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Review of Artificial Intelligence In Accounting: Trends, Implementation and Implications

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Abstract: *In the context of the industrial revolution 4.0, the use of advanced technologies such as artificial intelligence (AI), data analytics, and automation has fundamentally changed accounting practices. This article aims to explore and analyze recent developments in accounting practices through a systematic review of existing literature. The focus of the study is on how information technology and data analytics affect accounting practices and managerial decision-making. The methodology used is a systematic literature review, which involves collecting and analyzing relevant studies from various academic sources and leading journals with strict inclusion and exclusion criteria. This article shows a significant increase in the adoption of information technology and data analytics among accounting professionals, as well as challenges in its implementation, such as the need for training and adaptation to change. The conclusion of this article recommends the development of a comprehensive training program to help accounting professionals adapt to technological changes. This article is expected to make a significant contribution to the understanding of current dynamics in the accounting field and direct further research in the future.*

Keyword: *AI Trends in Accounting, Implementation of AI in Accounting, Systematic Literature Review*

INTRODUCTION

Artificial intelligence (AI) has become one of the most transformative technological innovations of the 21st century. AI involves the use of algorithms and machine learning models that enable computers to mimic human cognitive abilities, such as decision-making, predictive analysis, and understanding complex data patterns (Schneider & Richard, 2020). With the

advancement of AI, the accounting industry has undergone significant changes in its operations and service delivery. This technology has shifted the paradigm from time-consuming manual processes to automated and efficient workflows, allowing companies to focus on strategic analysis and data-driven decision-making (Davenport & Kirby, 2016).

The trends in AI implementation in accounting include the use of machine learning algorithms to identify patterns and anomalies in financial data. For instance, AI-based systems can detect potential fraud by analyzing financial transactions that deviate from established norms. Furthermore, AI enables the automation of routine and repetitive tasks such as bookkeeping, tax calculations, and financial report generation (Kokina & Davenport, 2017). This not only enhances efficiency but also reduces the risk of human error often associated with manual accounting processes.

According to Moffitt et al. (2018), Robotic Process Automation (RPA), a common application of AI in accounting, enables the continuous and automated processing of data. Consequently, tasks that previously required human intervention can be completed in a shorter time frame with higher accuracy. Additionally, this technology allows auditors to focus more on in-depth analysis and strategic decision-making rather than manual data examination. The utilization of AI in auditing has also set new standards for audit practices that are more objective, accurate, and efficient.

While the implementation of AI offers numerous advantages, it also poses challenges. One of the primary concerns is ethical and data security issues. The large-scale and automated processing of data increases the risk of privacy breaches and the potential misuse of sensitive information (Brynjolfsson & McAfee, 2014). Another challenge is the uncertainty regarding AI's impact on traditional accounting jobs. Many accounting professionals fear that AI-driven automation may reduce the demand for human accountants, particularly for administrative or repetitive tasks. However, various studies suggest that the role of accountants will not disappear but will shift to more strategic functions, requiring strong analytical and interpretative skills to support data-driven decision-making (Davenport & Kirby, 2016; Schneider & Richard, 2020).

This article aims to explore the trends in AI implementation in accounting, how AI is applied across various accounting functions, and its impact on the future of the accounting profession. It will also examine the ethical, security, and social implications of using AI in this field. A comprehensive understanding of these trends and implications is expected to serve as a guide for accounting professionals and organizations to optimize AI utilization while maintaining the ethical values and professionalism that form the foundation of the accounting profession. Based on this background, the study focuses on how information technology and data analytics influence accounting practices and managerial decision-making.

METHOD

The method used in writing this article is a systematic literature review (SLR). A systematic literature review (SLR) is a structured and comprehensive approach to identifying, evaluating, and synthesizing existing knowledge in a specific field of study. This method enables researchers to gain a deep understanding of the latest developments, trends, key findings, and gaps in the scientific literature (FEB Unair, 2024).

This study adopts the SLR methodology to address the main research questions regarding the trends, implementation, and implications of artificial intelligence in accounting. The approach involves collecting, evaluating, and synthesizing relevant information on the topic or issue from various sources of literature. In conducting the systematic literature review (SLR), the study follows the five stages or phases outlined by Denyer and Tranfield (2009).

