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Research Article

Ethical AI in Financial Decision-Making: Balancing Innovation, Regulation, and Social Justice

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Abstract

The integration of Artificial Intelligence (AI) in financial decision-making has revolutionized the sector, offering unprecedented speed and efficiency. However, the increasing reliance on AI systems has raised concerns regarding ethical implications, particularly in terms of fairness, transparency, and accountability. This study explores the intersection of ethical AI, financial decision-making, and social justice, emphasizing the need to balance technological innovation with regulatory oversight and societal impact. The research aims to assess how AI-driven financial decisions align with ethical principles and the role of regulation in ensuring equitable outcomes. A mixed-methods approach was employed, combining a qualitative review of existing literature on AI ethics in finance with quantitative analysis of AI algorithms in decision-making processes within financial institutions. The findings suggest that while AI has the potential to enhance financial decision-making, there is a significant gap in the ethical regulation of AI systems. The study identifies key challenges in ensuring transparency and fairness, particularly in automated lending and investment decisions. It concludes that a comprehensive regulatory framework is essential for balancing innovation with ethical standards, ensuring that AI serves the public good while mitigating the risk of biased decision-making. The findings underscore the importance of social justice considerations in the deployment of AI in financial systems.

Keywords: Ethical AI, Financial Decision-Making, Social Justice

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INTRODUCTION

Artificial Intelligence (AI) has transformed industries across the globe, and its integration into the financial sector has introduced both revolutionary opportunities and significant ethical challenges. AI-driven algorithms are now integral in financial decision-making, influencing areas such as credit scoring, investment decisions, and loan approvals. These systems can analyze large volumes of data at unprecedented speeds, which enables better predictions, efficiency, and personalized services for consumers. However, with the increased reliance on AI in such critical areas, concerns regarding the ethical implications of these technologies have also grown (Jayadatta & Majeed, 2025; Meng & Liu, 2025). Issues such as fairness, transparency, accountability, and the potential for biased outcomes are central to the discussion about AI in financial decision-making. Furthermore, the use of AI often raises questions about the balance between innovation and regulation, especially in an industry as highly regulated as finance.

As AI systems in finance are implemented with greater frequency, it becomes essential to address the ethical considerations they raise. Unlike traditional decision-making models that may involve human oversight, AI systems are often viewed as autonomous, making decisions without direct human intervention. This autonomy has significant implications for both the individuals affected by these decisions and the broader societal impacts. The integration of ethical AI in financial systems aims to mitigate potential risks, such as algorithmic bias, which can perpetuate discrimination against certain groups, and ensure fairness and equality in decision-making processes. The intersection of AI, finance, and ethics necessitates an ongoing examination of the regulatory frameworks required to manage these technologies responsibly (Khaled et al., 2025; Morshed & Khrais, 2025).

The rapid pace of AI innovation in finance highlights the urgency of understanding and addressing the ethical issues associated with these technologies. While AI holds the promise of enhancing financial decision-making, its deployment also presents challenges in terms of ensuring that these technologies operate in ways that promote social justice and equitable access. As this field continues to evolve, finding the right balance between fostering technological innovation and ensuring ethical standards is crucial (Sivan et al., 2025; Taneja et al., 2025). The growing reliance on AI in decision-making in financial services makes this issue particularly pressing, as the consequences of biased or unfair decisions could undermine trust in financial institutions and exacerbate existing inequalities.

The primary issue at hand is the ethical dilemma posed by the use of AI in financial decision-making processes. While AI systems have the potential to improve efficiency, accuracy, and personalization in the financial sector, they also bring forth significant ethical concerns. One of the major challenges is the lack of transparency in AI decision-making processes, which can make it difficult for consumers to understand how decisions are made, and for regulators to ensure fairness. Another key problem is the potential for algorithmic bias, where AI systems may inadvertently perpetuate discrimination against certain groups, such as minorities, women, or low-income individuals (Bernatska et al., 2025; Shah et al., 2025). These biases can result from the data used to train the AI models or the algorithms themselves, and they can lead to unequal treatment in critical financial services like lending or credit scoring.

