International Journal of Economic Literature (INJOLE) e-ISSN: 3026-0221
Vol. 2 No. 10 October 2024, page., 3188-3201

IMPLICATIONS OF THE USE OF ARTIFICIAL INTELLIGENCE IN MANAGEMENT ACCOUNTING: A LITERATURE REVIEW

Henny Rakhmawati*[1]
Universitas Tulungagung, Indonesia
Email: hennyrakhmawati19@gmail.com

Umarudin Kurniawan
Politeknik Negeri Lampung, Indonesia
Email: umarkurniawan@polinela.ac.id

Agus Prasetyo
Universitas Terbuka, Indonesia
Email: agusp@ecampus.ut.ac.id

Abstract

The use of artificial intelligence (AI) technology has grown in importance as a ever-growing digital era. AI is able to provide more accurate and quality analysis for faster processing times, AI is able to offer higher efficiency and lower long-term costs to companies. In the field of management accounting, AI offers a lot of promise to increase the effectiveness and precision of commercial decision-making. Modern management accounting includes managing internal financial data processing as well as external financial data processing in the age of artificial intelligence company finances. The use of AI can help management accountants to produce quality information and AI can also help in the decision-making process by providing recommendations based on historical data and market trends so that management accountants have accurate information to manage company finances. Although AI has many benefits and can help in many aspects of management accounting, AI cannot replace the main role of humans, especially in decision-making. AI won't be able to fully replace management accounting experts, at least not in the near future, since AI cannot take the position of human creativity and emotion-based thinking. AI related to management accounting is a new area for business. Effective and ethical implementation is key to maximizing benefits while minimizing negative impacts.

Keywords: Implications, Artificial Intelligence, management accounting

[1] Correspondence author

INTRODUCTION

According to Vărzaru, A. A. (2022), management accounting is an accounting discipline that deals with the management of financial and non-financial data that management uses to guide strategic decisions. Management accounting's primary goal is to support management in running the business efficiently by giving them accurate and pertinent data. Technology known as with the use of artificial intelligence (AI), robots can now do tasks requiring human-like reasoning and thought processes. Artificial Intelligence (AI) has applications in management accounting that help with financial data analysis and decision-making process optimization. Technology related to artificial intelligence (AI) has grown in importance innovation in the ever-growing digital era. AI is able to provide more accurate and quality analysis for faster processing times, AI is able to offer higher efficiency and lower long-term costs to companies (Zhang et al., 2023). Undoubtedly, AI is changing the future of numerous occupations, with accounting being one of the most important. One of the significant benefits resulting from AI application in accounting is the improvement in the quality of accounting information (Li, C., Haohao, S., & Ming, 2020). Artificial intelligence systems can provide more insightful recommendations about how to allocate resources, create budgets, and develop general business strategies by evaluating both historical and contemporary data. Artificial Intelligence (AI) has great promise for improving the efficiency and accuracy of business decision-making in the management accounting domain. Currently, in the age of artificial intelligence, management accounting manages internal financial data processing as well as corporate finances (Khaled AlKoheji, A., & Al-Sartawi, 2022). The use of AI can help management accountants to produce quality information and AI can also assist in the decision-making process by providing recommendations based on historical data and market trends so that management accountants have accurate information to manage corporate finances. AI related to management accounting is a new area for business (Cho, 2024). Therefore, new challenges arise that are faced by management accountants today.

According to Corazza, G., & Zanin, F. (2020), the application of AI in accounting also has several challenges. One of them is the need for quality data. AI relies on accurate and comprehensive data to be able to produce reliable results. Therefore, it is important for companies to have a good system to collect, store, and manage financial data required by the AI system. In addition, the adoption of AI in accounting also requires the development of new skills and knowledge for accountants. Accountants need to understand the concepts and technologies of AI and their ability to utilize them effectively in accounting practices. Data analysis skills, business intelligence, and an understanding of AI algorithms are some of the things that need to be considered in preparing accountants for the AI era. In conclusion, the AI implementation system in accounting provides many benefits for companies. With the ability to automate, faster and deeper data analysis, and smarter decision making, AI has changed the way accounting is done. However, challenges such as data privacy, the need for quality data, and the expansion of accountant expertise still need to be addressed. In facing these changes, it is important for companies to have the right strategy to implement AI in accounting effectively. The use of AI capabilities brings several challenges because accountants will work side by side with intelligent systems and need to be equipped with the right skills to benefit from the latest technological advances (Chowdhury, 2023). However, there is a gap between the challenges of developing accountants' capabilities in the AI era and the progression of management accounting in its entirety. The primary causes are a lack of focus and basic misconceptions about it held by management and accountants (Korobeynikova et al., 2021).

