Chapter 25:

Artificial Intelligence Adoption: Challenges Among Accountants

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ABSTRACT

The integration of Artificial Intelligence (AI) in accounting is transforming the profession by automating routine tasks, enhancing efficiency and reshaping accountants' roles. While AI offers opportunities for improved accuracy and strategic decision-making, it also presents challenges, particularly regarding job security and skill gaps. This paper explores the impact of AI on accounting, addressing concerns related to job displacement and the need for upskilling. It also examines strategies such as redefining the roles of accountants, education program revisit and continuous professional development (CPD) to mitigate the risks associated with AI adoption. Additionally, the study discusses employee resistance to AI implementation and highlights effective change management and communication strategies. Ethical and regulatory considerations are also analyzed to ensure the responsible use of AI in accounting. By fostering a culture of learning and adaptation, organizations can use AI as a tool to enhance financial decision-making while maintaining ethical and professional standards. The combination of smart AI tools and the valuable contribution of human brains and experience seem to be a solid approach. Integrating AI into accounting really depends on doing it right and doing it smart too.

Key Words: Accountant, Artificial Intelligence, Resistance

1. INTRODUCTION

The rapid growth of Artificial Intelligence (AI) has significantly transformed various industries, including accounting. AI technologies have the potential to enhance efficiency, reduce errors and automate the routine tasks. These effects allow accountants to focus more on strategic and analytical roles. Despite these advantages, the adoption of AI in accounting remains a challenge due to resistance from professionals concerning job displacement, skill gaps and ethical considerations. One of the primary concerns among accountants is job security, as AI-driven automation increasingly takes over traditional accounting tasks such as data entry, bookkeeping and financial reporting. While AI can streamline processes and improve accuracy, it also raises hesitations about the long-term relevance of accountants. Additionally, many professionals lack of the necessary digital skills to effectively integrate AI into their daily work. Another significant factor influencing AI adoption in accounting is organizational resistance to change. Concerns about biased results and uncertainty around how well AI works are making many accountants hesitant to really rely on it. AI in accounting also raises ethical and compliance concerns, particularly with regard to the justification and transparency of AI-driven choices. The accounting industry is going through a big struggle to make sure their AI systems follow the rules and current accounting standards.

2. LITERATURE REVIEW

A major challenge in the accounting field today centres around the effective integration of AI, particularly among accountants. Holmes and Douglass (2022) report that AI is significantly altering the accounting profession. While AI definitely offers a lot of advantages like increased speed, cost saving and automation of routine tasks, however getting it adopted can be slow because of a lot of different reasons. Accountants are generally resistant

towards AI because they are worried about losing their jobs, they are not familiar with the technology and also not sure about how reliable and trustworthy AI systems are.

Handling routine accounting tasks is getting much easier for artificial intelligence machines. Hanetscher et al. (2021) highlight how accountants have transformed from traditional bookkeeping to analytical and strategic roles. This transformation could save hundreds of hours annually (Bradley, 2024). This is a big challenge specifically for workers who newly start their careers. This trend raises big worries among entry level position workers about their future security as found by Bessen (2019) that many fear job losses in the next decade. This concern supported by Frey and Osborne (2013) who estimate that 47% of U.S. jobs are at risk of automation. Junior accountants are particularly vulnerable as their tasks are highly automatable (Hanetscher et al., 2021). This concern could quite possibly slow down the adoption of AI usage. As AI becomes more embedded in accounting practices, professionals will likely need to focus on more complex responsibilities that require human judgment, such as critical thinking and decision-making.

