Agentic Artificial Intelligence in Business: A Systematic Literature Review of Roles, Impacts, and Ethical Challenges

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Abstract. The increasing autonomy of Artificial Intelligence (AI) systems has given rise to Agentic AI, AI agents capable of goal-driven decision-making, self-learning, and autonomous execution of tasks in dynamic environments. This evolution raises critical implications for business practices, governance, and ethical accountability. This study aims to systematically explore the roles, impacts, and ethical challenges of Agentic AI in the business domain. Using a Systematic Literature Review (SLR) methodology, 15 peer-reviewed articles published between 2020 and 2025 were selected from the ScienceDirect database, filtered for relevance in the fields of Business, Management, and Accounting. The results indicate that Agentic AI plays a transformative role in strategic decision-making, operational efficiency, and innovation, particularly through AI-powered managers, virtual agents, and autonomous service systems. However, the implementation of such systems also introduces ethical risks, including algorithmic bias, privacy concerns, and accountability gaps. The study concludes that while Agentic AI offers significant potential to reshape business processes and organizational structures, its success depends on ethical system design, human oversight, and long-term trust-building mechanisms. These findings contribute to a deeper understanding of how autonomous AI systems can be responsibly integrated into future business environments.

Keywords: Agentic Artificial Intelligence, Decision-Making, Business Innovation, Ethical Governance, Human-AI Interaction

Introduction

Research (Hughes et al., n.d.) shows that Agentic AI systems can change the way organizations work by making decision-making more open to multiple parties and decentralizing authority structures so that they are not concentrated in a single point. Autonomous AI agents can independently handle complex tasks, such as designing adaptive treatment plans in healthcare, predicting supply chain disruptions in real time, and automating business processes to shift tasks from humans to AI for efficiency and innovation (Hughes et al., n.d.). However, this study highlights that the adoption of such systems also poses serious challenges, including issues of shared accountability in decision-making, compatibility with legacy systems, and bias in AI-based processes. The authors conclude that while agentic AI promises increased effectiveness, a strong governance framework, cross-industry

collaboration, and ethical design research are needed for safe and scalable implementation (Hughes et al., n.d.). In other words, agentic AI offers high potential for automation and cross-functional collaboration across various sectors, but companies must implement transparency mechanisms and workforce retraining to ensure optimal and responsible use of AI (Hughes et al., n.d.). These findings are relevant to this study as they illustrate the contribution of agentic AI in supporting strategic business decisions while warning of its ethical and technical limitations.

In the context of future digital organizations (Web 4.0), (Gürpinar, 2025) outlines a framework for integrating autonomous AI agents into decentralized ecosystems such as blockchain and the Internet of Things. He emphasizes that AI agents require decentralized coordination, transparent behavioral norms, and scalable governance structures to operate autonomously and align with human values (Gürpinar, 2025). Companies adopting Web 4.0 applications must address challenges such as data privacy, AI training, and multi-agent interactions to ensure the system remains secure and trustworthy. Additionally, Gürpinar highlights the potential of AI agents in the new digital economy: these agents are expected to participate in autonomous transactions, supply chain optimization, and decentralized finance (DeFi), replacing many traditional economic functions. These findings indicate that the use of agentic AI can drive the evolution of business models and markets (e.g., toward digital labor ecosystems and blockchain finance) while demanding appropriate infrastructure and policies. This contribution is significant for current research as it links AI agents to broader organizational and market transformations, particularly in connected and decentralized business environments.

From a corporate performance perspective, Chen et al. (2022) in their resource-based view model show that corporate AI capabilities can improve performance through AI-based decision-making. Autonomous AI contributes to organizational creativity and smart management, which act as intermediaries between AI capabilities and corporate performance (Chen et al., 2022). For example, a strong innovation culture reinforces the positive effect between creativity and AI-based decisions on performance, and environmental dynamics moderate this relationship. Their survey results indicate that the use of AI in business processes and strategic decision-making, including automated recommendations, significantly improves corporate efficiency and competitive advantage. These findings underscore that agentic AI is not only transformational for operational processes but can also be a source of competitive advantage when supported by an innovation culture. This research is relevant as it demonstrates how the role of autonomous AI in strategic decision-making impacts business outcomes and reinforces the importance of human-AI collaboration in modern organizations.