Another reason is that the body of knowledge now available on artificial intelligence (AI) in the scope of management accounting and control is still scarce and narrow. Other issues that come up when using AI in management accounting also bring up a number of moral concerns that need to be considered. For instance, using AI to make business decisions may make people wonder about responsibility and transparency. The possible ethical effects of using AI in management accounting on the efficacy and efficiency of management accounting choices, however, are not well examined in the literature (Lee, C. S., & Tajudeen, 2020).

The relationship between management accounting and control and ethical decision making is only discussed in a small number of articles (Ballamudi, 2019). While professional organizations such as the Institute of Management Accountancy focus on developing while imparting professional ethical standards, there hasn't been much focus on organizations' crucial role in management accountants' ethical decision-making (Secinaro et al., 2024). In a study conducted by Rawashdeh, A. (2023), it was revealed that defining the field of AI ethics is still a challenging task. Given that ethics in accounting is something that cannot be ignored, ethical issues related to further research is necessary to fully understand how AI is being applied to management accounting. The goal of this study is to more thoroughly examine the application of AI in management accounting, as well as the ethical concerns that may emerge and the potential solutions. Consequently, this research will significantly advance our knowledge of and ability to maximize the use of AI in the context of management accounting by considering relevant ethical aspects.

RESEARCH METHOD

This study uses a descriptive method by collecting data from various reliable sources, including literature studies and recent publications. The descriptive approach is used to describe the implications of using Artificial Intelligence in management accounting comprehensively. The first stage in this research method is collecting literature relevant to the research topic. A literature search is conducted through academic databases, scientific journals, and related publications that discuss the implications of using Artificial Intelligence in management accounting. The selected literature must be of good quality and relevant to the research objectives. After collecting the literature, an analysis and synthesis of the information found is carried out. Relevant data and information about the concept and definition of management accounting, Artificial Intelligence and ethics in management accounting, the role and impact of Artificial Intelligence in management accounting related to the research topic.

RESULT AND DISCUSSION

Concept and Definition of Management Accounting

Management accounting is a subset of accounting that describes how accounting professionals use data from financial accounting as well as process, gather, and report additional data to plan and oversee daily business operations for management staff at all levels and assist policymakers in reaching specific decisions by using a range of specific techniques in an effort to maximize the company's financial gains (Charifzadeh, M., & Taschner, 2017). Management accounting is the main supplier of business information needed for decision making in a company (Velasquez et al., 2015).

Management accounting is a branch of accounting that deals with collecting, evaluating, and interpreting data that is related to finances as well as non-financial matters in order to assist with decision-making inside businesses or organizations. The goal of management accounting is to deliver accurate and pertinent information information to managers and company leaders, so that they can make better decisions in strategic planning, cost control, performance evaluation, decision making, and investment evaluation.

According to Samuel, S. (2018) management accounting involves the use of various methods, techniques, and tools, including budget planning, cost analysis, performance evaluation, and business strategy development. The information generated by management accounting is used to improve the operational efficiency of the company, optimize resource allocation, and achieve organizational goals in the most effective way. In other words, management accounting helps companies manage their business better and smarter. With a strong understanding of management accounting, companies can acquire a competitive edge in the cutthroat industry and not only survive but also thrive in a changing business environment.

Accountants that do management accounting must possess extensive management skills and knowledge. Financial accounting and management accounting are fundamentally distinct. Information sharing with the company's creditors and investors is the main goal of financial accounting. In management accounting, management accounting has three characteristics in the company, namely internal service, flexibility and situation (Manyaeva et al., 2016). Management accounting has become an inevitable market product, and this transformation is conducive to existing accountants to solve their own employment problems.

In order to help managers make better decisions, management accounting is the process of gathering, evaluating, and interpreting both financial and non-financial data. In the ever-changing business world, information is power, and management accounting provides the information needed to (Wanderley, C., & Cullen, J. (2013):

1. Strategic Planning: With management accounting, companies can plan their strategic moves better. They can see past trends and make accurate projections for the future.
2. Cost Control: Cost management is a critical component of business success. Management accounting helps companies identify inefficient sources of costs and provides solutions to reduce them.
3. Decision Making: Good decisions are based on accurate information. Management accounting provides the data needed to make the right decisions, including expansion, investment, or restructuring.
4. Performance Evaluation: With regular monitoring, companies can evaluate their performance and identify areas where they need to make improvements.