Phase 1: Pilot Search and Research Questions

The pilot search and research questions form the first step in the SLR research method. The literature search utilized the Watase Uake database (a journal search site indexed by

Scopus) with predefined keywords as shown in Table 1. The search was conducted using specific search strings to identify contributions relevant to the research topic. Articles were selected based on title and keyword searches using predefined criteria. The primary aim of this literature search was to address the main research question concerning the trends, implementation, and implications of artificial intelligence in accounting. To ensure a comprehensive response, the research question was further divided into three sub-research questions:

SRQ 1: Analyze trends in artificial intelligence in accounting.
SRQ 2: Analyze the implementation of artificial intelligence in accounting.
SRQ 3: Analyze the implications of artificial intelligence in accounting.

Examining these sub-questions enables a detailed understanding of trends, causes, and fraud mitigation strategies in governance.

Table 1. Search Protocol for Selected Literature Sources

Database	Article Section Searched	Keywords	Time Range
Watase Uake	Title, Keywords	Trends Artificial Intelligence in Accounting	2014–2024
		Implementation Artificial Intelligence in Accounting	
		Implication Artificial Intelligence in Accounting	

Source: Processed Data, 2024

Phase 2: Locating Studies

The study location phase was used to identify relevant articles through suitable search databases. This article relied on one database, Watase Uake, which provides extensive access to literature relevant to the research question. The search protocol applied to individual databases was consistent. For example, in Watase Uake, searches were performed on the title section. Watase.web.id is an online platform designed to facilitate collaborative research among researchers. Initially developed in 2018, it began engaging researchers from various universities in 2020. Its primary purpose is to support researchers in conducting collaborative studies. Watase features systematic literature reviews using PRISMA methods, simple meta-analyses, article classification, and data visualization tools (Wahyudi, 2024).

Phase 3: Study Selection and Evaluation

The study selection and evaluation phase involves selecting and assessing the identified literature. This stage aims to select high-quality, relevant literature. The literature identified during the study discovery phase was read, further reviewed, and evaluated against the predefined research topic.

From the literature search, 532 relevant articles were identified. These articles were then evaluated using predefined inclusion and exclusion criteria. One criterion was the publication period from 2014 to 2024. Three rounds of elimination were conducted:

1. First Elimination: Removal of 111 duplicate articles across two keywords.
2. Second Elimination: Exclusion of 25 articles published outside the 2014–2024 range.
3. Third Elimination: Exclusion of 53 articles not classified under Q1, Q2, Q3, or Q4 in the Scopus database.

Next, two rounds of filtering were performed:

- First Filtering: Manual removal of articles where titles and abstracts did not match the criteria, resulting in 223 articles being excluded.
- Second Filtering: Exclusion of 71 articles with unavailable data.

Finally, 50 articles met the criteria, but 11 were excluded for various reasons, leaving 39 articles for inclusion in this study.