The ethical aspects of using agentic AI have also been widely discussed. Maiti et al. (2025) reviewed various ethical challenges in the adoption of AI in business. They found that ethical concerns often serve as major barriers, including issues related to privacy and data protection, bias and fairness, transparency and explainability of processes, as well as job displacement and workforce changes due to automation (Maiti et al., 2025). The report also highlights concerns about algorithmic manipulation, legal liability, and accountability mechanisms in AI-assisted decision-making. To address these issues, the researchers recommend best practices such as routine bias audits, strict privacy policies, and ethical awareness training for executives and workers. This analysis is important because it shows that while agentic AI brings efficiency, its implementation in the business world must be accompanied by a governance framework that ensures accountability and fairness. In the context of this research, this

underscores the need to consider ethical principles and regulations when designing autonomous AI systems in a business environment.

This study aims to explore the roles, impacts, and ethical issues of using Agentic AI in the business world. This study aims to answer the following research questions:

1) RQ 1: What are the main roles and functions of Agentic AI in supporting business decision-making?

2) RQ 2: What are the impacts of implementing Agentic AI on operational efficiency and business innovation?

3) RQ 3: How are ethical issues, trust, and responsibility considered in the application of Agentic AI in the business world?

Methods

This study uses a systematic literature review method to analyze, summarize, and draw conclusions from the available literature on Agentic AI in the world of business and management. This approach aims to identify, evaluate, and interpret all relevant research available on a topic, while also assessing the quality of the evidence (Lame, 2019). This review strategy includes setting a time frame, selecting databases, selecting articles, and classifying articles.

The method used has three stages consisting of the planning stage, the conducting stage, and the reporting stage. In the planning stage, the context of the article search is determined, and the research questions that will form the basis of the literature review are identified. The next stage is the search process, which involves identifying reference materials or literature sources. The final stage is reporting and summarizing the results of the proposed research activities and discussion.

A. Research Questions

A list of research questions can be created based on the research needs of the topic being discussed. The following is a list of research questions:

1) RQ 1: What are the main roles and functions of Agentic AI in supporting business decision-making?

2) RQ 2: What is the impact of Agentic AI implementation on operational efficiency and business innovation?

3) RQ 3: How are ethical issues, trust, and responsibility considered in the application of Agentic AI in the business world?

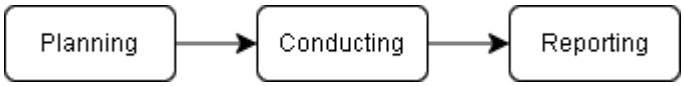


Figure 1. SEQ Figure * ARABIC 1: Steps of Systematic

Literature Review (SLR)

B. Search Process

This review strategy involves determining the time frame, selecting the database, selecting articles, and classifying articles. The publication dates of the journal articles used in the review and assessment process range from early 2020 to 2025. The year 2020 was chosen as the starting point for data collection because research on Agentic AI had increased significantly among academics in that year.

The latest literature on Agentic AI in the business and management world was identified using the Science Direct database. Initially, the author searched for articles containing the keyword "Agentic AI" within the 2020-2025 timeframe. In the next screening stage, the author conducted a screening process using the "filter" feature in the Business, Management, and Accounting fields. The final step was to analyze the suitability of the titles and abstracts with the predetermined Research Questions.

C. Data Analysis

At this stage, the data collected in the previous stage will be analyzed to answer each of the predetermined research questions.

Result and Discussion

The publication dates of the journal articles used in the review and assessment process range from early 2020 to 2025. The year 2020 was chosen as the starting point for data collection because research on Agentic AI had increased significantly among academics that year.

The latest literature on Agentic AI in the world of business and management was identified using the Science Direct database. Initially, the author searched for articles containing the keyword "Agentic AI" and found 245 results.

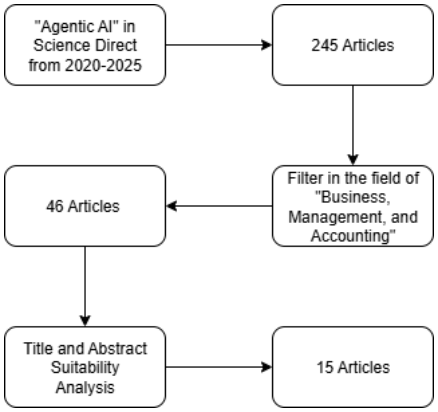
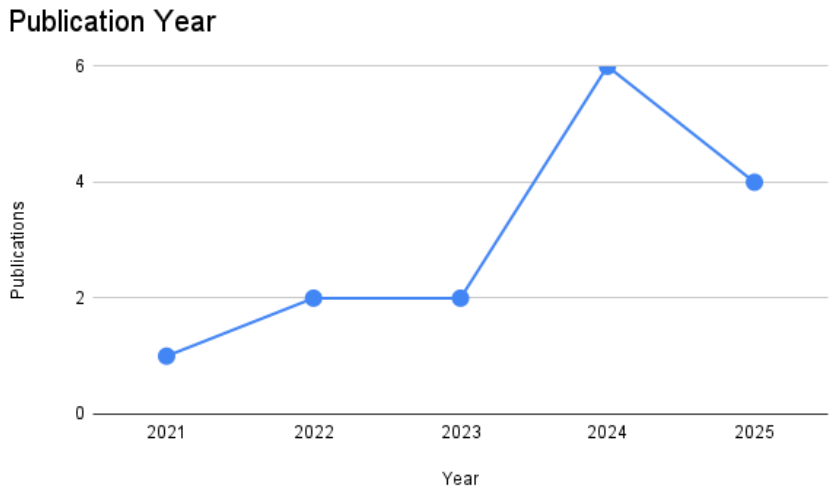