Management accounting has several key functions that are very important in supporting the success of a company (Maas, K., Schaltegger, S., & Crutzen, 2016):

1. Planning and Budgeting: Management accounting helps companies in strategic planning by developing a budget that includes revenues and costs. This helps companies allocate resources efficiently.
2. Cost Control: One of the main functions is to control costs. With careful monitoring, companies can identify unnecessary costs and take action to reduce them.
3. Performance Evaluation: Management accounting allows companies to evaluate the performance of a department, product, or specific project. This helps in identifying areas that need improvement or further development.
4. Decision Making: Data collected and analyzed by management accounting is used to make better decisions. This can include decisions about investment, expansion, or restructuring.
5. Investment Evaluation: Companies use management accounting to evaluate potential investment projects. With in-depth analysis, they can decide whether an investment is worth it or not.

The implementation of management accounting in a company is an important step in taking advantage of all its benefits. Here are some steps that can be taken in implementing management accounting (Kamal, S. (2015):

1. Establishing a Management Accounting Team: Companies need to form a special team that will be responsible for management accounting. This team should consist of individuals who are skilled in data analysis and business understanding.
2. Determining Goals: Companies must set clear goals in implementing management accounting. Do they want to increase profitability, reduce costs, or optimize operations?
3. Selecting Methods and Technologies: Companies need to choose the appropriate methods and technologies to collect and analyze data. Currently, there are various software and systems that can assist in this process.
4. Employee Training: Employees need to be trained on how to use management accounting data in their daily work. They must understand the importance of this data in decision making.
5. Periodic Evaluation: Implementing management accounting is not enough to be done only once. Companies need to conduct periodic evaluations to ensure that this system is effective and in accordance with the goals set.

In a competitive business world, having effective management accounting can be a competitive advantage. Companies that are able to make decisions based on strong data are more likely to survive and grow in a changing market. Management accounting also helps companies identify opportunities to improve their profitability. With a deep understanding of costs and operational performance, companies can develop strategies to maximize profits.

Artificial Intelligence and Ethics in Management Accounting

In order to provide managers with timely and useful accounting information for making decisions, artificial intelligence has achieved independent analysis of accounting data (Losbichler, H., & Lehner, 2021). High-level judgments are determined by the answers offered by AI-based technology as it advances (Ahmad, 2024). Because AI procedures reduce normal data collection and processing tasks, they free up time to test the correctness of generated information and the sustainability of the retrieval. This presents an opportunity for management accounting. Given that technology is growing very rapidly, the management accounting profession will have less time to consider the ethical challenges of AI (Boulianne et al., 2023). The results of a study by Fülöp et al., (2023) found that knowledge and skills in AI and accounting should be considered a necessity, not a desired competitive advantage. The results of a study by Beerbaum, D. (2019) AI will unavoidably replace entire job categories, according to study and experience, particularly in the transportation, retail, government, professional service, and customer service industries. Currently, one of the challenges faced by Management Accounting in implementing AI is several ethical challenges of implementing AI in management accounting. When AI systems change from being considered as tools Understanding the ethical implications of this is a key area of research and development, as it relates to being regarded as autonomous individuals and teammates.

Research from Hasan, A. R. (2021) revealed that to guarantee moral behavior, humans must constantly maintain control over the application of AI-based judgments and must always investigate the outcomes and ethical ramifications coming from AI decision-making. One of the ethical challenges of companies in implementing AI is data leakage. Companies must be fully conscious of the potentially fatal risks associated with information and data leaks, and base their effective and suitable information protection strategies accordingly (Rodgers et al., 2023). The increase in AI agency, especially when AI replaces human agents, also raises another more pressing ethical issue: responsibility. Rational calculations regarding reliability do not require AI to have emotions towards the people who trust it or be responsible for its actions. The first issue is that while AI is capable of taking actions and making decisions that have ethical ramifications, it lacks moral consciousness and cannot think morally, hence it cannot be held morally accountable for its actions. AI creates a "responsibility gap" that makes it challenging to place blame. Machines can be agents, but they are not moral agents because they lack consciousness, free will, emotions, the ability to create intents, and other qualities (Herath, S. K., & Herath, 2024).

Most companies do not have explicit AI ethics guidelines. The communities of technology, industry, and politics are actively looking for the best approaches to maximize advantages, reduce dangers, foster social acceptance, and make AI human-centered and trustworthy. Initial AI ethics standards will have long-term impacts on humans, and may become a common topic in software systems development (Alles, M., Munoko, I., & Vasarhelyi, 2022).