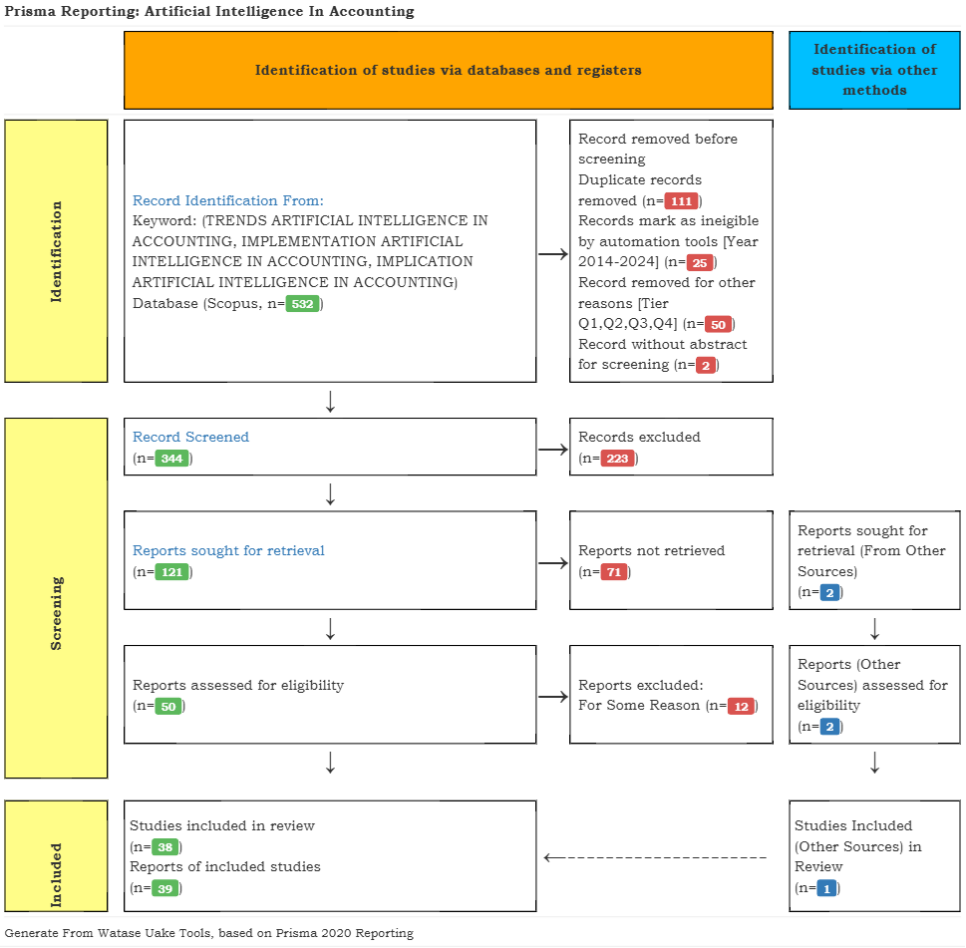

Figure 1. PRISMA Reporting: Artificial Intelligence in Accounting
Source: Data Processed from Watase Uake Website, 2024

Phase 4: Analysis and Synthesis

In this phase, the 39 selected articles were analyzed, and the extracted data were synthesized to identify factors and patterns related to trends, implementation, and implications of artificial intelligence in accounting. This analysis aimed to understand the development of AI trends in accounting, its implementation, and its implications. Additionally, bibliometric analysis was conducted to examine evolutionary trends related to this topic, focusing on key points such as:

1. The number of articles published over the last 10 years.
2. Article distribution across journal databases.
3. Article distribution by country.

Phase 5: Reporting Results

Research findings were communicated using tables, statistics, and discussions, following a methodology similar to that used by Pontoh et al. (2024). This approach involved a detailed presentation of search strategies, inclusion/exclusion criteria, study selection, quality evaluation, data extraction, and synthesis of findings. The analysis results were then reported comprehensively and systematically in scientific articles and detailed reports. This comprehensive presentation provides an in-depth review of trends, implementation, and implications of artificial intelligence in accounting.

RESULT AND DISCUSSION

Classification of Articles Based on Keywords

Table 2. Article Classification

No.	Topic / Keyword	Researcher Name (Year)
1.	Trends Artificial Intelligence in Accounting	(Rabbani, 2024), (Rautiainen et al., 2024), (Anriva, 2024), (Kumar et al., 2023), (Yi et al., 2023), (Grosu et al., 2023), (Vărzaru et al., 2022), (Cai, 2022), (Atayah & Alshater, 2021), (Shaffer et al., 2020), (Demchak, 2019)
2.	Implementation Artificial Intelligence in Accounting	(Pantea et al., 2024), (Almaqtari, 2024), (Butler & Brooks, 2024), (Yi et al., 2023), (Yang & Yin, 2023), (Vărzaru, 2022), (Jia et al., 2022), (Coman et al., 2022), (Ping, 2021), (Mökander & Floridi, 2021), (Chen, 2021), (Dhamija & Bag, 2020), (Qasim & Kharbat, 2020)
3.	Implication Artificial Intelligence in Accounting	(Abu Afifa et al., 2024), (Kureljusic & Karger, 2024), (Rabbani, 2024), (Ahmad et al., 2024), (Arnold et al., 2023), (Fülöp et al., 2023), (Faulconbridge et al., 2023a), (Dumitru et al., 2023), (Peng et al., 2023), (Lehner et al., 2022), (Leitner-Hanetseder et al., 2021), (Gambhir & Bhattacharjee, 2021), (Losbichler & Lehner, 2021), (Shaffer et al., 2020), (Munoko et al., 2020a), (Frank et al., 2019)

Based on the information presented in Table 2, the articles are categorized into three groups according to relevant topics or keywords. Among the total, 11 articles focus on discussing trends in artificial intelligence in accounting, followed by 12 articles on the implementation of artificial intelligence in accounting. Furthermore, 16 articles specifically address the implications of artificial intelligence in accounting. This data indicates that the topic of implications receives the most attention.

