Embracing Change: The Integration of Technology and Artificial Intelligence in the Malaysian Accounting Industry

Mohd Fairuz Adnan, Siti Mariam Mansor, Nur Adibah Ilyana binti Bahanuddin

Faculty of Accountancy, Universiti Teknologi MARA, Cawangan Selangor, Kampus Puncak Alam, Selangor, Malaysia

DOI: https://dx.doi.org/10.47772/IJRISS.2025.9010080

Received: 21 December 2024; Accepted: 24 December 2024; Published: 01 February 2025

ABSTRACT

The rapid advancements in technology and Artificial Intelligence (AI) are transforming the accounting field, making it imperative for accountants to enhance their expertise. To remain competitive in the evolving market, accounting professionals must adapt to emerging trends, embrace technological changes, and acquire new skills and competencies. Innovations such as automated data analysis, machine learning, and blockchain technology are revolutionizing traditional accounting processes by improving accuracy, efficiency, and decision-making. Additionally, AI enables real-time financial reporting and predictive analytics, allowing accountants to shift their focus from routine tasks to strategic roles that add greater value to organizations. This conceptual study utilizes a simple Systematic Literature Review (SLR) approach to investigate the factors driving accountants to adapt, with a particular focus on the impact of technological advancements and AI in the accounting field, such as (1) Enhanced Efficiency and Accuracy, (2) Deeper Financial Insights and (3) Futureproofing the Profession.

The findings underscore the importance of embracing digital transformation and provide insights into the competencies and strategies required for a successful transition in the modern accounting landscape. Additionally, this study provides valuable insights for the Malaysian government in shaping policies for digital transformation, assists educational institutions in designing relevant curricula to equip future accountants with essential technological skills, and highlights the need for the accounting industry to adopt advanced technologies, enhance workforce capabilities, and improve competitiveness in a rapidly evolving market.

Keywords: Technology, Artificial Intelligence, Efficiency, Financial Insights, Futureproofing Profession

INTRODUCTION

The accounting industry is embracing technology and artificial intelligence (AI) as a new partner. AI is transforming this field by automating the repetitive and time-intensive tasks that accountants often find slow and difficult. Technology is essential and is regarded as the most significant commercial obstacle facing public accountants (Jackson et al., 2020). This has nothing to do with replacing accountants but rather enabling them. This is because apart from detecting those hidden patterns, it also helps in synchronizing procedures among a host of other benefits like fraud prevention and makes it easier for accountants to be equivalent to financial strategists as opposed to mere bookkeepers. New technologies, mainly AI-based, will significantly impact the overall structure and processes in accounting, thus massively transforming existing professional occupations and task profiles within a very short time (Leitner et al., 2021). Besides streamlining operations and evaluating figures, technology and AI are changing the accounting industry in various ways. Accountants can concentrate on what they are good at, namely giving a strategic analysis, identifying financial trends, or providing helpful advice for companies when AI handles data entry and invoice processing, amongst other elements of auditing. AI can be used to comply with regulations by being continually informed about ambiguous laws and highlighting possible problems. In audits, efficiency is enhanced using AI, which deals with figures, detects variances, and estimates risks. Additionally, by monitoring financial data for anomalies continuously, AI can also reinforce internal controls and generate custom reports and recommendations aimed at making client services tailored to their needs. Furthermore, the automation of report generation and data visualization achieved using AI can improve financial reporting practices, while real-time access to financial data stored in the cloud may facilitate

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue I January 2025

global collaboration. Hence, it is evident that embracing technology and AI is essential and advantageous for accountants.

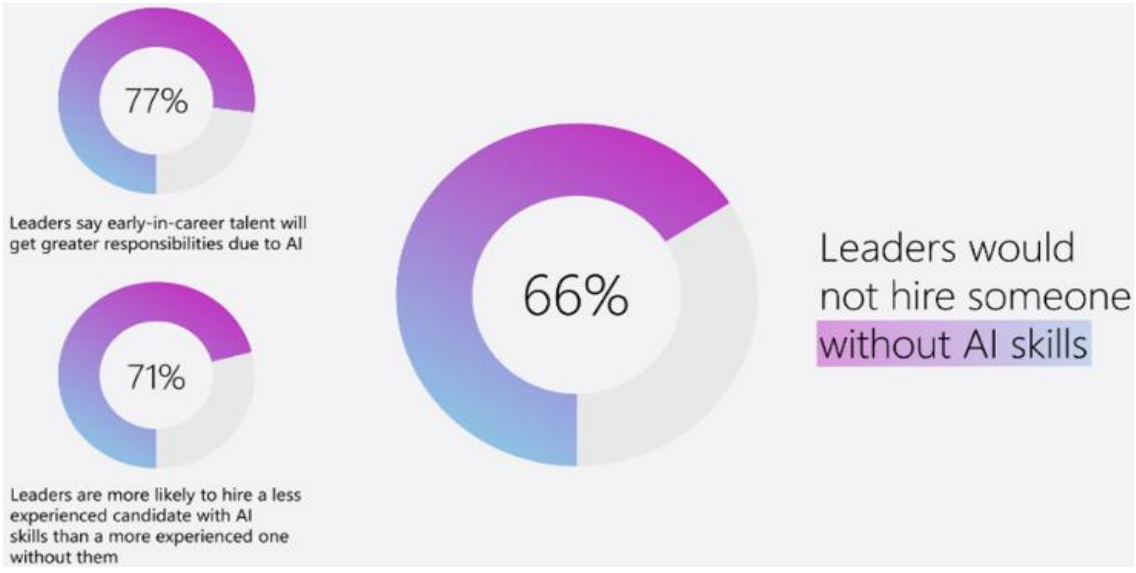
BACKGROUND OF STUDY

The swift advancements in technology have influenced numerous industries, including accounting. The accounting industry has long been regarded as a cornerstone of financial integrity and organizational success. The implementation of AI in business has been undertaken as a measure to enhance operations and maintain accurate financial records (Adnan et al., 2024).