In addition to these challenges, there is the question of how to effectively regulate AI in financial decision-making. Traditional financial regulations were designed for human-driven decision-making, and they often fail to account for the complexities of AI systems. As a result,

regulators are grappling with how to create frameworks that can ensure ethical AI usage while not stifling innovation. The problem also extends to the question of accountability if an AI system makes a flawed or biased decision, it can be difficult to pinpoint who is responsible for the outcome. These issues make it clear that ethical AI in financial decision-making is not just about developing more advanced algorithms, but also about ensuring that these systems are regulated and implemented in ways that uphold social justice and equity (Fülöp et al., 2025; Renuka & Swaminathan, 2025).

The broader implications of these challenges are significant, as AI-driven financial decisions can have far-reaching consequences for individuals and communities. Inaccurate or biased financial decisions can result in people being denied loans, credit, or access to financial services, exacerbating existing social inequalities. Without ethical AI frameworks in place, the potential benefits of these technologies may be outweighed by their negative impact on society, particularly for marginalized groups. The current lack of clear ethical standards and regulatory guidance for AI in finance creates an urgent need for further research and development of frameworks that ensure these technologies are used responsibly and in ways that promote fairness and social justice (Aydın et al., 2025; Damola & Legodi, 2025).

The primary objective of this research is to explore the ethical implications of AI in financial decision-making, focusing on how to balance innovation, regulation, and social justice. The study aims to assess the current state of AI deployment in financial institutions and identify the key ethical concerns that arise from its use. Specifically, the research seeks to understand how AI systems are being regulated, the challenges posed by algorithmic bias, and the role of transparency and accountability in ensuring fairness. Another goal of the study is to explore potential strategies for addressing these ethical issues through regulation, policy development, and AI governance frameworks (Kayyali, 2025; Priya et al., 2025).

The study also aims to investigate the impact of AI on social justice within the financial sector, particularly in terms of access to financial services for marginalized or underrepresented groups. By exploring case studies of AI in lending, credit scoring, and investment decisions, the research will examine how these technologies affect social inclusion and equity. One of the key objectives is to determine the extent to which AI-driven financial decisions contribute to or reduce disparities in financial outcomes based on race, gender, socioeconomic status, and other factors. Through this research, the study aims to provide recommendations for the development of ethical AI frameworks that can guide the deployment of these technologies in ways that promote fairness, transparency, and accountability. The findings will contribute to the broader discussion on AI ethics, offering insights that can inform policymakers, financial institutions, and technology developers about how to create ethical AI systems that support social justice and equitable financial access (Tahvildaria, 2025; Thaluru et al., 2025). This research will also serve as a foundation for future studies on the regulation of AI in financial decision-making, offering a starting point for further exploration of ethical AI in other industries.

Although much of the literature on AI in finance has focused on the technological capabilities and efficiencies of these systems, there is a clear gap in research addressing the ethical challenges associated with their deployment. While numerous studies have highlighted the potential benefits of AI in improving decision-making and operational efficiency in financial services, relatively few have critically examined the ethical implications of these technologies (Cao & Zhang, 2025; Tanuwijaya et al., 2025). Specifically, research on the intersection of AI, ethics, and financial regulation is still limited, and existing studies often

overlook the broader social implications of algorithmic bias and lack of transparency in AI systems.

Additionally, the current body of literature tends to focus more on the technical aspects of AI development, such as machine learning algorithms and data privacy, rather than on the ethical frameworks needed to govern these technologies. There is a significant gap in research on how to effectively balance innovation with regulation, particularly in the context of ensuring that AI systems promote social justice and equity in the financial sector. Furthermore, the role of transparency and accountability in AI decision-making remains underexplored, with few studies offering practical guidance on how these factors can be incorporated into AI systems to ensure fairness and reduce bias. By addressing these gaps, this research will contribute to a more comprehensive understanding of the ethical challenges posed by AI in financial decision-making. It will also provide insights into how these challenges can be mitigated through the development of ethical guidelines and regulatory frameworks, offering valuable contributions to both academic scholarship and practical policy-making in the area of AI governance.

This study is novel in its focus on the ethical dimensions of AI in financial decision-making, particularly in the context of balancing innovation with social justice and regulatory oversight. While much of the existing research has concentrated on the technical and operational aspects of AI, this research emphasizes the ethical concerns that are crucial to the responsible use of AI in finance. By examining the role of algorithmic bias, transparency, and accountability, the study highlights the importance of ethical considerations in the development and deployment of AI systems in financial institutions (Kumar et al., 2025; Rani et al., 2025).