Bibliometric Analysis

The results of the bibliometric analysis examine trends and the evolution of research related to this topic, providing graphical representations of article distribution per year, per country, and per journal database for all articles published in the last ten years (2014–2024). Scientific article publications on trends, implementation, and implications of artificial intelligence in accounting between 2014 and 2024 show annual fluctuations, with some years experiencing increases and others decreases in publication. Research productivity provides an overview of contributions made by institutions or individuals to research activities, measured through research outputs such as publications.

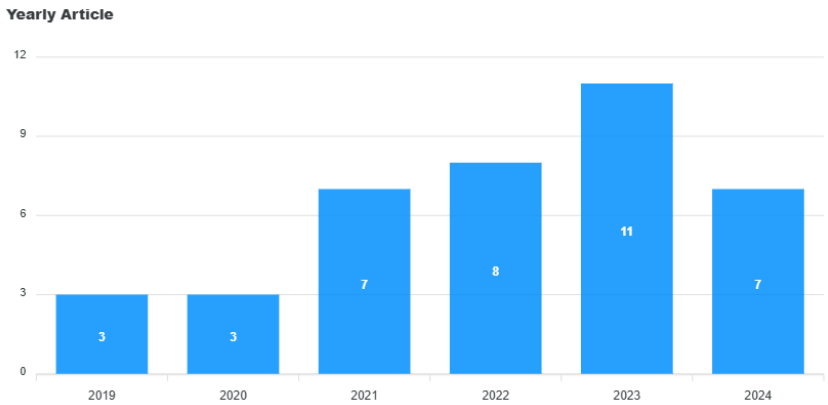

Figure 2. Distribution Graph by Year of Publication

Source: Processed data in 2024

Analysis of 39 articles reveals that the number of publications began to rise in 2021, increasing from 3 to 7 articles compared to 2019–2020. In 2022, this rose to 8 articles. Figure 3 shows that the peak of research productivity and publication occurred in 2023, with 11 articles. Data for 2024 shows 7 articles, with potential for additional publications. It is anticipated that article publications on trends, implementation, and implications of artificial intelligence in accounting in 2024 and 2025 will surpass 2023, enriching the literature on this topic.

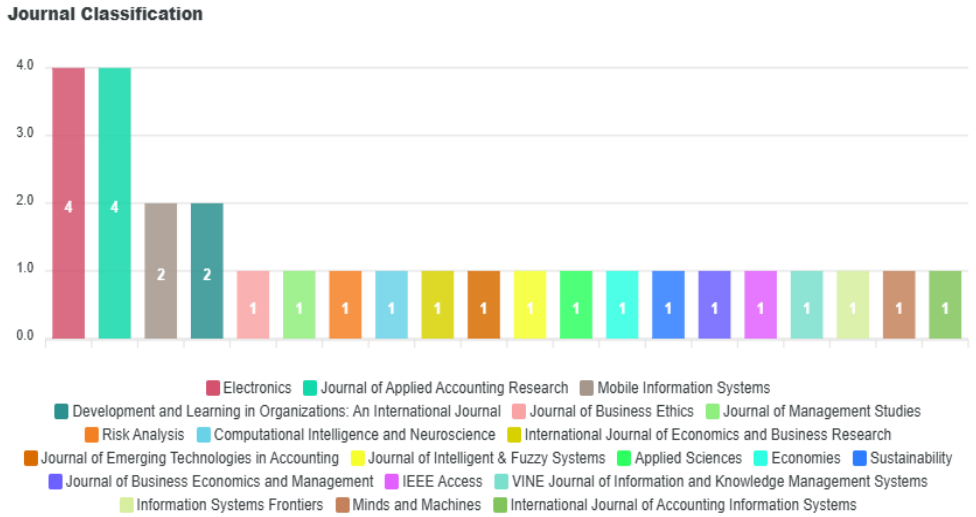

Figure 3. Distribution of Articles by Classification
Source: Processed data in 2024

The publication development on trends, implementation, and implications of artificial intelligence in accounting, as shown in Figure 4, indicates 39 journals containing articles on these topics. *Electronics* and the *Journal of Applied Accounting Research* contributed the most, with 4 articles each. Most other journals published only one article related to this topic. This highlights significant interest and research diversity in trends, implementation, and implications of artificial intelligence in accounting, offering a variety of resources for researchers and practitioners.