Lee (2024) states that 77% of Malaysians have reported feeling a lack of time and energy to complete their tasks, particularly in the aftermath of the COVID-19 pandemic. As a response, 84% of individuals in Malaysia have turned to AI to enhance efficiency, foster creativity, and prioritize their most critical responsibilities. In addition to influencing work trends, AI has transformed the employment landscape, with job seekers and employers increasingly adopting its use. According to Microsoft Malaysia's Managing Director, K Raman, while presenting the 2024 Work Trend Index: Malaysia findings at a media briefing in Kuala Lumpur, a total of 65% of Malaysian leaders indicated a preference for hiring less experienced candidates equipped with AI skills over more experienced candidates who lack them. This concern is, in fact, a global issue affecting countries worldwide.

Figure 1 presents the findings from a survey conducted by Microsoft and LinkedIn, which involved 31,000 participants across 31 countries. The survey examines labour and hiring trends sourced from LinkedIn data alongside an analysis of trillions of productivity signals from Microsoft 365. Additionally, it incorporates research with Fortune 500 companies to explore the emerging hiring priority, with a particular focus on the growing importance of AI skills.

Figure 1: Emerging Hiring Priority with the Importance of AI Skills



(Source: 2024 Work Trend Index Annual Report from Microsoft and LinkedIn).

The findings suggest that 77% of leaders believe early-career talent will be assigned more responsibilities due to their ability to delegate tasks to AI. When evaluating job candidates, 66% of leaders stated they would not hire someone lacking AI skills, and 71% expressed a greater preference for hiring a less experienced candidate with AI skills over a more experienced candidate without them.

Moreover, it is reported that by the end of last year, LinkedIn members adding AI-related skills, such as ChatGPT and Copilot, to their profiles had increased 142-fold globally. Additionally, job posts mentioning AI on LinkedIn saw a 17% increase in application rates (Microsoft Malaysia, 2024). Consequently, the present study aligns with the growing trend among Malaysians to embrace the integration of technology and AI, specifically within the accounting industry.

Problem Statement

Traditional accounting methods have faced increasing criticism in recent years due to several limitations. These include the inability to evaluate internal efficiency, quality, and profitability per product or service line (Narong, 2009) and the failure to keep up with the rapidly changing business environment (Rajpoot, 2020). For instance, it has always been a challenge for accountants to deal with inefficiencies caused by manual data entry and complex hand calculations. All these antiquated methods not only make accountants error-prone but also lead to wasting precious time. The introduction of AI and sophisticated technologies calls upon the industry to swiftly update its procedures to improve its accuracy as well as productivity. While there is an ongoing debate about whether AI will alleviate accountants' duties and improve accounting efficiency, recent research suggests that AI can enhance accountants' productivity (Al Wael et al., 2023).

Conventional approaches, being manually handled and hence non-automated, have resulted in paper-based systems and data silos that pose significant issues. These systems typically involved painstaking tasks like recording expenses in handwritten ledgers and filing paper receipts. The age-old stereotype of accountants sorting through endless cabinets of financial information was not always that far from the truth (William & Mary, 2001). The old systems are not just slow but also increase the risk of security issues since sensitive information is not safe from being compromised easily. With AI, it is possible to do away with manual data entry, electronically store it safely online, and have it transferred to another place without any difficulty.

Furthermore, the confidentiality of traditional accounting systems is crucial for monitoring data and navigating complex auditing procedures. However, with real-time data tracking and simplified audit trails enabled by AI-powered tools, transparency may be increased. Such systems facilitate auditing operations, thus ensuring adherence to rules and providing further understanding through superior data analysis, which is changing the field of bookkeeping to become more efficient and safeguarded.

However, a report from Oppotus (2023) stated that although Malaysians demonstrate a high level of awareness regarding AI, its actual adoption remains relatively limited. Only 25% of respondents reported using AI applications, significantly lower than the 63% who expressed awareness of the technology. Moreover, while some businesses emphasize AI proficiency as a valuable skill for employees, many organizations lack the necessary frameworks or learning resources to support their workforce in acquiring these capabilities.

Therefore, this study on the factors driving accountants to adopt technological advancements and AI in the accounting field is crucial to understanding the dynamics of technology integration within the profession. Furthermore, the findings will serve as a guide for policymakers, educational institutions, and industry leaders in developing targeted initiatives, training programs, and frameworks to support the seamless adoption of AI and related technologies in the accounting industry.

