

Systematic literature review on the rise of agentic AI in enterprise operations

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Abstract

The study aims to analyze Agentic AI's impact on enterprise operations, specifically emphasizing its benefits, challenges and strategic implementation. Agentic AI has shown the capability of independently interpreting data-driven tasks and aligning them to continuously changing business conditions regardless of human intervention. The major benefit of incorporating Agentic AI has been the ability to introduce transformation within supply chain management and the efficiency of enterprise resource planning. It has been highlighted that AI-driven ERP solutions have contributed towards improving and optimizing the inventory management process while forecasting future required levels. Regarding enterprise decision-making, the upcoming era of Agentic AI will be responsible for implementing hybrid AI-human collaboration models. At the same time, as AI systems have been brought as a supplement to human decision-making and not to replace it entirely, they must be used as style engines.

Keywords: Agentic AI; AI Optimization; Artificial Intelligence Decision-Making; AI in Business; AI Automation

1 Introduction

The drastic development prominent in artificial intelligence has brought to the forefront the broad transformation within different aspects of business activities, including automation in operations and decision-making. AI systems have been initially developed as passive tools that are responsible for providing help for data processing, repetitive activities, and process optimization. With the advent of Agentic AI, a model capable of autonomous decision-making and executing actions, AI has demonstrated a significant paradigm shift (Shavit et al., 2023). Without the assistance of a human representative, the agentic AI have the proficiency to autonomously understand data, initiate tasks, and adjust according to the constantly changing business landscape. This change has pointed out the significant implications of scalability, competitive advantage, and company efficiency, making it a crucial area of upcoming research (Lee, 2025). Agentic AI has incorporated the features of natural language processing, machine learning and advanced automation, which has made the process of company functions like customer relationship management, supply chain management, IT operations and cyber security much easier than before and has reduced the chances of error occurring (Sivakumar, 2024). The organizations that have adopted Agentic AI have experienced high-cost savings, increased operational efficiency and enhanced decision-making. Despite its potential, technology has raised major concerns about ethical accountability, data security, and its effect on human employment.

1.1 Problem statement

While Agentic AI is responsible for significant opportunities and scope provided to business organizations, it has also enabled them to experience autonomy, highlighting substantial challenges. Business organizations have been subjected to difficulties maintaining governance, upholding transparency and adhering to ethical compliance in deploying AI agents which might operate independently (Chan et al., 2023). Moreover, issues like security vulnerability, lack of regulatory framework and algorithmic bias have hampered the seamless integration of Agentic AI within enterprise

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settings (Hayley Clatterbuck, Clinton Castro and Arvo Muñoz Morán, 2024). The inadequate accountability guidelines have resulted in a significant risk of AI leading to unethical or faulty decisions, which might hinder reputational and financial damage for business organizations. Other than this, numerous organizations have been struggling to integrate Agentic AI within the existing system due to the inability of the infrastructure and technical capabilities to support the advanced version (Ogbu, 2023). A comprehensive understanding of the identified issues is necessary for developing strategic solutions to optimize AI benefits.

Research aim

The study aims to analyze the role of Agentic AI in enterprise operations, particularly emphasizing the benefits, challenges, and strategic implementation.

Research objectives

- To examine the role of Agentic AI in enhancing enterprise efficiency and decision-making.
- To identify key challenges associated with deploying agentic AI, including security risks, ethical concerns, and regulatory issues.
- To explore best practices for integrating Agentic AI into business operations effectively.
- To provide strategic recommendations for enterprises seeking to implement Agentic AI while ensuring compliance and accountability.

1.2 Significance of the study

The study is significant for AI developers, business leaders and policymakers since it will provide information regarding the transformative potential of agentic AI (Roy, 2025). By pointing out the risks and opportunities associated with the technology, this study will enable organizations to adopt the knowledge required for implementing AI responsibly (Viswanathan, 2025). It will also contribute to words supporting the ongoing discussion regarding AI ethics to shape the regulatory policies for ensuring transparent and fair AI applications.