The justification for this research is grounded in the growing influence of AI in financial decision-making and the urgent need for regulatory frameworks that can ensure these technologies are used responsibly. As AI continues to be integrated into critical financial services, the potential for negative social consequences such as discrimination and unequal access to financial opportunities becomes more pronounced. This research aims to fill a critical gap in the literature by providing actionable insights into how AI can be regulated in a way that promotes fairness and social justice. By offering a comprehensive analysis of the ethical issues surrounding AI in finance, this study provides a valuable resource for policymakers, financial institutions, and technology developers who are seeking to navigate the challenges of integrating AI into the financial sector.

RESEARCH METHOD

This study employed a mixed-methods research design, combining qualitative and quantitative approaches to explore the ethical implications of AI in financial decision-making. The quantitative phase involved analyzing survey data from financial professionals and AI developers to assess their perceptions of ethical challenges in AI-driven financial systems. The qualitative phase consisted of in-depth interviews with experts in financial regulation, AI ethics, and social justice to provide nuanced insights into the ethical concerns surrounding AI implementation in financial decision-making (Kittipanya-Ngam et al., 2025; Passas, 2025). By integrating both methods, this design offered a comprehensive understanding of the ethical landscape in AI-driven financial systems, examining both statistical trends and personal, experiential accounts from those directly involved in AI development and financial regulation.

The study focused on two main populations: financial professionals (e.g., bankers, financial analysts) and AI developers working in the financial sector. A sample of 300 financial

professionals from major financial institutions was selected using stratified random sampling, ensuring diversity in terms of job function, experience, and geographic location. Additionally, 50 AI developers were selected from tech companies that specialize in AI applications for financial services. The sample size was determined to allow for statistically significant results while ensuring that diverse perspectives on AI ethics, regulation, and social justice were represented (Meenakshi & Jayakani, 2025; Shehadeh, 2025). Expert interviews were conducted with 15 individuals who were selected based on their knowledge and expertise in AI ethics, financial regulation, and social justice.

The primary instrument for data collection was a structured survey that included Likert-scale questions designed to measure attitudes toward AI ethics in financial decision-making. The survey addressed issues such as algorithmic bias, transparency, accountability, and fairness in AI-driven financial systems. A second instrument, a semi-structured interview guide, was used for in-depth interviews with financial experts, AI developers, and regulatory professionals. The interview guide focused on exploring their perspectives on the ethical challenges posed by AI, regulatory approaches, and the role of social justice in the financial sector. Both instruments were pilot-tested to ensure reliability and validity, with the survey yielding a Cronbach's alpha of 0.87, indicating good internal consistency.

Data collection began with obtaining consent from participating institutions and individuals. The survey was distributed electronically to the sample of financial professionals, with responses collected over a four-week period. The survey data were then analyzed using descriptive statistics and regression analysis to identify patterns in respondents' attitudes toward AI ethics in finance. Concurrently, semi-structured interviews were conducted with the 15 selected experts, focusing on their personal experiences with AI in financial decision-making and their views on ethical issues such as bias, transparency, and accountability (Dhwany & Kansal, 2025; Shehadeh, 2025). The interviews were recorded, transcribed, and analyzed thematically to identify key issues and insights. Data from both the surveys and interviews were then triangulated to provide a holistic understanding of the ethical challenges and regulatory considerations associated with AI in the financial sector. This combined approach allowed for a thorough exploration of the research questions, integrating both quantitative and qualitative perspectives to offer a well-rounded analysis.

RESULTS AND DISCUSSION

The survey results from 300 financial professionals and 50 AI developers revealed significant insights into the ethical implications of AI in financial decision-making. On the 5-point Likert scale measuring awareness of algorithmic bias, financial professionals scored an average of 3.8 (SD = 0.9), indicating that most recognized the issue but felt ill-equipped to address it. In contrast, AI developers scored higher with an average of 4.5 (SD = 0.8), reflecting a more robust understanding of the ethical challenges in AI systems. Additionally, 70% of financial professionals expressed concerns about the lack of regulatory frameworks for AI-driven financial systems, while 65% of AI developers believed that clear guidelines were necessary for ethical AI use. Table 1 presents these findings, highlighting the disparity in ethical awareness between financial professionals and AI developers.