Figure 2. SEQ Figure * ARABIC 2:

PRISMA Flow Diagram

The next step was to filter the fields of Business, Management, and Accounting and find 46 articles. The final step taken by the author was to analyze the suitability of the titles and abstracts with the Research Questions. This procedure resulted in the submission of 15 articles for review.

Dalam penelitian ini, penulis membatasi tahun publikasi yaitu dari tahun 2020 - 2025. Pada gambar berikut merupakan grafik yang menggambarkan urutan data yang dikumpulkan dan jumlah artikel



dari tahun 2020 hingga 2025.

Figure 3. SEQ Figure * ARABIC 3:

Publication Year

Between 2020 and 2025, 15 articles were published. These 15 articles came from various sources: Technological Forecasting & Social Change (3 articles), Telecommunications Policy (1 article), International Journal of Research in Marketing (2 articles), Decision Support Systems (1 article), Journal of Business Research (1 article), Journal of Retailing and Consumer Services (3 articles), Tourism Management (1 article), Journal of Retailing (1 article), and Annals of Tourism Research (2 articles).

Table 1: journals sourced in the systematic literature review

Source Tittle	Year	Quantity	Indeks Scopus
Technological Forecasting & Social Change	2021, 2022, 2023	3	Q1
Telecommunications Policy	2022	1	Q1
International Journal of Research in Marketing	2023, 2024	2	Q1
Decision Support Systems	2024	1	Q1
Journal of Business Research	2024	1	Q1
Journal of Retailing and Consumer Services	2024 (2 Articles), 2025	3	Q1
Tourism Management	2024	1	Q1

Journal of Retailing	2025	1	Q1
Annals of Tourism Research	2025 (2 Articles)	2	Q1

The role and main functions of Agentic AI in supporting business decision-making.

The application of Agentic Artificial Intelligence in the business world has evolved from a mere automation tool to an autonomous entity that plays an active role in strategic and operational decision-making. The role of Agentic AI includes functions as a decision-support system, virtual manager, and even a social entity within the organizational structure.

In the context of customer service, (Baabdullah et al., 2022) show that the quality of customers' virtual experiences with chatbots is influenced by transparency, responsiveness, and personalization capabilities, which directly contribute to communication quality and user satisfaction. Chatbots are not merely communication tools but also agents that create virtual flow experiences mediating customer relationships with companies.

(Jeon, 2022) highlights a new dimension of AI agents as leaders. In the experiments conducted, customers exhibited more positive attitudes toward chatbots labeled as "AI managers" compared to "AI representatives" or even human managers. This job title not only influences perceptions of competence and trust but also purchase intent toward recommended products.

In the organizational management sector, (Stylos et al., 2025) introduce the Hybrid Transformative Dynamic Flows (HTDF) framework, which integrates Agentic AI into organizational socialization and collective decision-making. This framework is rooted in sociotechnical systems theory and emphasizes the importance of social legitimacy and team processes in integrating AI with human organizational practices.

Meanwhile, in the cybersecurity domain, (Kshetri, 2025) identifies that Agentic AI has the potential to revolutionize SOCs (Security Operation Centers). Agentic AI can autonomously detect, respond to, and mitigate security threats without human intervention, saving time and significantly improving the efficiency of responses to cyberattacks.

Thus, Agentic AI is no longer merely a supporting technology but has evolved into an organizational actor with social, structural, and strategic roles within the business ecosystem.

The impact of Agentic AI implementation on operational efficiency and business innovation.

Agentic AI has been proven to contribute significantly to efficiency and innovation in business services, both in micro (user experience) and macro (operational structure) contexts. Research (Guo et al., 2025) shows that empathetic responses from AI can effectively recover from service failures. When AI demonstrates empathy in the context of service failures, users' intent to continue using the service

increases significantly. However, this effectiveness depends on the level of human interaction needed and the urgency of the task; if the task is urgent, the empathetic effect of AI diminishes.