Transitioning into this new digital landscape brings some tricky challenges and many accountants are finding it hard to develop skills that let them cooperate really well with all these new AI tools. There is definitely a huge gap when it comes to accounting skills and not just between experienced accountants and fresh graduates. Many experienced accountants struggle because they have not quite familiar with that technology yet. Meanwhile a lot of recent graduates are entering right into a world where learning to use new digital systems and AI is absolutely essential. In line with this scenario, Fulop et al. (2022) stresses the need to integrate AI and digital literacy into accounting education. However, we are all a bit behind sometimes. Nowadays, some important skills for us to have are data management, cybersecurity and being able to read and understand insights that come out from AI. These skills are the high-level understanding that everyone who works with data or technology needs. In order to survive in these changes, accountants need to continuously equip themselves with the current technology. As mentioned by Igou et al. (2023) that stress the importance of continuous professional development for accountants to remain competitive and Hanetseder et al. (2021), who argue that ongoing training is crucial for accountants to focus on advanced skills such as critical thinking, data analytics, and strategic planning.

Organisational resistance, which frequently results from reluctance to adopt new technology and undergo change, is another challenge. Ivchyk (2024) states that misaligned strategies and cultural situation drive organizational resistance. Concerns about biased results and uncertainty around how well AI works are making many accountants hesitant to really rely on it. AI in accounting also raises ethical and compliance concerns, particularly with regard to the justification and transparency of AI-driven choices. Ethical concerns such as bias, accountability and privacy violations worsen the resistance (Ivchyk, 2024). The industry is going through a big struggle to make sure their AI systems follow the rules and current accounting standards.

3. DISCUSSION

Job Security Concerns

Using AI in accounting, it comes together with opportunities and challenges. One of the big challenges is whether people can keep their jobs or not. From one perspective, AI is capable of handling many routine and repetitive tasks that have traditionally been performed by entry-level accountants. Holmes and Douglass (2022) point out that AI brings significant changes to accounting profession. While new technology definitely leads to people losing jobs, at the same time it is also changing the nature of accounting roles. Things really are evolving in the world of accounting. According to Hanetseder et al. in 2021, accountants have seen their roles evolve from the traditional practice of just keeping books and records to strategic oversight and decision making. This shift shows that while AI takes care of a lot of boring routine stuff, it actually opens up new exciting chances for accountants to grow by using their special human intelligence and skills. The International Federation of Accountants (IFAC) emphasises the importance of accountants constantly improving their abilities in developing technologies in order to remain relevant and effectively collaborate with AI rather than be replaced by it. By redefining roles and enhancing skill sets, the accounting profession could reduce job security concerns while utilising AI to boost efficiency and effectiveness. Bessen (2018) notes that many people are really worried and concerned about job losses because of AI in the next ten or twenty years. This concern is supported by the fact that many jobs, particularly those that can be automated, like factory workers and tailors, have already been replaced by machines. New information technologies will put a substantial share of jobs at risk in the near future (Frey & Osborne, 2013). Frey and Osborne (2017) analyze that nearly 47% of jobs in the U.S. are at risk of computerization due to advancements in technologies like machine learning. Junior accountants are particularly at high risk these days because the routine works they do very easily lend itself to automation via robots. Machines can do it faster and more regularly than people (Hanetscher et al., 2021).

Skills Gap in the Accounting Profession

The swift growth of AI technologies has exposed a significant skill gap within the accounting profession, primarily due to traditional education and training frameworks not keeping up with technological advancements. Fulop et al. (2022) emphasize the critical requirement to adapt educational curriculum to include AI and digital literacy training. They suggest that for accountants to stay effective and competitive, both current professionals and fresh graduates must learn how to use AI tools effectively. Igou et al. (2023) support this, emphasising the significance of ongoing professional development. Nowadays there is a growing feeling that accountants really need to keep up with changes like AI, so professional accounting groups think continuing education should help accountants learn the skills they need to really look at the insights that come out from that technology and use them well too. Hanetseder et al. (2021), convey the message that continuous learning and training is absolutely very important because as AI starts to take on a lot of daily tasks, accountants need to focus really hard on enhancing skills that are more advanced, like critical thinking, data analytics, and strategic thinking. The American Institute of CPAs (AICPA) offers guidelines for incorporating AI into accounting procedures, emphasising the value of ongoing learning and professional development. By stepping up with robust education and training programs, the accountancy world can make sure that its members have all the tools they need to really excel with the help of AI. This makes their contributions and their roles greater and more significant.