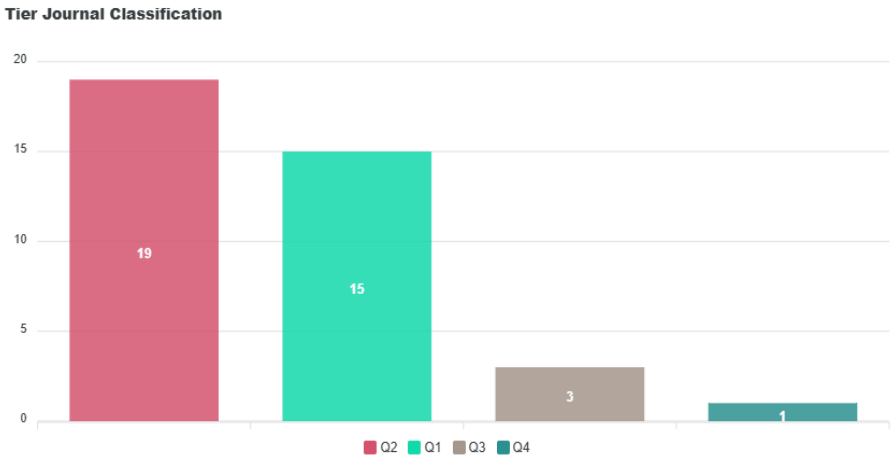

Figure 4. Distribution by Article Tier Classification
Source: Processed data in 2024

Based on Figure 5, regarding Scopus-indexed article tier distribution, 19 articles used in this study are in Tier Q1, 15 articles in Tier Q2, 3 articles in Tier Q3, and 1 article in Tier Q4. This shows that most research conducted in this domain predominantly falls under Tier

Q1. This highlights a strong interest and focus on research and knowledge dissemination regarding trends, implementation, and implications of artificial intelligence in accounting.

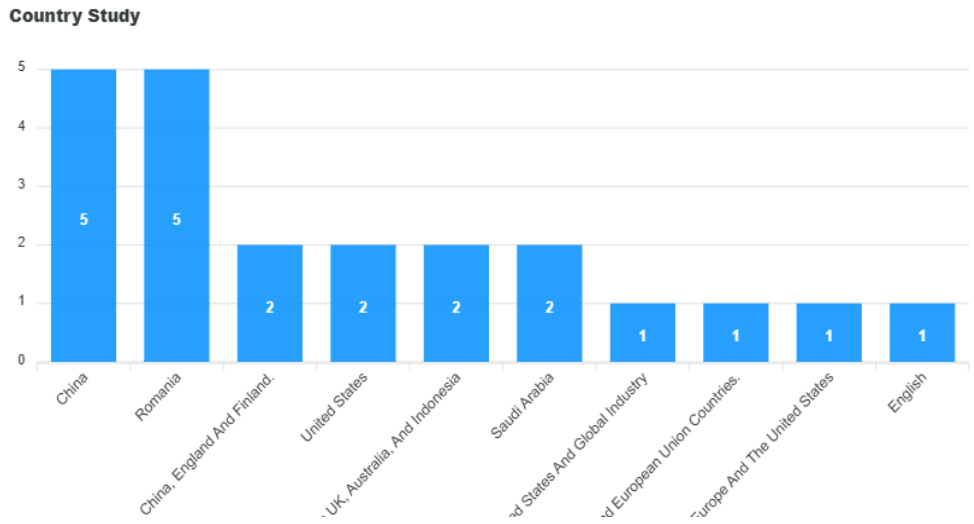

Figure 5. Article Distribution by Country
Source: Processed data in 2024

The publication development on trends, implementation, and implications of artificial intelligence in accounting, presented as a graph in Figure 6, shows that 10 countries contributed articles on this topic. Based on the data, it is observed that China and Romania rank highest, with 5 articles each, followed by the United Kingdom, Finland, the United States, Australia, Indonesia, and Saudi Arabia, each with 1 article. This indicates that research on this topic has spread globally over the last decade, including Europe, America, Asia, and Australia.

SRQ 1: Analysis of Artificial Intelligence Trends in Accounting

Digitalization and regulatory changes have driven a more flexible role for accountants in OP Financial Group, Finland. Accountants, known as "controllers," face technological challenges such as robotic automation and AI, while working in agile, cross-disciplinary teams. They must develop new skills, including data analytics and information technology understanding, supported by ongoing training. Their roles now include traditional tasks as well as strategic roles as business partners. This flexibility is essential to address evolving demands and strengthen the relevance of the accounting profession in the digital era (Rautiainen et al., 2024). Technological advancements like blockchain, AI, and cloud computing are transforming the fields of accounting, auditing, and reporting. These technologies enhance efficiency, reduce human errors, and increase data transparency. However, integrating these technologies presents challenges, such as the need for new skills, infrastructure barriers, and cybersecurity risks. The use of FinTech, data security in cloud-based accounting, ESG reporting, and regulatory frameworks are critical to addressing modern challenges and enhancing the profession's relevance in the digital age (Rabbani, 2024).