Bakarich, K. M., & O'Brien, P. E. (2021) in their research concluded that the International Standard for AI delivered by the Organization for Economic The Economic Cooperation and Development Organization (OECD) provides basic guidelines for the application of AI that prioritize moral observance and adherence to the welfare of humanity. These guidelines are based on the following OECD AI value-based principles:

1. AI should advance equitable growth, sustainable development, and well-being for the benefit of people and the environment.
2. AI systems should be developed with sufficient protections in place to guarantee a just and equitable society, while also respecting diversity, human rights, democratic principles, and the rule of law.
3. AI systems should be disclosed responsibly and with transparency, particularly when they are implicated. Throughout their lives, AI systems need to operate reliably, securely, and safely while identifying and mitigating risks.
4. AI developers, implementers, and operators must take responsibility for ensuring that their systems are developed, implemented, and operated in accordance with AI value-based principles.

The ethics of AI implementation must be examined to understand whether the results of the AI implementation can be fully understood and do not violate moral guidelines. Trust is recognized as a key requirement in the ethical implementation and use of AI. According to research by Bonsón et al. (2021), adoption process decisions' efficacy and efficiency have a significant impact on how beneficial and effective AI solutions are perceived. These concerns include autonomy, accountability, and trust. These guiding principles are meant to make sure that the interests of society and AI users come first and that those who create, develop, and use AI systems are held responsible for adhering to the OECD AI standards. Organizations should place more emphasis on ensuring that companies that use AI, and individuals within those organizations, are trustworthy.

The results of research by Beccalli, E., Elliot, V., & Virili, F. (2020) state that companies must base themselves on long-term and sustainable corporate development, firmly end unethical behavior in the form of misuse of information and violation respect other people's rights and interests, and create a positive work environment and strong cultural framework inside the organization to accomplish these objectives by offering a favorable corporate climate for the transformation of financial accounting management. Guidelines for implementing AI in an organization can be incorporated into standards, they can be part of corporate or industry governance mechanisms, they can be reflected in laws and regulations, and enforced by regulators.

The Role and Impact of Artificial Intelligence in Management Accounting

The main Enhancing the company's financial and economic management and boosting economic benefits is the role of management accounting (Kwafo, 2019). Companies must bear considerable losses if they are less than optimal in the field of management accounting. Weak management foundations result in subpar performance in the economy, low management, low income, and other unfavorable circumstances. In this instance, the growth of an unclear organization compels managers to precisely evaluate the dangers they encounter in terms of both management and fundamental skills (Moudud-Ul-Huq, 2014). It is undeniable that management accounting and AI will continue to coexist as a form of modernization and the business's attempts to adhere to the flow of technological progress.

The results of research from Liu, X. (2022) that AI still has the potential to develop further, become smarter and can complete more complex tasks including decision making. Management accounting and AI have a very close and complementary relationship in achieving efficiency and effectiveness in managing organizational resources. The economy is growing, and society in the age of artificial intelligence needs to shift from having professional accountants to managers. Artificial intelligence has the potential to make life and work more convenient and efficient. It can also save a significant amount of time, particularly when it comes to the transition from financial to management accounting. Even while management accounting has long employed AI technology, the recent surge in the field's development offers a significant chance to raise the standard of decision-making. The business world still needs to consider certain challenges related to AI integration, high resource demands in terms of time, data, investment, and infrastructure, and the lack of knowledgeable professionals.

Businesses will have a workforce that has undergone retraining to handle higher-value and more competent jobs. Although AI has many benefits and can help in many aspects of management accounting, AI cannot replace the main role of humans, especially in decision making. AI won't be able to fully replace management accounting experts, at least not in the near future, since AI cannot take the position of human creativity and emotion-based thinking (Larioui, A., & Himran, 2023).

Here are some examples of the application of AI in management accounting:

1. Demand Forecasting: AI can help predict the demand for a company's products or services based on historical data and other factors such as market trends and seasons. This information can help management plan production and inventory more effectively.
2. Cost Analysis: AI can help identify and analyze costs associated with business activities, so that management can make better decisions about expenses that need to be cut.
3. Performance Monitoring: AI can be used to monitor the company's financial and operational performance in real-time and provide early warnings if there are any issues that need to be addressed immediately.
4. Sentiment Analysis: AI can be used to analyze the sentiment of a company's customers and employees from collected data such as online reviews and feedback, so that management can take appropriate actions to improve customer experience and improve work culture.
5. Tax Analysis: AI can help ensure a company's tax compliance by identifying potential errors or violations of tax regulations, and providing recommendations to fix the issues.