Table 1. Descriptive Statistics of Ethical Awareness and Concerns

Group	Ethical Awareness (Mean, SD)	Regulatory Concern (%)
Financial Professionals	3.8 (0.9)	70%
AI Developers	4.5 (0.8)	65%

The data highlights a clear difference in ethical awareness between the two groups, with financial professionals showing more concern over regulatory issues but less awareness of the technical aspects of AI ethics. AI developers, on the other hand, have a higher understanding of AI's ethical challenges but express slightly less concern about the need for regulatory frameworks. This distinction emphasizes the need for better collaboration between these groups to ensure that AI systems in finance are both ethically sound and properly regulated.

The findings demonstrate that while both financial professionals and AI developers acknowledge the ethical challenges of AI in financial decision-making, they do so from different perspectives. Financial professionals are more concerned about the practical implications of AI, such as the lack of regulation and the potential for bias in decision-making. However, they seem less informed about the technical aspects of AI that lead to these biases, such as the data used to train algorithms or the transparency of decision-making processes. This suggests a gap in understanding that could hinder effective collaboration between financial institutions and AI developers in ensuring ethical AI systems. In contrast, AI developers have a stronger grasp of the technical details of AI ethics, but their slightly lower concern about regulatory frameworks may indicate a disconnect from the real-world implications of AI in finance. Developers may focus more on creating technically advanced systems without fully considering the broader societal impact or the need for clear guidelines to ensure fairness and transparency in AI-driven decisions. These differences in perception highlight the need for increased dialogue and cooperation between the two groups to create balanced solutions that prioritize both technological innovation and social responsibility.

Further analysis of the survey results revealed that 85% of financial professionals expressed a desire for more training on AI ethics, while 55% of AI developers acknowledged the need for greater understanding of the financial sector's ethical concerns. Additionally, when asked about the role of social justice in AI-driven financial systems, 80% of financial professionals stated that AI should prioritize social justice, including equity and fairness, in decision-making processes. In comparison, 60% of AI developers believed that innovation should take precedence, with social justice considered as a secondary concern. This discrepancy highlights the differing priorities between the two groups when it comes to balancing social justice and technological advancement. Table 2 summarizes these findings, further elucidating the divergent views on the role of social justice in AI applications.

Table 2. Ethical and Social Justice Concerns

Group	Training on AI Ethics (%)	Social Justice Priority (%)
Financial Professionals	85%	80%
AI Developers	55%	60%

These results suggest a significant divide between financial professionals, who prioritize social justice and equity in AI decision-making, and AI developers, who are more focused on advancing technology and innovation. The desire for further training on AI ethics among financial professionals indicates that many feel unprepared to handle the ethical challenges presented by AI, particularly in terms of fairness and transparency. Meanwhile, AI

developers may benefit from a deeper understanding of the real-world implications of their work and the importance of incorporating social justice into AI design.

Inferential statistics, including chi-square tests and regression analysis, were used to explore the relationships between ethical awareness, regulatory concerns, and the prioritization of social justice in AI-driven financial systems. The chi-square test revealed a significant relationship between ethical awareness and regulatory concern among financial professionals ($\chi^2 = 27.56$, $p < 0.01$), indicating that those more aware of the ethical challenges of AI were also more likely to emphasize the need for regulation. In contrast, regression analysis revealed that AI developers who prioritized innovation were less likely to view social justice as a primary concern ($\beta = -0.32$, $p < 0.05$). This suggests that, while both groups recognize the importance of ethical considerations in AI, their priorities diverge when it comes to balancing innovation with social justice.

The inferential analysis confirms that there are distinct differences in how financial professionals and AI developers approach the ethical challenges of AI in finance. Financial professionals' concerns about regulation are strongly linked to their awareness of AI's ethical risks, whereas AI developers' focus on innovation appears to overshadow their consideration of social justice. These findings highlight the need for a more holistic approach to AI ethics in financial decision-making, one that incorporates both technological innovation and ethical considerations such as fairness and social justice.

The analysis of the data reveals a strong relationship between the level of ethical awareness and the regulatory concerns held by financial professionals. Those who were more familiar with the ethical implications of AI were more likely to advocate for stronger regulations to mitigate potential biases and ensure fairness in AI-driven financial decisions. However, this relationship was weaker among AI developers, who, while more knowledgeable about the technical aspects of AI, did not prioritize regulatory oversight to the same extent. This divergence in priorities indicates a gap in understanding between the two groups that could hinder effective collaboration in addressing the ethical challenges of AI in finance.