(Bai et al., 2024) add that interaction experiences emphasizing AI's "warmth" can enhance perceptions of competence and overall service quality. The longer users interact, the more important warmth becomes in determining positive service evaluations, indicating a long-term relationship between AI's anthropomorphic design and user loyalty.

In the field of sustainable innovation management, (Wang & Zhang, 2025) found that the implementation of AI-based digital employees can drive ambidextrous green innovation. This success is mediated by chatbot design interactions and determined by the level of ethical anxiety felt by users. This shows that innovation is not only technical but also depends on the perceived moral and social value of AI.

At the organizational level, (Kshetri, 2025) noted that SOC operational efficiency is projected to increase by up to 40% by 2026 due to the contribution of Agentic AI. This efficiency is achieved through automated responses, real-time threat detection, and reduced human analysis time.

Overall, Agentic AI not only provides practical efficiency but also acts as a driver of strategic innovation by integrating social, emotional, and environmental dimensions into business practices.

Considerations of ethics, trust, and responsibility in the application of Agentic AI in the business world.

Ethical and trust dimensions are important focuses in the implementation of Agentic AI. The success of Agentic AI adoption depends heavily on the extent to which organizations are able to manage user perceptions of transparency, exploitation, and privacy threats.

(Lefkeli et al., 2024) found that when users were asked to share information with AI rather than humans, they felt a higher sense of exploitation, which in turn reduced trust in the brand. The perception that AI shares information with a broader audience acts as a psychological mechanism that erodes this trust.

This is reinforced by (Sohn et al., 2025), who found that the passive presence of AI alone can cause greater privacy concerns than the presence of humans. This finding is based on reactance theory, in which individuals feel their freedom is threatened by indirect surveillance from AI agents.

A study by (Hu et al., 2024) shows that there is an AI trust divide between users in different positions, such as recruiters and job candidates. This trust gap is explained through the theory of motivated reasoning, where individuals with different roles process AI information differently due to their subconscious motivations, creating bias toward AI in important decision-making.

Additionally, the aspect of moral responsibility is also a concern. Studies by (Jeon, 2022) and (Stylos et al., 2025) show that assigning managerial positions or organizational roles to AI raises questions about legitimacy and accountability. If AI takes over managerial functions, the question arises: who is responsible when mistakes occur? This demands new governance models that consider morality, oversight, and systemic transparency.

Therefore, while Agentic AI brings efficiency and innovation, its implementation must be accompanied by a redesign of ethical and trust structures that consider the long-term relationship between humans and technology.

Conclusion

This study aims to provide a comprehensive understanding of the role, impact, and ethical challenges of implementing Agentic Artificial Intelligence in a business context through a Systematic Literature Review approach. Based on an analysis of fifteen recent scientific articles (2020–2025), this study compiles important findings to answer three main research questions.

First, the findings show that Agentic AI is no longer merely a technical tool but has taken on the role of an autonomous agent in business decision-making. Agentic AI manifests in the form of AI-powered managers, virtual agents, and cybersecurity responders capable of performing managerial, operational, and even social functions within organizational structures. This role indicates a fundamental shift in how technology is positioned within the business ecosystem.

Second, Agentic AI has proven to have a significant contribution to improving operational efficiency and driving innovation across various sectors. Through adaptive capabilities such as empathetic responses, anthropomorphic interactions, and real-time data processing, Agentic AI enhances customer experience quality while accelerating digital transformation processes. However, these achievements are highly dependent on the usage context and user characteristics, such as the urgency of tasks and the need for human interaction.

Third, this study also highlights serious challenges related to ethical, trust, and responsibility aspects. Users' tendency to feel exploited when interacting with AI, privacy concerns arising solely from the passive presence of AI, and trust gaps between roles (e.g., between recruiters and candidates) all indicate that the successful implementation of Agentic AI must be supported by ethical and transparent system design. Trust is not an automatic result of high AI performance but a social construct that must be consciously built through communication, legitimization, and expectation management.

Overall, this study emphasizes that the adoption of Agentic AI in business is a multidimensional phenomenon that encompasses not only technological aspects but also organizational, psychological, and ethical dimensions. Therefore, the success of Agentic AI utilization depends on the balance

between technological innovation and organizational readiness to manage cultural change, user trust, and new accountability structures. Future research should delve deeper into the governance and regulatory mechanisms of Agentic AI, as well as how human-AI interactions can be developed toward more collaborative, adaptive, and meaningful directions.

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