1.3 Research Gap

The published resources have initially emphasized the conventional AI applications within business organizations, giving a limited examination of Agentic AI regarding security risk governance challenges and autonomy. While studies discuss AI automation, few address the practical implications of deploying AI agents with minimal human intervention (Casper et al., 2025). This study focuses on filling the gap by presenting a comprehensive analysis of Agentic AI within enterprise operations, thereby providing strategic suggestions regarding the efficient and ethical implementation of the technology.

2 Literature review

The innovation in Agentic AI within enterprise operations has marked the shift from traditional automation to autonomous systems proficient in collaboration, decision-making, and problem-solving.

2.1 Agentic AI and Enterprise Transformation

Agentic AI has integrated cognitive abilities within enterprise workflow, bringing optimization within operational efficiency and decision-making processes (Tupe & Thube, 2025). The existing papers highlighted the role of AI-driven workflow and API architectures, which have helped business organizations adapt their systems to integrate AI-driven automation seamlessly. These intelligent agents have formed interaction throughout different enterprise applications and have reduced human intervention while streamlining operations (Bousetouane, 2025). The studies have also discussed vertical AI agents, which have focused on the ability to specialize within domain-specific tasks required within the Enterprises, which has improved industries-specific strategies in terms of automation. Khan et al. (2024) highlighted that AI agents, designed to operate independently while interacting with humans and systems, are revolutionizing industries through hyper-automation and real-time adaptability (Samdani, Paul, and Saldanha, 2023). The significant advantage of implementing Agentic AI is the ability to transform supply chain management and enterprise resource planning. It has been pointed out by Laura Moradbakhti, Simon Schreibelmayer, Martina Mara (2022) that AI-driven ERP solutions have helped to improve inventory management process optimization and forecasting levels (Spivack et al., 2024). On the other hand, the study by Acharya, Kuppan, and Divya (2025), a comprehensive analysis of autonomous driving, has been noted, reflecting that Agentic AI can dynamically adjust to business environments, making enterprises more resilient and adaptive.

2.2 Agentic AI and decision making in organizations

The major descriptive aspect of Agentic AI has been the ability to foster decision-making processes. It has been argued by Canayaz (2025) that AI agencies have been responsible for redefining corporate decision-making by analyzing large datasets and generating insights rapidly using AI entities rather than human counterparts (Alamdari et al., 2024). This shift in business organizations has helped to address operational redundancies by focusing on strategic planning (Krishnan, 2025). The existing paper has also elaborated on how AI agents have resulted in real-world scenarios by managing complex decision-making aspects without human oversight. As Gridach et al. (2025) pointed out, Agentic AI has gained momentum within high-stakes environments, including Healthcare and Finance, where data-driven decisions are vital for operational success. On the contrary, the reviews of collaborative AI and autonomous systems have shown that Agentic AI helps improve decision efficiency but has also increased concerns regarding accountability, transparency and ethical AI governance (Joshi, 2025).

2.3 Challenges and ethical considerations

Regardless of the transformative abilities, Agentic AI has given rise to numerous challenges, including ethical dilemmas and security uncertainty. Manda (2024) proposed that the PTSA framework responsible for outlining the enterprise architecture used for autonomous AI agents ensures better governance and security controls. This has been crucial due to the concerns about AI security risks and mitigation strategies for enterprise applications dependent upon generative AI models (John et al., 2025). Along with this, generative AI has been conceptualized as a style engine for warning about the potential biases ingrained within AI models for decision-making (Riemer & Peter, 2024). Since AI agents have gained autonomy, maintaining ethical decision-making and accountability have been a pressing challenge (Borghoff, Bottoni, and Pareschi, 2025).