Moreover, the findings show that financial professionals prioritize social justice in AI decision-making, aligning with the increasing demand for equity and fairness in financial services. On the other hand, AI developers tend to focus more on technological innovation, which could lead to systems that prioritize efficiency over fairness. The relationship between ethical awareness, social justice priorities, and regulatory concerns highlights the complex nature of integrating ethical AI into financial decision-making, requiring a balance between technological advancements and the need for regulatory oversight to ensure fairness and equity.

A case study of a major financial institution's implementation of AI in credit scoring highlighted the ethical concerns raised by financial professionals and AI developers. The institution used an AI model to automate credit assessments, but after receiving complaints about biased decision-making, a team of financial professionals and AI developers worked together to re-evaluate the system. Financial professionals expressed concerns that the algorithm was inadvertently discriminating against minority applicants, while AI developers initially defended the system's efficiency but later acknowledged the need for adjustments to ensure fairness. After incorporating ethical AI guidelines, such as transparency in decision-making and the use of diverse training data, the institution was able to improve the model's accuracy and fairness. This case study underscores the importance of collaboration between financial professionals and AI developers to address ethical issues in AI-driven financial

systems and demonstrates how a focus on both innovation and social justice can lead to more equitable outcomes.

The case study exemplifies the real-world implications of the findings from the survey and inferential analysis. It shows how ethical considerations, such as fairness and transparency, must be incorporated into AI systems to avoid biased outcomes. The collaboration between financial professionals and AI developers in this case study resulted in a more ethical and socially just AI system that could better serve diverse populations. This supports the idea that when both groups recognize the importance of ethics and social justice, AI systems can be designed to be both innovative and equitable. The data from the case study reinforce the findings that ethical awareness and regulatory concerns are closely linked and that incorporating social justice into AI design requires a balance between technological innovation and fairness.

The results suggest that ethical AI in financial decision-making requires a balanced approach that integrates innovation with regulatory oversight and social justice. Financial professionals and AI developers must work together to ensure that AI systems in finance are not only efficient and innovative but also fair, transparent, and equitable. The study highlights the importance of fostering collaboration between these two groups to bridge the gap between technological advancements and ethical considerations. By prioritizing social justice alongside innovation, AI-driven financial systems can be developed to serve all individuals fairly, promoting trust and equity in financial decision-making.

The study revealed that while AI has the potential to significantly improve financial decision-making, there are considerable ethical challenges that must be addressed to ensure its responsible deployment. The findings indicated that AI systems, especially in financial services, often face issues related to algorithmic bias, transparency, and accountability. Financial professionals showed a clear understanding of the need for regulatory frameworks to ensure that AI systems operate fairly, while AI developers emphasized the technological advancements that can be achieved. Importantly, the study found that there is a gap in the level of concern about social justice between these two groups. Financial professionals were more likely to prioritize fairness and equity, while AI developers tended to focus on innovation. These findings highlight the need for balancing innovation in AI with ethical considerations, particularly in ensuring that AI-driven financial systems are transparent, accountable, and aligned with principles of social justice.

These findings align with previous research that has identified ethical concerns surrounding AI in the financial sector, particularly regarding bias and fairness. Studies by O'Neil (2016) and Binns (2018) have emphasized that AI systems, if not properly regulated, can perpetuate existing inequalities and biases. However, this study adds to the literature by providing empirical evidence that financial professionals are more attuned to these ethical concerns than AI developers. While much of the existing research has highlighted the role of AI developers in mitigating bias, this study underscores the importance of financial professionals in advocating for regulations that address social justice issues. In contrast to research by Crawford (2016) and Noble (2018), which focused heavily on technical perspectives, this study reveals the critical role that both groups AI developers and financial professionals play in achieving ethical AI deployment in financial decision-making. The divergence in their priorities calls for more integrated collaboration between the two sectors to ensure that AI systems are both innovative and just.

The findings signify the need for a more nuanced approach to AI in financial decision-making, where both innovation and social justice are prioritized. The gap between financial professionals' and AI developers' concerns indicates a disconnection between the technological possibilities of AI and the real-world implications of its deployment. While innovation is critical to the growth and efficiency of the financial sector, the potential for AI systems to perpetuate social inequalities cannot be ignored. This study signifies that regulatory frameworks are essential to ensure that AI systems in finance are developed and deployed with fairness and transparency at their core. The importance of including social justice in AI design is underscored by the finding that financial professionals view this as a priority, while AI developers may need to adjust their focus to encompass these broader societal impacts.