Gap in Research

While there has been substantial research on the general impact of technological advancements and AI across various industries, there remains a notable gap in the specific application of these technologies within the accounting industry. A comprehensive literature review spanning 2010-2021 highlighted the need for a more holistic understanding of AI's nature and implications in accounting to assess the current state of knowledge in the field (Elmegaard, 2022). Existing studies tend to focus on broader technological adoption trends or the role of AI in business functions outside of accounting, leaving a gap in understanding how AI directly influences key areas like efficiency, accuracy, financial insights, and the long-term sustainability of the accounting profession.

Moreover, much of the current literature often overlooks the specific factors that drive accountants to adopt AI and technology, particularly in the context of Malaysia. The integration of AI in accounting is not merely about technological adoption but involves cultural, organizational, and skill-based factors that influence accountants' willingness and ability to adapt. These factors, including the perceived benefits of AI, such as enhanced operational efficiency, improved decision-making, and futureproofing the profession, have yet to be fully explored.

This study aims to fill this gap by focusing on the specific drivers of AI adoption within the accounting profession in Malaysia, mainly how these technological advancements contribute to enhanced efficiency, deeper financial insights, and the overall evolution of the profession. By investigating these factors in-depth, the research will provide a comprehensive understanding of the current state and future potential of AI in accounting, offering practical insights for both the industry and policymakers.

LITERATURE REVIEW

The Integration of Technology and Artificial Intelligence

The accounting industry is undergoing significant transformation due to the integration of technology and AI. Integration is transforming the industry, offering enhanced efficiency and accuracy (Rahim & Chishti, 2024). AI applications, including expert systems, natural language processing, and robotic process automation, are automating routine tasks and improving decision-making processes (Rahim & Chishti, 2024; Victoria et al., 2023). This shift allows accountants to focus on higher-value analytical tasks and strategic decision-making (Victoria et al., 2023). The implementation of RegTech and AI-OCR is revolutionizing compliance procedures, risk management, and data extraction (Malladhi, 2023). While these advancements promise significant benefits, challenges such as data security, ethical concerns, and potential job displacement must be addressed (Victoria et al., 2023; Malladhi, 2023).

Despite these challenges, the application of AI in accounting is an inevitable trend that will bring substantial changes and development to the industry (Luo et al., 2018). However, this shift is not merely about enhancing efficiency; it is redefining the role of accountants and the overall landscape of financial management. Thus, it is crucial to investigate the main potential factors that influence the adoption of technology and AI in the accounting industry, which are as follows: (1) Enhanced Efficiency and Accuracy, (2) Deeper Financial Insights and (3) Futureproofing the Profession.

Enhanced Efficiency and Accuracy

Accounting is more efficient and accurate when it involves technology and AI, which is essential in the profession. The adoption of AI in accounting enhances efficiency and accuracy through various mechanisms. This is why time-consuming tasks that accountants are forced to do, like data entry, bookkeeping, and reconciliation, are best and lengthily automated. For example, AI can automate repetitive tasks, classify items, upload documents automatically, provide more accurate information by processing the collected data, and recommend the track to find the best possible findings (Al Wael et al., 2023). Holmes and Douglass (2021) suggest that participants have an overall positive perception of AI and believe it will enhance their job performance by reducing repetitive tasks and the risk of human error. The technology readiness of accounting professionals significantly influences AI adoption, mediated by perceived ease of use and perceived usefulness (Damerji & Salimi, 2021).

This automation enables fast and correct entry of data, which would be slow and might involve many mistakes when done manually. Therefore, the jobs that have been automated can be moved from the category of low value add to high value add for accountants. AI improves transparency and trust in accounting practices, enabling real-time accounting and continuous auditing (Han et al., 2023).

At the same time, the employment of AI and technological advancements assists accountants in delivering added-value tasks such as planning and client interaction. This minimizes the time accountants spend entering data as they can now work through it to make valuable contributions in recording financial data for business enhancement. Our findings thus contradict the prevalent notion that AI as an actor is going to replace human actors and instead recognize that AI is going to collaborate with humans and supplement human decision-making instead of replacing it (Agrawal et al., 2019). They can prepare better financial projections and advanced predictions and provide management consultancy relevant to the corporate aim. It, however, enriches the role of an accountant and brings much value to the client's business.

Also, the new procedures, which are self-designed with the help of AI, make financial reporting and compliance

more accurate. It means that with the help of automated systems, all money transactions can be controlled more effectively, and all prices for goods and services can be recorded in time, so there will be no questions concerning differences and corrections. Such reliability helps establish more trust with the clients and the stakeholders as they are assured of accurate financial information about the business at any given time.

AI automation is transforming core accounting processes, shifting the industry from manual to computerized operations (Chukwuani et al., 2020). The intensity of AI adoption positively impacts internal control system quality, which in turn enhances accounting information system quality (Monteiro et al., 2023). These advancements lead to improved decision-making based on immutable, consensus-driven blockchain data (Han et al., 2023). In summary, accounting may improve its efficiency and effectiveness and raise the level of the service that accountants offer by implementing AI and technology. However, challenges remain, and stakeholders must collaborate to design suitable AI ecosystems for accounting and auditing in the digital transformation era (Han et al., 2023).