Organizational Resistance to AI Adoption

Humans are naturally resistant to change, especially in the face of outstanding technical developments such as AI. This opposition is frequently motivated by fear of the undetermined, discomfort with new technologies and concerns about job security. Kotter (1996) explains that employees often resist new technologies due to uncertainty, fear of job loss, and lack of clear guidance from management. Benbya et al. (2020) argue that AI should be seen more as a technology that enhances work alongside humans rather than as a replacement for human labor. This is really important to deal with the resistance because people need to know that AI is about helping people do their jobs better instead of taking their positions away. The Technology Acceptance Model (TAM) offers additional insight into overcoming resistance. According to TAM, the important factors that affect technology adoption are how easy and how effective the technology is. Accountants are more likely to adopt AI technology if they are easy to use. They really feel better when they notice that these AIs are making their work easier and better. Trust is an important aspect in lowering resistance. The extensions of TAM that include trust imply that creating trust in the reliability and transparency of AI systems is critical for their acceptance. Both IFAC and AICPA highlight the critical importance of ethical standards as well as particular training in fostering trust among users and lessen resistance to adopting AI. By tackling these issues and emphasizing all the upsides of AI, companies can really help accountants move along smoothly and gain acceptance.

Ethical and Compliance Challenges

Implementation of AI in accounting is serious in terms of ethics and the law with focus on the responsible and transparent usage. According to Oyeniyi et. al (2024), the impact of AI on financial reporting and decision-making necessitates strong corporate controls and ethical standards. Transparency and accountability are necessary for ensuring AI judgments are within norms, particularly in accounting where financial data quality is vital for trust preservation. Various studies as well as TAM truly promote trust and honest speech from such intelligent computer systems because keeping clear ethical principles and regulatory frameworks is paramount. The International Accounting Standards Board (IASB) is responsible for ensuring that using AI applications in accounting adhere to international standards in order to remain the consistency and reliability of financial reporting. Even though AI systems can avoid some human biases through processing large amounts of data in a systematic manner, they are nevertheless in need of careful attention. For example, AI may misinterpret data patterns through lack of common sense and contextual understanding, while human beings can use that context to make conclusions.

4. RECOMMENDATION

Improvement and upgrading initiatives based on skillsets complementary to AI are required to counter the threat of job security for accountants. These initiatives should aim to develop skillsets complementary to AI tools such as data analysis, strategic decision-making, and critical thinking. Organisations can make their employees valuable and relevant in the new world where most of their work is automated through continuous learning and professional development. This not only solves the problem of job displacement but also improves the overall competence of the accounting team. With accountants' jobs being shifted from bookkeeping to more strategic management, such solutions can facilitate professionals to adapt with ease, low anxiety and resistance towards technological advancements.

Redefining the Role of Accountants

A successful way of resolving issues of employment security is to redefine the accountants' roles to include more analytical and strategic work so that less routine labor is required that can be automated. Organisations can greatly benefit from the creation of new positions responsible for managing AI systems, interpreting AI-

generated information and offering strategic insights. Organisations can ensure human skill is utilised where it can be most effective by specifying accountants' roles. It not only resolves employment security issues but also improves organisational efficiency and creativity. By training accountants with new abilities and more complicated duties, accountants are able to consider AI as a helper instead of something that puts their employment at risk. Furthermore, future education also could include training for student to prepare themselves for a future where their primary value lies in strategic decision-making and analytical tasks rather than manual data entry.

Revisit the Education Program

Secondly, to address the skill gap issue, it is essential to reform the syllabus of accounting programs to include AI and digital literacy training. Both theoretical foundations and practical applications of AI should be introduced in educational institutions, including introducing students to the various AI tools being applied in accounting and how to interpret data generated through AI. By incorporating training in AI into the curriculum, future accountants would be well prepared to work with such technologies right from the onset of their careers, which can fill the skill gap with the passage of time and make new graduates capable of meeting the challenges of a tech-based career in accounting.