In conclusion, the application of AI in management accounting can help companies optimize business processes and decision making. However, companies must ensure that the AI system used is reliable, accurate, and follows applicable regulations and ethics.

CONCLUSION

Artificial intelligence (AI) has becoming more prevalent in management accounting several significant implications, including:

Automation and Efficiency: AI enables the automation of repetitive tasks in accounting, such as checking large amounts of data and analyzing financial data quickly. This can save auditors time and lighten the workload of accountants.

Artificial Intelligence (AI) enables comprehensive financial data analysis by analyzing vast volumes of data to identify patterns, trends, and abnormalities. This capacity offers insightful information to support managerial decision-making.

Risk Management: The use of AI in risk management enables companies to recognize various data formats and numbers more efficiently and accurately. Financial Planning and Forecasting: The integration of AI in management accounting improves financial planning and forecasting. Advanced AI algorithms can explore patterns in historical data and current market trends to assist in more accurate budgeting and cash flow projections.

Ethical and Transparency Challenges: The use of AI in management accounting also poses ethical challenges, including its impact on the behavior of managerial accountants, transparency, and trust in AI. This needs be taken into account to guarantee the moral application of AI in accounting.

The implementation of AI has been shown to have a favorable effect on management accounting, including the application of machine learning, chatbots, and smart city technologies. Therefore, there is a lot of room for improvement in efficiency, data analysis, and decision-making when using AI in management accounting and financial planning, but also raises ethical challenges that need to be considered.

REFERENCES

Ahmad, A. Y. A. B. (2024). Ethical implications of artificial intelligence in accounting: A framework for responsible ai adoption in multinational corporations in Jordan. *International Journal of Data and Network Science*, *8*(1), 401-414.

Alles, M., Munoko, I., & Vasarhelyi, M. (2022). Ethics and the future of artificial intelligence in auditing. In *Artificial Intelligence in Accounting* (pp. 217-230). Routledge.

Bakarich, K. M., & O'Brien, P. E. (2021). The robots are coming… but aren't here yet: The use of artificial intelligence technologies in the public accounting profession. *Journal of Emerging Technologies in Accounting*, *18*(1), 27-43.

Ballamudi, V. K. R. (2019). Artificial intelligence: Implication on management. *Global Disclosure of Economics and Business*, *8*(2), 105-118.

Beccalli, E., Elliot, V., & Virili, F. (2020). Artificial intelligence and ethics in portfolio management. In *Digital business transformation: Organizing, managing and controlling in the information age* (pp. 19-30). Springer International Publishing.

Beerbaum, D. (2019). Artificial Intelligence Ethics–The case of XBRL in Accounting Information Systems (AIS). *Artificial Intelligence Ethics–The case of XBRL in Accounting Information Systems (AIS)(March 5, 2019)*.

Bonsón, E., Lavorato, D., Lamboglia, R., & Mancini, D. (2021). Artificial intelligence activities and ethical approaches in leading listed companies in the European Union. *International Journal of Accounting Information Systems*, *43*, 100535.

Boulianne, E., Fortin, M., & Lecompte, A. (2023). Artificial intelligence and data analytics: Ethical implications for accounting. In *Research Handbook on accounting and ethics* (pp. 168-179). Edward Elgar Publishing.

Charifzadeh, M., & Taschner, A. (2017). *Management accounting and control: tools and concepts in a Central European context*. John Wiley & Sons.

Cho, O. H. (2024). Analysis of the Impact of Artificial Intelligence Applications on the Development of Accounting Industry. *Nanotechnology Perceptions*, 74-83.

Chowdhury, E. K. (2023). Integration of Artificial Intelligence Technology in Management Accounting Information System: An Empirical Study. In *Novel financial applications of machine learning and deep learning: algorithms, product modeling, and applications* (pp. 35-46). Cham: Springer International Publishing.

Corazza, G., & Zanin, F. (2020). Impact of artificial intelligence on managerial accounting systems. In *Handbook of research on IT applications for strategic competitive advantage and decision making* (pp. 17-35). IGI Global.

Fülöp, M. T., Topor, D. I., Ionescu, C. A., Cifuentes-Faura, J., & Măgdaș, N. (2023). Ethical concerns associated with artificial intelligence in the accounting profession: a curse or a blessing?. *Journal of Business Economics and Management*, *24*(2), 387-404.