Deeper Financial Insights

AI is slowly becoming prominent in finance as it extends the possibility of analyzing financial data. AI transforms the way accountants operate by allowing them to digest data quickly, discover trends, and make informed judgments (Maharani et al., 2023). Ranjit et al. (2021) explore how organizations leverage AI within the accounting industry, using KPMG as a case study, and revealing a significant positive relationship between AI adoption and deeper financial insights in the accounting sector at KPMG.

The ability of AI to process and analyze large datasets allows for improved financial forecasting and planning. The help of efficient algorithms and machine learning also helps analyze financial data quickly. Machine learning algorithms can evaluate historical data to make accurate predictions about future performance, enabling businesses to make informed decisions regarding investments and resource allocation (Watson, 2024). The adoption of AI in accounting practices is driven by its ability to automate routine tasks, enable predictive analytics, and improve overall process efficiency (Chukwuani et al., 2020; Odonkor et al., 2024). Through this capability, it becomes easier to point out underlying trends, patterns, and anomalies that one may not be able to notice. Furthermore, AI tools facilitate continuous auditing by monitoring transactions in real time, thus providing more precise control over financial processes (Vijayanarayanan, 2024).

In addition to helping an organization understand changes and trends in customer preferences, the information can be used in new product development and can help organizations customize their marketing strategies (Moll & Yigitbasioglu, 2019). For example, in the case of financial services, AI can identify even minor trends in the markets, changes in the consumers' purchases, or any unusual financial activities and offer more details about their overall condition. Thus, applying these findings increases knowledge, improves plans and procedures, and leads to a more significant competitive advantage for businesses.

AI technologies are widely used in financial distress, financial fraud, stock market forecasting, and auditing (Zhang et al., 2020). The same idea of AI means that accountants or financial analysts can produce proactive insights because of the discovery of hidden trends and patterns. The process of analyzing relevant data in traditional finance is usually based on historical data and common indicators, while AI can forecast based on real-time data. This helps a business to prevent the occurrences of certain risks that could have otherwise worsened if not identified early. For instance, it can forecast a company's cash flow problems and detect credit risks or potential economic downturns for firms to avoid risk factors. At this level, it becomes possible to foresee what lies ahead, and such visionary thinking is critical to keep the company on the straight and narrow.

Besides, with the help of AI analysis of financial statements, one can identify opportunities for cost optimization and increase such key factors as productivity. Smart analysis of the expenses leads to the identification of areas in the organization that spend too much, the areas that can cut costs or increase efficiency. This, in turn, can bring about substantial cost reduction or optimization and thereby increase the profitability of the business. Further, AI can help solve the problems of inefficiency by pointing out ineffective resources or processes for improvement. For example, SKB Accounting bookkeeping services are designed to achieve accuracy and precision along with saving costs (SKB Accounting, 2021). AI can look at data from different suppliers to find

the best prices and deals. It can also review production data to find ways to save money or materials. By analyzing this information, AI helps businesses make better decisions, improving results and supporting sustainability.

According to Cassens (2017), JPMorgan Chase uses an AI-based software called Contract Intelligence (COIN) to streamline the review of commercial loan contracts. This program, powered by machine learning, can analyze documents in seconds, a task that previously required 360,000 hours of work by lawyers and loan officers each year. By automating these repetitive and time-consuming processes, COIN reduces errors and boosts productivity, enabling employees to focus on more valuable tasks. COIN also demonstrates how AI can uncover hidden trends in financial services, improving performance. It can analyze large volumes of data quickly, identifying hidden patterns or irregularities that may pose risks or reveal opportunities for cost savings. This capability helps organizations address issues before they escalate and seize opportunities ahead of competitors, providing a significant strategic advantage.

Futureproofing the Profession

The future of the accounting profession is very promising and is growing rapidly with the rise of technology (Mujiono, 2021). Massive changes are occurring in accounting as new technologies and AI applications modify the existing practices of the profession. AI is transforming the accounting industry, offering opportunities for automation, enhanced efficiency, and strategic decision-making (Manal Abdulameer et al., 2022; Oluwatobi Opeyemi Adeyelu et al., 2024). Advancements in software and AI-enabled solutions include lifting tasks, which include data input, validation, and bookkeeping. This change is not only making the process faster but also minimizing the role of errors that can be made by people. Over time, these technologies are infusing the world of accounting more deeply, and thus, those who understand these tools well will be better placed if the environment changes fast. While AI adoption may initially reduce human resources, it is expected to create new job opportunities in the long run (Manal Abdulameer et al., 2022). Generative AI, such as ChatGPT, can streamline workflows and support research in accounting (Yang Liu, 2024).

However, challenges persist, including data quality issues, workforce adaptation, and ethical considerations (Oluwatobi Opeyemi Adeyelu et al., 2024; Yang Liu, 2024). A study in Estonia revealed limited knowledge and adoption of AI among accounting professionals, citing lack of experience and qualified personnel as barriers (Gavrilova & Gurvitsh-Suits, 2020). In addition, survey data by Holmes and Douglass (2021) suggest that the growth of AI technology will change the focus of accounting curriculums to include specialized computer skills. To address these challenges, experts recommend fostering critical thinking, enhancing AI model training, strengthening data protection, and promoting professional development in AI for accountants (Yang Liu, 2024). Moreover, empirical evidence indicates that the growing adoption of AI within accounting firms and accounting departments leads to a gradual increase in the share of AI workers and a decrease in junior accounting employees (Boritz & Theophanis, 2023). This might be a call to a shift in the required skill set of new accounting employees.