Creation of CPD Training

Another important suggestion is the creation of continuous professional development (CPD) programs centered around digital technology and AI. These should be made available to all accountancy professionals and should be periodically revised with new technology updates. Organisations can keep their staff up-to-date of the latest AI tools and approaches through frequent training programs. CPD programs can allow accountants to acquire the requisite skills to effectively comprehend and utilize AI outputs through workshop training, web-based training, and hands-on training. This action narrows the skill gap and enhances overall productivity as current professionals become competitive and efficient in AI-driven environments.

Effective Change Management and Communication

To counter resistance to change and promote AI adoption, effective change management and communication are essential. Organisations must have clear communication plans that explain the advantages of using AI and how it is to be introduced and implemented, as well as how it is going to complement human functions rather than replace them. Organisations can counter employee resistance and fear through trust and transparency. Communicating with employees at all levels, talking through their worries and investing in training to enable them to adapt to technology are all essential aspects of effective change management. Organisations can cultivate a culture where workers are likely to adopt AI and view it as a useful tool that improves their work through the fostering of an openness and supportive culture. One of the successful strategies for reducing resistance to change is the introduction of AI technologies through pilot schemes and incremental adoption. Pilot schemes enable organizations to test AI technologies in a controlled environment before full-scale roll-out, gather feedback and make any necessary adjustments. Employees can learn about AI technologies and experience their advantages directly through incremental implementation. Organisations can earn the trust and acceptance of accountancy professionals through the demonstration of the practicality and usability of AI technologies. This methodical approach makes adaptation to AI-enhanced processes smoother and reduces disruption.

Ethical and Regulatory Consideration

In addressing ethical and regulatory challenges, organizations must have and apply firm ethical standards and regulations for AI usage in accounting. These should cover issues of transparency, accountability, data integrity as well as the proper usage of AI-generated information. By offering transparent ethical standards, organizations can ensure that AI systems are being applied responsibly and that their outputs are reliable and credible. This also facilitates the maintenance of financial reporting and decision-making processes' integrity. Furthermore, clear ethical standards provide the basis for solving potential ethical problems and ensuring that AI implementations are congruent with organizational values and regulatory expectations. Ultimately, regular audits and compliance checks are required to ensure that AI systems meet established ethical standards and regulatory expectations. Both external and internal reviews should be conducted for such audits to ensure objectivity and completeness. Regular audits ensure that AI systems are running as they should be and are ethical because they can identify potential problems early. By ensuring AI implementations meet regulatory standards applicable to them, compliance checks will ensure the credibility and trust of AI-based accounting processes. Organisations are able to show their adherence to moral principles and legal compliance through prioritization of regular audits and compliance checks. This will increase the reliability and transparency of their AI applications.

5. CONCLUSION

In summary, there are pros and cons of the adoption of AI to the accounting industry. The adoption of AI is hindered by professional resistance, skill shortages and ethical issues, despite the fact that it has many advantages, including greater efficiency and cost reductions. A diverse strategy is needed to address these issues, including upgrading and reskilling initiatives, role redesign, education updates, change management approaches, and the development of strong ethical standards.

Organisations can reduce concerns about job displacement and improve worker capacities by investing in thorough reskilling and upskilling programs that enable accounting professionals to effectively utilise AI technologies. AI is positioned as a useful ally rather than a threat to job security when accounting functions are redesigned to concentrate on strategic and analytical duties, reducing dependency on routine work. By ensuring that future accountants are prepared to deal with AI from the beginning of their careers, updating courses in schools helps to close the skill gap and encourage innovation in the field.

Effective change management strategies, such as clear communication plans and pilot programs, facilitate AI adoption and reduce resistance among professionals. The accounting industry may fully utilise AI to promote productivity, creativity, and expansion by adopting new technologies, making educational and training investments, and maintaining moral principles. The accounting industry may fully utilise AI to promote productivity, creativity, and expansion by adopting new technologies, investing in educational and training, and maintaining moral principles.

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