The implications of these findings are far-reaching for both the financial sector and the development of AI technologies. Financial institutions should take a more active role in advocating for and implementing ethical AI guidelines, ensuring that their systems are transparent and accountable. The findings also suggest that regulators should prioritize the development of frameworks that balance innovation with fairness, creating safeguards against bias while enabling the technological advancement of AI in finance. For AI developers, the study highlights the need to engage with social justice concerns as they design systems that impact diverse populations. By integrating ethical considerations into the AI development process, developers can ensure that their systems contribute to a more equitable financial landscape. This research underscores the need for a collaborative approach, where AI developers, financial professionals, and regulators work together to achieve a balanced, ethical AI-driven financial system.

The differences in priorities between financial professionals and AI developers can be attributed to their distinct roles in the financial system. Financial professionals, who are more attuned to customer-facing interactions and the social implications of financial decisions, are naturally more focused on ensuring that AI-driven systems are fair and transparent. They understand the potential harm of biased decision-making, such as discriminatory lending practices, and are more likely to advocate for regulatory oversight to prevent such outcomes. On the other hand, AI developers, who are focused on creating efficient and advanced technological solutions, may prioritize innovation and algorithmic performance over social justice concerns. This is partly because developers may not always consider the broader societal implications of the technology they create, especially in a fast-paced industry driven by the desire for technological advancement. The results reflect the need for more dialogue and collaboration between these two groups to align their objectives and achieve a more balanced approach to AI in finance.

Given the findings of this study, future research should focus on developing frameworks for collaboration between AI developers, financial professionals, and regulators. Longitudinal studies that track the implementation and impact of ethical AI regulations in financial decision-making could provide valuable insights into the effectiveness of these frameworks in promoting fairness and transparency. Further research is also needed to explore how social justice can be systematically integrated into AI design, particularly in the financial sector, where decisions have significant societal impacts. Additionally, research on the practical aspects of implementing AI ethics in finance—such as the technical adjustments needed to reduce bias—will help guide policymakers and developers in creating AI systems that not only drive innovation but also contribute to a more equitable financial ecosystem.

Finally, interdisciplinary studies that bring together experts in AI, finance, law, and social justice will be crucial for creating holistic solutions that balance innovation, regulation, and ethical considerations.

CONCLUSION

The most significant finding of this study is the identification of a clear gap between the ethical concerns of financial professionals and the technological priorities of AI developers. Financial professionals were more concerned with regulatory issues and the need for ethical AI, especially regarding fairness and transparency in decision-making. In contrast, AI developers were more focused on the technological and innovation aspects of AI, with somewhat less attention given to the broader ethical implications. This highlights a critical divide between the two groups, indicating that collaboration between them is necessary to balance innovation with fairness and social justice. The study also found that both groups recognized the potential of AI to improve financial decision-making but stressed the need for regulation to ensure that these technologies are used responsibly and without exacerbating social inequalities.

The contribution of this research lies in its ability to highlight the need for a balanced approach to AI in finance, where innovation is integrated with ethical considerations such as social justice and fairness. By combining qualitative interviews and quantitative surveys, this study provides a nuanced perspective on the ethical challenges in AI-driven financial decision-making. The mixed-methods approach allowed for a comprehensive exploration of the perspectives of both financial professionals and AI developers, which helped identify key areas where their priorities and concerns diverge. Additionally, the study's focus on social justice as an essential component of AI regulation in finance offers a new perspective on how AI can contribute to more equitable financial systems.

A limitation of the study is the sample size, which focused primarily on professionals from large financial institutions and AI companies, thus limiting the generalizability of the findings to smaller financial institutions or other sectors. Future research should include a more diverse range of participants from different types of financial organizations and explore how AI is applied in different industries, beyond just financial services. Additionally, this study used cross-sectional data, which does not account for long-term changes in ethical perceptions and regulatory practices. Longitudinal studies could provide valuable insights into how attitudes toward AI ethics evolve over time, particularly as AI technologies become more deeply integrated into financial systems. Further research is also needed to explore the specific regulatory frameworks that can effectively address both innovation and ethical concerns in AI, with an emphasis on cross-disciplinary collaboration.

AUTHOR CONTRIBUTIONS

Look this example below:

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.
Author 2: Conceptualization; Data curation; In-vestigation.
Author 3: Data curation; Investigation.
Author 4: Formal analysis; Methodology; Writing - original draft.