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

Herath, S. K., & Herath, L. M. (2024). Understanding the ethical and social consequences of data analytics for organizational management in the

age of AI: accounting ethics perspective. In *AI and Data Analytics Applications in Organizational Management* (pp. 216-248). IGI Global.
Kamal, S. (2015). Historical evolution of management accounting. *The cost and management*, *43*(4), 12-19.
Khaled AlKoheji, A., & Al-Sartawi, A. (2022, May). Artificial intelligence and its impact on accounting systems. In *European, Asian, Middle Eastern, North African Conference on Management & Information Systems* (pp. 647-655). Cham: Springer International Publishing.
Korobeynikova, O. M., Korobeynikov, D. A., Popova, L. V., Chekrygina, T. A., & Shemet, E. S. (2021, March). Artificial intelligence for digitalization of management accounting of agricultural organizations. In *IOP Conference Series: Earth and Environmental Science* (Vol. 699, No. 1, p. 012049). IOP Publishing.
Kwafo, D. (2019). *The impacts of artificial intelligence on management accounting students: a case study at Oulu Business School, University of Oulu* (Master's thesis, D. Kwafo).
Larioui, A., & Himran, M. (2023). Impact of Artificial Intelligence on Operational Management and Accounting. *La Revue des Sciences Commerciales*, *22*(1), 22-44.
Lee, C. S., & Tajudeen, F. P. (2020). Usage and impact of artificial intelligence on accounting: Evidence from Malaysian organisations. *Asian Journal of Business and Accounting*, *13*(1).
Li, C., Haohao, S., & Ming, F. (2020, April). Research on the impact of artificial intelligence technology on accounting. In *Journal of physics: conference series* (Vol. 1486, No. 3, p. 032042). IOP Publishing.
Losbichler, H., & Lehner, O. M. (2021). Limits of artificial intelligence in controlling and the ways forward: a call for future accounting research. *Journal of Applied Accounting Research*, *22*(2), 365-382.
Liu, X. (2022). Transformation from Financial Accounting to Management Accounting in the Age of Artificial Intelligence. In *2021 International Conference on Big Data Analytics for Cyber-Physical System in Smart City: Volume 1* (pp. 1185-1195). Springer Singapore.
Maas, K., Schaltegger, S., & Crutzen, N. (2016). Integrating corporate sustainability assessment, management accounting, control, and reporting. *Journal of cleaner production*, *136*, 237-248.
Manyaeva, V. A., Piskunov, V. A., & Fomin, V. P. (2016). Strategic management accounting of company costs. *International Review of Management and Marketing*, 6(5), 255-264.
Moudud-Ul-Huq, S. (2014). The Role of Artificial Intelligence in the Development of Accounting Systems: A Review. *IUP Journal of Accounting Research & Audit Practices*, *13*(2).

Rawashdeh, A. (2023). The consequences of artificial intelligence: an investigation into the impact of AI on job displacement in accounting. *Journal of Science and Technology Policy Management*.

Rodgers, W., Murray, J. M., Stefanidis, A., Degbey, W. Y., & Tarba, S. Y. (2023). An artificial intelligence algorithmic approach to ethical decision-making in human resource management processes. *Human resource management review*, *33*(1), 100925.

Samuel, S. (2018). A conceptual framework for teaching management accounting. *Journal of Accounting Education*, *44*, 25-34.

Secinaro, S., Calandra, D., Lanzalonga, F., & Biancone, P. (2024). The Role of Artificial Intelligence in Management Accounting: An Exploratory Case Study. In *Digital Transformation in Accounting and Auditing: Navigating Technological Advances for the Future* (pp. 207-236). Cham: Springer International Publishing.

Vărzaru, A. A. (2022). Assessing artificial intelligence technology acceptance in managerial accounting. *Electronics*, *11*(14), 2256.

Velasquez, S., Suomala, P., & Järvenpää, M. (2015). Cost consciousness: conceptual development from a management accounting perspective. *Qualitative Research in Accounting & Management*, *12*(1), 55-86.

Wanderley, C., & Cullen, J. (2013). Management accounting change: A review. *Revista Base (Administração e Contabilidade) da UNISINOS*, *10*(4), 294-307.

Zhang, C., Zhu, W., Dai, J., Wu, Y., & Chen, X. (2023). Ethical impact of artificial intelligence in managerial accounting. *International Journal of Accounting Information Systems*, *49*, 100619.