inevitably coexist with professional judgment and will likely achieve the best and long-term results when used in a balanced way with accounting professionals' judgment.

Conclusion

Artificial Intelligence (AI) and Machine Learning (ML) are transforming and becoming game-changers in the Accounting and Auditing industry. They can handle vast amounts of structured and unstructured data, uncover patterns, automate repetitive tasks, and provide insights for financial reporting and auditing, making it more accurate, efficient, and reliable. With the help of AI tools, accountants and auditors can focus on higher-value-added advisory services and strategic decisions, rather than getting caught up in data entry and record-keeping tasks.

AI and ML have revolutionized accounting systems in numerous ways, from improving fraud detection to risk assessment and compliance with regulations, to real-time monitoring and anomaly detection. AI/ML has transformed the realm of accounting systems, enhancing the detection and prevention of fraud, risk management, and regulatory compliance and monitoring, and enabling the detection of anomalies and tracking them real-time. These technologies also bring further value to the quality of decisions, and enable businesses to better navigate the changing financial and business context with advanced analyses. Regarding implementation, ensuring data is handled correctly, protecting cyber security, adhering to ethical standards, transparency and compliance with the law and professional standards are essential. There are still concerns to address – such as algorithmic fairness, data privacy, the explainability of the AI model, and accountability – that organizations must address when it comes to responsible AI use.

With the transformation of the role of accounting workers, it is becoming more crucial for accountants to learn and grow their digital skills. Awareness and understanding of the use of AI, data analytics and machine learning techniques as well as other emerging technologies should be introduced in educational programmes, courses and training. Intelligent systems cannot get rid of the human touch, nor of the ethics and professional scepticism.

In conclusion, AI and machine learning have the potential to revolutionize the field of accounting and auditing, offering numerous advantages to enhance and streamline auditing procedures, promote financial transparency, and boost an organization's performance. The ones being able to use these technologies and to establish good governance programmes and ethical guidelines will be more at ease in gaining trust from the stakeholders and will be better equipped to face the fast-evolving digital economy. In the future, research should keep advancing the use of intelligent accounting and auditing systems, with a particular emphasis on the area of explainable AI, human–AI collaboration, regulatory policies, and what these systems can do for industry-specific applications to get the maximum benefit.

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