Accounting information systems (AIS) have become a focal point of global research, including in Indonesia. Analysis shows that the United States dominates AIS research contributions, while Indonesia also offers significant contributions. Key topics that require further exploration include technology acceptance models (TAM), AI, big data, and the implementation of AIS in SMEs. Indonesia's potential for contributing to global AIS development can be enhanced through research investment and international collaboration (Anriva, 2024). Research on accountants' perceptions of digitalization indicates that their readiness for further training is influenced by their perceptions of digital tools, performance, and situational factors such as organizational culture and regulatory policies. Younger

accountants are more receptive to digital technology, while more experienced accountants are more realistic about the challenges. Digitalization offers significant opportunities but also poses substantial risks, especially in regulation and cybersecurity. Adjusting accounting education curricula and providing continuous training are necessary to address future challenges (Grosu et al., 2023). AI provides new solutions in accounting and finance, such as financial report analysis, fraud detection, credit risk management, and portfolio optimization. However, AI faces challenges like complex data processing and subjective decision-making. Using various AI techniques can improve efficiency and prediction accuracy. AI has vast potential to revolutionize accounting and finance, but further research is needed to overcome challenges and maximize its benefits (Yi et al., 2023).

The accounting profession is expected to undergo significant transformation over the next 10 years, with accountants adopting new technologies like AI, enabling them to thrive and grow. They will shift from focusing on financial data calculations to more specialized consulting services, particularly in helping clients integrate AI technology. This transformation requires training supported by organizations. The main challenge lies in retraining experienced accountants and overcoming resistance to change, which requires support and guidance to ensure a successful transition in adopting new technologies for more effective client service (Shaffer et al., 2020). Universities have begun integrating information technology, data analytics, cybersecurity, and database management into accounting curricula. One proposed method is to develop a private cloud service platform for teaching information technology at universities, which can help cultivate talent that aligns with company needs (Cai, 2022). Digital transformation has become key to an organization's competitive advantage in facing various opportunities and challenges. Companies now use technologies such as AI, Blockchain, Big Data, and Cloud Computing to manage financial and accounting information in management, marketing, and decision-making processes. Each technology serves a specific role: AI for repetitive decisions, Cloud Computing for easy access, and Blockchain for security and data transparency. These digital innovations have improved organizational performance, increased efficiency and reliability, streamlined tasks, boosted customer trust, enabled real-time evidence collection, and enhanced corporate reputation. However, it is important to ensure interoperability and integration of IT solutions to optimize the benefits of digital transformation (Demchak, 2019; Vărzaru et al., 2022). In taxation, advanced technology helps governments reduce the risk of tax avoidance and improve noncompliance detection. However, the implementation of Big Data, AI, and Blockchain in auditing and taxation must address ethical aspects, including privacy and data protection (Atayah & Alshater, 2021).

SRQ 2: Analysis of the Implementation of Artificial Intelligence in Accounting

AI, big data, cloud computing, and deep learning increase efficiency and decision-making in accounting and auditing, improving financial reporting and audit processes. IT governance aligns business strategies and AI technologies, managing complexity and supporting cultural change and training. Challenges such as data quality, bias, and regulatory compliance can be addressed with strong IT governance support (Almaqtari, 2024). The adoption of digital technologies like AI and Big Data enhances managerial efficiency, competitive strategies, and strategic decision-making, although limited by human and financial resources. Strategic planning is needed to optimize the potential of digital technologies for sustainability and competitive advantage. Investment in digital technology has been shown to improve organizational effectiveness (Pantea et al., 2024).

Traditional reactive risk management creates systemic risks, as seen in the case of Credit Suisse. A new approach based on "Risk Accounting" with AI technology allows for more transparent risk measurement, improves accountability, and fosters cultural change through better transparency and incentives (Butler & Brooks, 2024). Blockchain ensures secure and transparent transaction recording, while IoT provides real-time data for more accurate decision-

making. This combination of technologies enhances audit reliability, speeds up transactions, reduces operational costs, and creates more efficient accounting information systems for the digital era (Yang & Yin, 2023).