Thus, the question arises of how accountants can remain functional in this changing environment, and, therefore, they learn new skills and knowledge actively. This includes acquiring proficiency in the latest accounting tools and data analysis packages. Adopting these technologies helps accountants provide more business solutions, increase efficiency in the work, and add more value to their clients. This shows that accountants are more than mere data processors who merely record and reconcile figures. The accountant would have to focus on building strong working relationships with clients and providing services that software technology cannot. For the audit profession, technology will allow for a more complete audit that uses all available data rather than samples. Besides possessing specialist technical, forensic, and cultural expertise, core skills in finance and business analysis are essential for the audit profession. Auditors need to focus on internal controls, ongoing concerns and viability, and fraudulent financial reporting (Geok & Fernandez, 2022). Using technology, accountants perform value-added activities such as financial analysis, risk management, and strategic consultancy.

In the future, one should be able to manage and work with new technologies to sustain a competitive advantage in the accounting profession. Taking into consideration the fact that the industry is highly dynamic, the individuals who are open to change and ensure that they acquire relevant skills will be imitable in the labour market. For new accountants embarking on their careers, they should try to acquire skill sets such as technology know-how, remote working and holding virtual meetings with teams, acquiring and applying new capabilities at

the workplace, and focusing on job training and experiences (Geok & Fernandez, 2022). Consistent with earlier discussions, futureproofing of the profession entails a conscious focus of accountants on learning and change, thereby positioning them and the tools to drive further change and generate better results.

METHODOLOGY

This study adopts a straightforward Systematic Literature Review (SLR) method to assess consumer risks within Malaysia's fintech sector. The SLR approach systematically synthesizes existing research on a particular topic, offering valuable insights for primary research, serving as a standalone academic contribution, and providing a comprehensive understanding of the subject (Kabir et al., 2023). The study leverages secondary data sources, including scholarly articles, industry reports, regulatory guidelines, and case studies from both Malaysian and global contexts. The methodology involves:

Literature Review: Analyzing existing studies to identify factors driving accountants to embrace technological advancements and AI. The review focuses on key impacts such as (1) Enhanced Efficiency and Accuracy, (2) Deeper Financial Insights, and (3) Futureproofing the Profession. This involves an in-depth examination of academic publications and industry reports.

Research Design: Developing a conceptual framework to map and identify factors influencing the adoption of technology and AI in Malaysia's accounting industry.

Figure 2: The Proposed Conceptual Framework for Factors Influencing the Adoption of Technology and AI Among Malaysian Accountants.

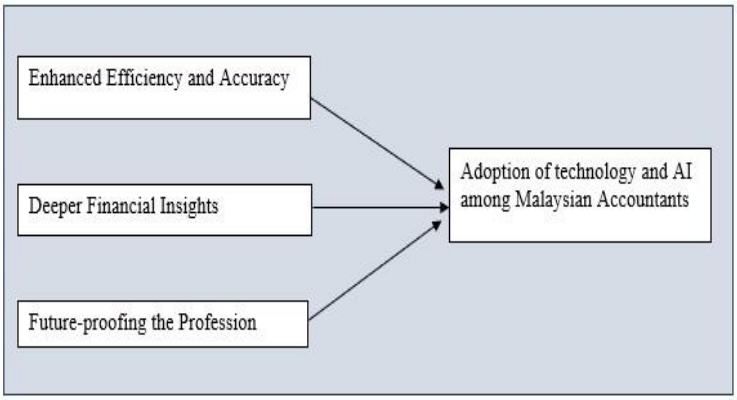


Figure 2 illustrates the factors influencing the adoption of technology and AI among Malaysian accountants. Enhanced efficiency and accuracy, deeper financial insights, and futureproofing of the profession are pivotal concepts in the framework of accountants adapting to technology and AI. By integrating advanced technologies, accountants can streamline routine tasks, reducing the risk of human error and significantly boosting productivity. This technological synergy not only accelerates data processing but also enhances the precision of financial reporting and analysis. Moreover, AI-driven tools enable accountants to delve deeper into financial data, uncovering patterns and insights that inform strategic decision-making and drive business growth. Embracing these innovations ensures that the accounting profession remains relevant and resilient in an ever-evolving digital landscape, equipping professionals with the skills and tools necessary to navigate and thrive in the future.

FINDINGS

The findings highlight the transformative impact of AI on efficiency, financial insights, and futureproofing the profession, while addressing challenges associated with its adoption.

Enhanced Efficiency and Accuracy

AI significantly improves efficiency and accuracy in accounting by automating routine tasks such as data entry,

bookkeeping, and reconciliation. This transformation reduces human error, enhances internal control systems, and improves accounting information quality (Rahim & Chishti, 2024; Monteiro et al., 2023).