3 Material and methods

3.1 Search strategy

This study conducted a systematic literature review using scholarly databases from Google Scholar, Web of Science, Scopus, and PubMed. The primary keywords used in this study are "Agentic AI," "AI Optimization," "Artificial Intelligence Decision-Making," "AI in Business," and "AI Automation." In this study, the Boolean operator, including AND /OR, was used, which helped refine the search process. The search has been restricted to conference proceedings, reputable industry reports and peer-reviewed journal articles.

3.2 Exclusion and inclusion criteria

Studies have been selected based on predefined inclusion and exclusion criteria for ensuing relevance and quality:

Table 1 Inclusion and Exclusion Criteria

Criteria	Inclusion	Exclusion
Publication Type	Peer-reviewed journals, conferences, industry reports	Non-peer-reviewed sources, blogs, opinion articles
Time Frame	2019–2025	Before 2019 (unless foundational)
Language	English	Non-English
Focus Area	Agentic AI in decision-making, automation, optimization	General AI without a specific focus on Agentic AI
Availability	Full-text accessible	Abstract-only or restricted access

(Source: Self-Developed)

3.3 Time Horizon

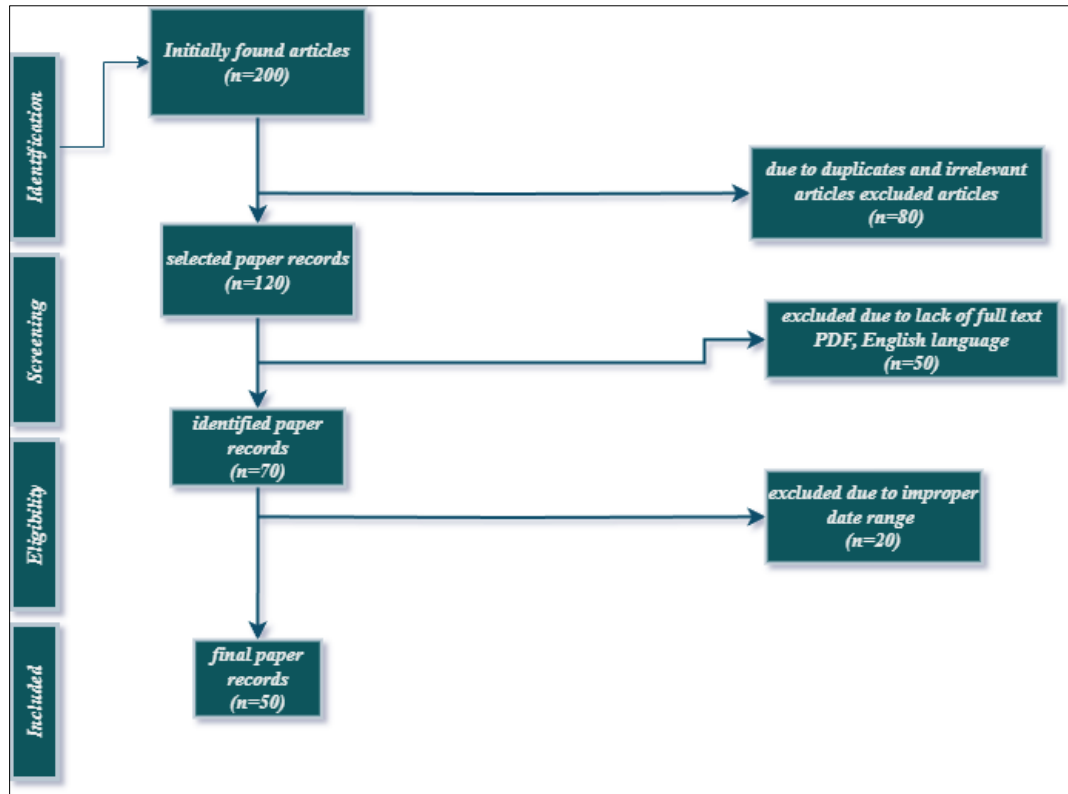
The review has emphasized the studies published between 2019 and 2025 to capture the most recent developments in technology aspects within agentic AI. This period has been chosen to reflect the advancement evidence in decision-making optimization within Industrial and business applications and AI-driven automation.