Digitalization has facilitated communication among economic actors and provided real-time access to information. The decision to digitize a business is influenced by internal factors (organizational culture and functional structure) and external factors (telecommunications infrastructure and e-government) (Coman et al., 2022). The development of information technology and the increase in the number of subsidiaries have driven the adoption of shared service center models for accounting in many large companies. This model is supported by the innovation spirit of entrepreneurs that influences financial management development, as well as capital capacity that guarantees infrastructure, information systems, and the development of skilled teams. Through centralized management of budgeting, financing, investments, and working capital, shared service centers can provide accurate and timely value information to various stakeholders (Chen, 2021). Ethical-based auditing is an important mechanism to bridge the gap between principles and practices in AI development. This audit can improve decision-making, user satisfaction, and trust while mitigating ethical risks and supporting regulation. To be effective, the process must be sustainable, holistic, and integrated with the AI system design from the outset (Mökander & Floridi, 2021).

AI-based financial decision support systems have shown significant positive impacts on corporate financial management. These systems provide more accurate financial analysis, more comprehensive information, and more timely decision-making. AI technology has long been used in Management Accounting (MA), and the rapid development of this technology opens up opportunities to significantly improve decision quality through its ability to process large amounts of complex data (Dhamija & Bag, 2020; Vărzaru, 2022). However, existing systems still face some challenges, such as low intelligence levels, high operational costs, and insufficient decision support. To address these issues, a new system has been proposed that consists of three layers: data, analysis, and interaction. This system integrates AI technology to handle various aspects of financial decisions, including financing, investments, costs, and dividend distribution. The proposed system has proven to improve efficiency, enhance data management, and produce higher-quality decision-making, thus supporting stable and healthy long-term business development (Jia et al., 2022).

XBRL technology, as an innovation in financial information exchange, plays an important role in improving management accounting efficiency and supporting long-term corporate development. Its implementation requires close collaboration between company management, management accounting staff, and financial software programmers, as well as continuous improvements in practice. Although it has been used for years, the potential of XBRL technology has not been fully utilized, so further research and development are needed to optimize its function in serving large companies (Ping, 2021). The role of professional accountants has shifted from mere number recorders to data processors for decision-making, with the integration of technologies such as AI, Blockchain, and Robotic Process Automation. Therefore, integrating blockchain, business data analytics, and AI into accounting curricula is necessary to enhance graduates' ability to face the challenges of an increasingly digital world. For example, blockchain can be used to securely store accounting data and improve business data verification, while big data can be used to analyze large-scale transactions and detect anomalies. Furthermore, AI is already being used in auditing processes to perform repetitive tasks such as internal control reviews (Qasim & Kharbat, 2020).

SRQ 3: Analysis of the Implications of Artificial Intelligence in Accounting

The application of AI in accounting, particularly through technologies like deep learning, big data analytics, and cloud computing, has significantly improved the efficiency and accuracy of accounting and auditing processes, as seen in countries like Saudi Arabia and Vietnam. AI

also supports data-driven decision-making and digital transformation, aligning with initiatives like Saudi Arabia's Vision 2030 and Vietnam's integration of modern technology. Transformational leadership has been shown to encourage AI adoption by empowering employees and fostering innovation, with digitalization acting as a catalyst for AI integration in accounting (Abu Afifa et al., 2024; Ahmad et al., 2024).

Knowledge-based systems with interfaces replicating expert knowledge structures can help novice accountants develop expertise, while mitigating potential deskilling due to automation (Arnold et al., 2023). AI has proven reliable in financial analysis, fraud detection, and bankruptcy prediction. However, its widespread adoption faces challenges such as integration limitations and employee acceptance (Kureljusic & Karger, 2024).

While AI may result in job losses, it also creates new collaboration opportunities between the accounting profession and technology. Additionally, it is crucial to address ethical challenges, such as data protection and accountability for errors (Faulconbridge et al., 2023a; Rawashdeh, 2023). Technologies like Robotic Process Automation (RPA) improve sustainability reporting and data efficiency through AI-based ERP systems, though challenges like cost and skill shortages persist (Dumitru et al., 2023). AI also supports the achievement of SDGs through innovation, economic growth, and institutional strengthening. However, responsible adoption requires a multidisciplinary approach to address privacy, ethics, and training needs (Fülöp et al., 2023; Peng et al., 2023).