For example, AI automates processes like document classification, data uploading, and continuous auditing, allowing accountants to focus on high-value activities (Holmes & Douglass, 2021). Furthermore, real-time accounting facilitated by AI increases trust among stakeholders by providing accurate and timely financial data (Han et al., 2023). Contrary to fears of job replacement, AI is found to complement human decision-making and enhance strategic contributions (Agrawal et al., 2019). While challenges like data security and ethical concerns remain, stakeholders are encouraged to design AI ecosystems tailored to the accounting profession's needs (Han et al., 2023).

Deeper Financial Insights

AI enables deeper analysis of financial data, allowing for improved decision-making and strategic foresight. For instance, machine learning algorithms enable accurate predictions based on historical and real-time data, optimizing investment decisions and risk management (Watson, 2024). Moreover, AI tools uncover hidden patterns and provide continuous auditing, enhancing financial oversight (Vijayanarayanan, 2024). Through detailed expense analysis, AI identifies areas for efficiency improvements, reducing operational costs and enhancing profitability (SKB Accounting, 2021).

Applications such as JPMorgan Chase's COIN exemplify AI's potential to save time, reduce errors, and improve financial performance through rapid document analysis (Cassens, 2017). AI's capacity to transform raw data into actionable insights provides organizations with a competitive edge and helps mitigate potential risks early.

Futureproofing the Profession

The integration of AI is reshaping the accounting profession, requiring accountants to adapt to new roles and skills. AI adoption is reducing manual work while creating new opportunities for strategic decision-making and consultancy (Manal Abdulameer et al., 2022). In other words, accountants must acquire proficiency in AI-driven tools, data analytics, and other emerging technologies to remain relevant (Geok & Fernandez, 2022). Moreover, accounting curriculums are increasingly incorporating technical skills to align with AI-driven industry demands (Holmes & Douglass, 2021).

Despite challenges such as workforce adaptation and ethical considerations, the profession is expected to benefit from enhanced productivity and new business opportunities (Yang Liu, 2024). Futureproofing requires accountants to embrace lifelong learning, adaptability, and collaboration with AI systems, ensuring sustainable growth in a rapidly evolving field.

CONCLUSION

This study on the integration of technology and AI in the accounting industry provides valuable insights into the evolving landscape of the profession. The findings suggest that the adoption of AI is driven by several key factors, including the potential to enhance efficiency and accuracy, deliver deeper financial insights, and futureproof the profession in the face of rapid technological advancements. As the accounting industry continues to evolve, AI offers significant benefits, including automating repetitive tasks, enabling more precise financial analysis, and empowering accountants to focus on higher-value strategic roles. By embracing AI and technological advancements, accountants will stay competitive in an increasingly digital and data-driven world.

However, the successful integration of AI in accounting requires addressing various challenges, including the need for continuous upskilling, overcoming resistance to change, and ensuring ethical governance in the use of AI technologies. Additionally, the research highlights the importance of providing appropriate resources and frameworks to help both organizations and individuals in the accounting profession navigate this transition. As AI continues to shape the future of accounting, it is essential for accounting professionals, businesses, and policymakers to collaborate in fostering a culture of innovation, ensuring the industry adapts effectively to the digital age.

Additionally, this research underscores the need for a balanced approach to the adoption of technology, recognizing both the opportunities and challenges it presents. While AI can significantly improve operational efficiencies and financial decision-making, it also raises important considerations regarding workforce transformation and the potential displacement of certain job functions. As such, accounting firms and educational institutions need to invest in comprehensive training programs that not only equip professionals with the necessary technical skills but also promote a mindset of adaptability and continuous learning. By doing so, the accounting profession can fully harness the potential of AI while ensuring that its workforce remains agile, innovative, and capable of thriving in a technology-driven environment. This proactive approach will help mitigate the risks of technological disruption and foster a more resilient and forward-thinking accounting industry.

RECOMMENDATION

Based on the findings of this study, several key recommendations can be made to facilitate the successful integration of technology and AI in the accounting industry. Firstly, accountants need to involve technology experts in the adoption of AI technology. When interacting with specialists in the field of IT and data science, accountants will be able to make sure that the introduction of AI-based solutions is adjusted to industry requirements and is most effective in introducing accuracy. AI developers and accounting professionals should collaborate to ensure that AI tools are designed with the specific needs of the accounting profession in mind. This collaboration will help create AI applications that are user-friendly, reliable, and tailored to the unique challenges accountants face in their day-to-day work. Thus, this model guarantees that the final AI product is not only technologically sound but also contextually relevant as it strengthens the firm's capacity for sound financial planning and propels the advisory services provided to clients to the next level.

Secondly, there is a willingness to change and the readiness to experiment with new technologies to strive for innovative improvements in accounting permanently. The role of learners should be cultivated by accountants who constantly familiarize themselves with new technologies to evaluate their effectiveness. This mindset is essential for embracing AI and technological advancements in the profession. By encouraging accountants to explore and experiment with AI tools, organizations can create a more dynamic and adaptable workforce that is open to continuous improvement and innovation. Leadership should support a culture where trial and error are seen as part of the learning process, enabling professionals to gain confidence in using new technologies.

The third recommendation is to promote AI education and training among accountants. Accounting professionals should be provided with access to ongoing training and certification programs focused on AI and emerging technologies. These programs should be designed to equip accountants with the technical skills required to leverage AI tools effectively, ensuring they can adapt to the evolving demands of the profession. Educational institutions and professional organizations should collaborate to develop tailored courses that bridge the gap between accounting knowledge and technological proficiency.