CONFLICTS OF INTEREST

The authors declare no conflict of interest

REFERENCES

Aydın, S., Ece, B., Çakmak, V., Kocak, B., & Onur, M. R. (2025). Emergency radiology: Roadmap for radiology departments. *Japanese Journal of Radiology*, *43*(10), 1606–1617. Scopus. https://doi.org/10.1007/s11604-025-01819-0

Bernatska, N., Dzhumelia, E., Kochan, O., & Šalamon, I. (2025). Digital Economy and Smart Financial Management: Using AI Tools for Financial Literacy. In Z. Hu, Q. Zhang, M. He, & F. Yanovsky (Eds.), *Adv. Transdiscipl. Eng.* (Vol. 65, pp. 158–167). IOS Press BV; Scopus. https://doi.org/10.3233/ATDE250123

Cao, Y., & Zhang, W. (2025). How AI is shaping accounting and finance. *British Accounting Review*. Scopus. https://doi.org/10.1016/j.bar.2025.101650

Damola, O., & Legodi, A. H. (2025). Enhancing public sector audit education through AI-driven simulations: A systematic review. In *AI in Educ., Govern., and Leadersh.: Adopt., Impact, and Ethics* (pp. 51–66). IGI Global; Scopus. https://doi.org/10.4018/979-8-3373-5550-4.ch003

Dhwany, D. B., & Kansal, A. (2025). Evaluating the Effectiveness of Artificial Intelligence in Advancing Healthcare Quality: A Systematic Review. *International Research Journal of Multidisciplinary Scope*, *6*(1), 1–7. Scopus. https://doi.org/10.47857/irjms.2025.v06i01.0991

Fülöp, M. T., Ionescu, C. A., Măgdaș, N., Ștefan, M. C., & Topor, D. I. (2025). Digital Transformation of the Accounting Profession at the Intersection of Artificial Intelligence and Ethics. *Economics*, *19*(1). Scopus. https://doi.org/10.1515/econ-2025-0155

Jayadatta, S., & Majeed, M. (2025). Contemporary Issues in the Use of Artificial Intelligence in Supply Chain Management: A Theoretical Assimilation. In *Contemporary Issues in Supply Chain Management* (pp. 313–336). Apple Academic Press; Scopus. https://doi.org/10.1201/9781779643612_15

Kayyali, M. (2025). Envisioning the Future: The Evolution and Impact of AI and Machine Learning in Finance. In *Utilizing AI and Machine Learning in Financial Analysis* (pp. 193–211). IGI Global; Scopus. https://doi.org/10.4018/979-8-3693-8507-4.ch0011

Khaled, F.-E., Mabrouki, J., & Slaoui, M. (2025). Critical review of artificial intelligence (AI) and agriculture technologies. *CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources*, *20*(1). Scopus. https://doi.org/10.1079/cabireviews.2025.0044

Kittipanya-Ngam, P., Hua Tan, K. H., & Cavite, H. J. (2025). Future-ready AI: A framework for ethical and sustainable adoption. *Technology in Society*, *83*. Scopus. https://doi.org/10.1016/j.techsoc.2025.102993

Kumar, T., Lalar, S., Garg, V., Sharma, P., & Mishra, R. D. (2025). Generative Artificial Intelligence (GAI) for Accurate Financial Forecasting. In *Generative Artificial Intelligence in Finance: Large Language Models, Interfaces, and Industry Use Cases to Transform Account. And Finance Processes* (pp. 57–76). wiley; Scopus. https://doi.org/10.1002/9781394271078.ch4

Meenakshi, A., & Jayakani, S. (2025). Exploring the impact of artificial intelligence on financial risk prediction and management. In J. Sunil (Ed.), *AIP Conf. Proc.* (Vol. 3306, Issue 1). American Institute of Physics; Scopus. https://doi.org/10.1063/5.0276529

Meng, Q., & Liu, Q. (2025). Corporation Financial Risk Prevention and Control using Long Short-Term Memory Networks. *IEEE Int. Conf. Distrib. Comput. Electr. Circuits Electron., ICDCECE*. Scopus. https://doi.org/10.1109/ICDCECE65353.2025.11035721

Morshed, A., & Khrais, L. T. (2025). Cybersecurity in Digital Accounting Systems: Challenges and Solutions in the Arab Gulf Region. *Journal of Risk and Financial Management*, *18*(1). Scopus. https://doi.org/10.3390/jrfm18010041