AI has been widely applied in accounting, finance, and audit for routine tasks due to its ability to enhance efficiency while reducing time and costs. Although concerns about AI disrupting jobs exist, this technology is expected to complement the workforce in the long term and create new opportunities, as demonstrated by large companies like KPMG with IBM Watson and PwC with GL.ai. Rather than replacing human roles entirely, AI will generate new opportunities and tasks within the profession. AI will increase the demand for skilled workers and may create new jobs equivalent to those it replaces. To navigate these changes, accounting professionals must continue to enhance their skills, not only in AI technology knowledge but also in interpreting AI-generated outcomes (Gambhir & Bhattacharjee, 2021). The importance of human-AI collaboration is critical, where AI complements human decision-making. Companies must learn to implement AI ethically to encourage innovation and improve productivity. The most significant impact of AI will be seen in how human work changes, not in job replacement. The emergence of human-machine symbiosis in the future will result in accounting teams characterized by collaborative networks, flexibility, and interdisciplinary thinking. The success of this transition depends on companies' readiness to adopt digital technology and ensuring employees possess the appropriate qualifications (Leitner-Hanetseder et al., 2021).

Although data has become a crucial strategic asset for modern companies, IFRS currently does not adequately accommodate its recognition and economic value assessment. Consequently, there is a growing gap between a company's book value and market value. A new framework for AI- and big data-based information reporting (FAIIBD) has been proposed, encompassing data recognition, valuation, and good governance (Leitner-Hanetseder et al., 2021). Potential limitations of AI and control systems based on complexity and system theory have been identified, including the Bremermann limit, issues with partial detection and control of complex systems, and bias in human-machine information processing complementarity (Losbichler & Lehner, 2021). While AI offers increased efficiency, broader insights, and competitive advantages, its complexity and sophistication also present various ethical issues that need addressing. Tensions arise among stakeholders regarding conflicts of rights, responsibilities, expectations, and ethical principles. The importance of formal collaboration among stakeholders to develop practical guidelines and effective governance for AI use, as well as adopting a futuristic approach to evaluating the ethical implications of emerging

technologies, is crucial in preventing negative impacts (Frank et al., 2019; Munoko et al., 2020).

CONCLUSION

Digital transformation and regulatory changes have altered the role of management accountants at OP Financial Group, Finland, by introducing greater flexibility and requiring the mastery of new skills such as data analytics and information technology. Accountants now play a more strategic role, not only performing traditional tasks but also becoming key business partners. Technological advancements such as blockchain, artificial intelligence (AI), and cloud computing have enhanced efficiency, reduced human errors, and improved data transparency. However, these changes also bring new challenges, such as the need to acquire new skills, infrastructure barriers, and cybersecurity risks.

Global research shows that Accounting Information Systems (AIS) have become an increasingly important focus in the development of the accounting profession, with significant contributions from countries like the United States and Indonesia. Younger accountants are more open to digital technology, while experienced accountants tend to be more realistic about the challenges. While AI offers innovative solutions in accounting and finance, it faces adoption hurdles.

A significant transformation in the accounting profession is expected in the next 10 years, with accountants who adopt new technologies like AI being better positioned to survive and thrive. To support this transformation, continuous training and adjustments to accounting education curricula are essential. On the other hand, digital technology has become a key competitive advantage for organizations, improving efficiency, reliability, and company reputation. In taxation, advanced technology can help governments reduce the risk of tax evasion and improve compliance detection, though ethical considerations such as privacy and data protection need to be addressed.

Digital technologies such as AI, big data, cloud computing, and blockchain have improved efficiency and accuracy in accounting, auditing, and financial decision-making. However, this digital transformation requires strong IT governance to address challenges like data quality, bias, and regulatory compliance. The adoption of these technologies also supports competitive strategies, risk management, and better financial reporting, though it is constrained by limited human and financial resources. Collaboration among various stakeholders and adjustments to the education curriculum are needed to optimize the benefits of these technologies and ensure organizational sustainability and competitive advantage.

The application of AI in accounting, finance, and auditing has improved efficiency, accuracy, and innovation through technologies like deep learning, big data, and cloud computing. AI also supports digital transformation and data-driven decision-making. However, AI faces challenges such as employee resistance, skill limitations, and ethical issues. AI offers potential to enhance productivity and create a human-machine symbiosis, opening new job opportunities and technology-based tasks. To leverage these opportunities, professionals need to continuously improve their technical and analytical skills. Ethical AI implementation and formal collaboration among stakeholders are key to addressing privacy, bias, and governance challenges. Overall, AI is not only transforming the way work is done in accounting but also driving the creation of new frameworks for strategic data management, such as AI-based reporting, while emphasizing the importance of a multidisciplinary approach to ensure responsible adoption.

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