ACKNOWLEDGMENT

The authors would like to convey their appreciation to the Faculty of Accountancy, Universiti Teknologi MARA, Malaysia, for supporting and enabling this research project.

REFERENCES

1. Abdulameer, M., Mansoor, M.M., Alchuban, M., Rashed, A.L., Al-Showaikh, F., & Hamdan, A.M. (2022). The Impact of Artificial Intelligence (AI) on the Development of Accounting and Auditing Profession. Technologies, Artificial Intelligence and the Future of Learning Post-COVID-19. https://doi.org/10.1007/978-3-030-93921-2_12
2. Adeyelu, O.O., Ugochukwu, C.E., & Shonibare, M.A. (2024). The Impact of Artificial Intelligence On Accounting Practices: Advancements, Challenges, And Opportunities. International Journal of Management & Entrepreneurship Research. https://doi.org/10.51594/ijmer.v6i4.1031
3. Adnan, M.F., Bahrudin, A. N., & Hashim, S. (2024). Factors Influencing the Adoption of Artificial Intelligence (AI) Based Accounting System in Malaysian Organization: A Conceptual Paper, Accounting and

Finance Research, Sciedu Press, vol. 13(2), pages 1-80, May. http://dx.doi.org/10.5430/afr.v13n2p80
4. Agrawal, A., Gans, J. S., & Goldfarb, A. (2019). Exploring the impact of artificial intelligence: Prediction versus judgment. Information Economics and Policy, 47, 1-6. https://doi.org/10.1016/j.infoecopol.2019.05.001
5. Al Wael, H., Abdallah, W., Ghura, H., & Buallay, A. (2023). Factors influencing artificial intelligence adoption in the accounting profession: the case of public sector in Kuwait. Competitiveness Review: An International Business Journal, 34(1), 3-27. https://doi.org/10.1108/CR-09-2022-0137
6. Boritz, J.E., & Stratopoulos, T.C. (2023). AI and the Accounting Profession: Views from Industry and Academia. J. Inf. Syst., 37, 1-9. https://doi.org/10.2308/isys-2023-054
7. Cassens Weiss, D. (2017, March 2). JPMorgan Chase uses tech to save 360,000 hours of annual work by lawyers and loan officers. ABA Journal. https://www.abajournal.com/news/article/jpmorgan chase uses tech to save 360000 hours of annual work by lawyers and#google vignette
8. Chukwuani, D., Nnenna, V., Egiyi, D., & Amaka, M. (2020). Automation of Accounting Processes: Impact of Artificial Intelligence.
9. Damerji, H., & Salimi, A.Y. (2021). Mediating effect of use perceptions on technology readiness and adoption of artificial intelligence in accounting. Accounting Education, 30, 107 - 130. https://doi.org/10.1080/09639284.2021.1872035
10. Elmegaard, J. (2022). The Role of Artificial Intelligence in Accounting - New Perspectives on Empirical Research. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.4191419
11. Gavrilova, V., & Gurvitsh-Suits, N. A. (2020). Contemporary Innovation Challenges–Future of Adoption Artificial Intelligence: Case of Estonia. European Integration Studies, (14), 217-225. 10.5755/j01.eis.1.14.26143
12. Geok, A.L.S., & Fernandez, R.T. (2022). The evolving role of accountants and the future of the accounting profession. Journal of Management Information and Decision Sciences, 26(S2), 1-8.
13. Han, H., Shiwakoti, R.K., Jarvis, R., Mordi, C., & Botchie, D. (2023). Accounting and auditing with blockchain technology and artificial Intelligence: A literature review. Int. J. Account. Inf. Syst., 48, 100598. https://doi.org/10.1016/j.accinf.2022.100598
14. Holmes, A.F., & Douglass, A. (2021). Artificial Intelligence: Reshaping the Accounting Profession and the Disruption to Accounting Education. Journal of Emerging Technologies in Accounting. https://doi.org/10.2308/JETA-2020-054
15. Jackson, D. E. N. I. S. E., Michelson, G. R. A. N. T., & Munir, R. A. H. A. T. (2020). The impact of technology on the desired skills of early career accountants. Melbourne: CPA Australia.
16. Kabir, R., Hayhoe, R., Bai, A. C., Vinnakota, D., Sivasubramanian, M., Afework, S., & Parsa, A. D. (2023). The systematic literature review process: a simple guide for public health and allied health students. https://dx.doi.org/10.18203/2320-6012.ijrms20232496
17. Lee, C. (2024, June 6). 84% of Malaysians use AI for work, 77% citing exhaustion. The Edge Malaysia. Retrieved from https://theedgemalaysia.com/node/714478
18. Leitner-Hanetseder, S., Lehner, O. M., Eisl, C., & Forstenlechner, C. (2021). A profession in transition: actors, tasks and roles in AI-based accounting. Journal of Applied Accounting Research, 22(3), 539-556. https://doi.org/10.1108/JAAR-10-2020-0201
19. Liu, Y. (2024). Transforming Accounting with Generative AI Potential Opportunities and Key Challenges. Asia Pacific Economic and Management Review. https://doi.org/10.62177/apemr.v1i3.8
20. Luo, J., Meng, Q., & Cai, Y. (2018). Analysis of the Impact of Artificial Intelligence Application on the Development of Accounting Industry. Open Journal of Business and Management, 06, 850-856. https://doi.org/10.4236/OJBM.2018.64063
21. Maharani, S.N., Rahmawati, S.A., & Dewanti, N. (2023). Transformation of artificial intelligence in the Accounting Profession toward a New Technology Era. Proceedings of the 6th International Conference of Economics, Business, and Entrepreneurship, ICEBE 2023, 13-14 September 2023, Bandar Lampung, Indonesia. https://doi.org/10.4108/eai.13-9-2023.2341188
22. Malladhi, A. (2023). Technological Disruption in Accounting: RegTech, AI, and AI-OCR. International Research Journal of Modernization in Engineering Technology and Science. https://doi.org/10.56726/irjmets43743
23. Microsoft Malaysia. (2024, June 6). Microsoft and LinkedIn release the 2024 Work Trend Index on the state of AI at work in Malaysia. Retrieved from https://news.microsoft.com/en-my/2024/06/06/microsoft-and-