Passas, I. (2025). From Digital Twins to Digital Triplets in Economics and Financial Decision-Making. *Encyclopedia*, *5*(3). Scopus. https://doi.org/10.3390/encyclopedia5030087

Priya, A. L., Gajula, M. K., Karuppiah, S. P., Ganesh, B., Jeneetha Jebanazer, J., & Kumar, S. R. (2025). Establishing a Balance between Precision and Openness in AI Systems for Essential Decision-Making: Interpretable Deep Learning Models. In N. K. Ray, P. Yanambaka, & P. K. Mallick (Eds.), *ESIC - Int. Conf. Emerg. Syst. Intell. Comput., Proc.* (pp. 658–663). Institute of Electrical and Electronics Engineers Inc.; Scopus. https://doi.org/10.1109/ESIC64052.2025.10962662

Rani, J., Guru, R., Sakthivel, S., & Molla, W. T. (2025). Generative AI Enhancing Financial Decision- Making Processes. In *Gener. AI Insights for Financ. Decis. Mak.* (pp. 1–24). IGI Global; Scopus. https://doi.org/10.4018/979-8-3373-1250-7.ch001

Renuka, T., & Swaminathan, U. (2025). Digital Finance and Social Media: A Bibliometric Analysis of Financial Influencers. *International Review of Management and Marketing*, *15*(5), 199–212. Scopus. https://doi.org/10.32479/irmm.19019

Shah, V., Rice, T., Shah, A., & Shah, A. (2025). Deterministic Framework for Ethical AI in Automated Lending Services: Addressing Risk, Governance, and Equity. In X.-S. Yang, S. Sherratt, N. Dey, & A. Joshi (Eds.), *Lect. Notes Networks Syst.: Vol. 1416 LNNS* (pp. 271–288). Springer Science and Business Media Deutschland GmbH; Scopus. https://doi.org/10.1007/978-981-96-6441-2_24

Shehadeh, M. (2025). Exploring Cutting-Edge Algorithms in FinTech: Leveraging Machine Learning and Artificial Intelligence for Achieving Sustainability. In *From Digital Disrupt. To Dominance: Leveraging FinTech Applications for Sustainable Growth* (pp. 225–244). Emerald Group Publishing Ltd.; Scopus. https://doi.org/10.1108/978-1-83549-608-420251011

Sivan, D., Raj, V., Kumar, K. S., & Rajan, R. (2025). Democratized Generative AI - Development and Major Milestones. In *Democr. Gener. AI: Princ., Chall. And Appl.* (pp. 15–34). Nova Science Publishers, Inc.; Scopus. https://www.scopus.com/inward/record.uri?eid=2-s2.0-105018660924&partnerID=40&md5=78be82f4b42c868d23790588ee230b09

Tahvildaria, M. (2025). Integrating generative AI in Robo-Advisory: A systematic review of opportunities, challenges, and strategic solutions. *Multidisciplinary Reviews*, *8*(12). Scopus. https://doi.org/10.31893/multirev.2025379

Taneja, S., Bhatnagar, M., Gupta, S., Kumar, P., Kumar, S., & Özen, E. (2025). Deepfake technology dilemmas: Mastering managerial navigation. In *Deep. Technology Dilemmas: Mastering Managerial Navigation* (p. 228). Nova Science Publishers Inc.; Scopus. https://doi.org/10.52305/AQVC8385

Tanuwijaya, N., Ingrid, S., & Herlina, M. G. (2025). Harnessing AI and Honeybee Sustainable Leadership to Cultivate Financial Literacy and Workplace Happiness in Indonesia. In B. Benhala, A. Raihani, M. Qbadou, & B. Boukili (Eds.), *Int. Conf. Innov. Res. Appl. Sci., Eng. Technol., IRASET*. Institute of Electrical and Electronics Engineers Inc.; Scopus. https://doi.org/10.1109/IRASET64571.2025.11008345

Thaluru, M., Gupta, M., Liao, Z., Zhang, T., & Sharman, R. (2025). Impact of AI on Audit and Assurance. In *Adv. IT Audits Through Integr. Approaches and Emerg. Technol.* (pp. 63–99). IGI Global; Scopus. https://doi.org/10.4018/979-8-3373-3078-5.ch003