linkedin-release-the-2024-work-trend-index-on-the-state-of-ai-at-work-in-malaysia/
24. Microsoft Malaysia. (2024, May 8). 2024 Work Trend Index Annual Report from Microsoft and LinkedIn Retrieved from https://assets-c4akfrf5b4d3f4b7.z01.azurefd.net/assets/2024/05/2024 Work Trend Index Annual Report 6 7 24 666b2e2fafceb.pdf
25. Moll, J., & Yigitbasioglu, O. (2019). The role of Internet-related technologies in shaping the work of accountants: New directions for accounting research. The British Accounting Review, 51(6), 100833.
26. Monteiro, A.P., Cepêda, C., Silva, A.C., & Vale, J. (2023). The Relationship between AI Adoption Intensity and Internal Control System and Accounting Information Quality. Syst., 11, 536. https://doi.org/10.3390/systems11110536
27. Mujiono, M. N. (2021). The shifting role of accountants in the era of digital disruption. International Journal of Multidisciplinary: Applied Business and Education Research, 2(11), 1259-1274. https://doi.org/10.11594/10.11594/ijmaber.02.11.18
28. Narong, D.K. (2009). Activity-Based Costing and Management Solutions to Traditional Shortcomings of Cost Accounting. Cost engineering, 51, 11-22.
29. Odonkor, B., Kaggwa, S., Uwaoma, P.U., Hassan, A.O., & Farayola, O.A. (2024). The impact of AI on accounting practices: A review: Exploring how artificial intelligence is transforming traditional accounting methods and financial reporting. World Journal of Advanced Research and Reviews. https://doi.org/10.30574/wjarr.2024.21.1.2721
30. Oppotus. (2023, November 20). Malaysians' perception of artificial intelligence. Retrieved from https://www.oppotus.com/malaysians-perception-of-artificial-intelligence/
31. Rahim, R., & Chishti, M.A. (2024). Artificial Intelligence Applications in Accounting and Finance. 2024 ASU International Conference in Emerging Technologies for Sustainability and Intelligent Systems (ICETSIS), 1782-1786. https://doi.org/10.1109/ICETSIS61505.2024.10459526
32. Rajpoot, P. (2020). Impact of Cloud Accounting in Present Scenario: A Theoretical Overview.
33. Ranjith, P. V., Madan, S., Jian, D. A. W., Teoh, K. B., Singh, A. S., Ganatra, V., ... & Singh, P. (2021). Harnessing the power of artificial intelligence in the accounting industry: A case study of KPMG. International Journal of Accounting & Finance in Asia Pacific (IJAFAP), 4(2), 93-106. https://doi.org/10.32535/ijafap.v4i2.1117
34. SKB Accounting. (2021, October 26). Technological advancements in accounting industry and their benefits for your business. LinkedIn. https://www.linkedin.com/pulse/technological-advancements-accounting-industry-benefits-
35. Victoria, C., Ibeh, Ajayi-Nifise, A.O., Odeyemi, O., Mhlongo, N.Z., Elufioye, O.A., & Feranmi, K. (2023). The future of accounting: Predictions on automation and AI integration. World Journal of Advanced Research and Reviews. https://doi.org/10.30574/wjarr.2024.21.2.0466
36. Vijayanarayanan, P. (2024, August 30). Transforming the industry: AI in accounting and finance. SandTech. https://www.sandtech.com/insight/transforming-the-industry-ai-in-accounting-and-finance/
37. Watson, J. (2024, May 24). How artificial intelligence will impact the accounting industry? Ace Cloud Hosting. https://www.acecloudhosting.com/blog/artificial-intelligence-impact-accounting/
38. William & Mary. (2001, April 21). The role of technology in modern accounting. Retrieved from https://online.mason.wm.edu/blog/the-role-of-technology-in-modern-accounting
39. Zhang, Y., Xiong, F., Xie, Y., Fan, X., & Gu, H. (2020). The impact of artificial intelligence and blockchain on the accounting profession. Ieee Access, 8, 110461-110477. doi: 10.1109/ACCESS.2020.3000505