3.4 Prisma

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework has been used for screening and filtering the studies:

- *Identification*: The initial database search yielded 200 papers.
- *Screening*: After removing duplicates and irrelevant articles, 120 papers remained.
- *Eligibility*: Based on inclusion/exclusion criteria, 70 papers were thoroughly assessed.
- *Inclusion*: 50 papers met the full criteria and were included in the review.

The PRISMA framework has been developed for visually representing the selection procedure.



(Source: Self-Developed)

Figure 1 PRISMA Framework

4 Results and discussion

4.1 Enhancing enterprise efficiency through agentic AI

Agentic AI, which is also referred to as an AI system capable of autonomous learning and decision-making from a dynamic environment, has brought transformation within enterprise efficiency (Konsynski et al., 2024). It has been mentioned that the fourth-generation evolution of intelligent systems, also known as C³AN, has facilitated compact custom and composite AI models for improving enterprise productivity while reducing dependency upon extensive computational resources (Sheth et al., 2025). Integration of AI-driven automation has enabled enterprises to bring optimization within workflow efficiency, improving real-time decision-making and minimizing the occurrence of human error. Other than this, it has also been highlighted that Agentic AI has been particularly beneficial for supply chain management since intelligent automation has resulted in cost efficiency and sustainability (Pinski & Benlian, 2023). Predictive Analytics driven by AI capabilities within the supply chain has helped business organizations anticipate fluctuating demand levels and optimize inventory management (Aylak, 2025). This shift towards AI-driven automation has helped minimize operational bottlenecks while improving organizational efficiency.

4.2 Enhanced decision-making capabilities

Agentic AI has brought improvement in the decision-making aspect by integrating real-time data processing and predictive analytics. An AI-driven decision-making process has been argued to improve economic productivity since it provides business organizations with primary information that human analysts might have overlooked (Strunk et al., 2024). These AI systems evaluate a wide range of data sets, which helps identify patterns, address risks, and introduce data recommendations (Dennis et al., 2023). While considering financial services, it has been pointed out that AI-based decision support systems can bring a revolution in terms of risk management and investment strategies (Muria-Tarazón et al., 2025). Leveraging AI for skill development and workforce training will enable financial institutions to ensure that employees can utilize AI-driven insights to make strategic decisions.

4.3 Challenges face in terms of implementing agentic AI

Despite the advantages, implementing Agentic AI is associated with specific challenges (Painter et al., 2024). The ethical concerns associated with AI adoption regarding algorithmic bias and data privacy have been pointed out (Markelius et al., 2024). Security threats have also been discovered to pose significant challenges to the widespread adoption of agentic AI. (John et al., 2025). Strong cyber security measures are required for handling unauthorized access and potential vulnerabilities when complex decision-making systems are being used, which are controlled by AI capabilities.

4.4 Strategic Considerations and Future Implications

Developing a comprehensive AI framework has improved autonomous decision-making while bringing adaptability to human-driven strategic goals (Zhang et al., 2025). By fostering symbiotic AI-human interactions, businesses might be able to leverage the computational power possessed by AI to retain human perceptions while making critical decisions (Furman & Seamans, 2019). These approaches might point out the proper alignment of AI-driven choices with long-term enterprise objectives to increase sustainable value (White, 2024). The future of Agentic AI within enterprise decision-making might enable the introduction of hybrid AI-human collaboration models (Yang, 2025).

5 Conclusion

Adopting Agentic AI for upgrading enterprise operations has helped increase decision-making and organizational efficiency through the automation facility within complex processes. It has helped optimize resource allocation and incorporate predictive analytics. This technology has minimized the need for human intervention while intensifying adaptability, leading to cost savings and operational agility. The vital issues faced while implementing Agentic AI have been the security risks, ethical considerations, and lack of AI literacy required to optimize the benefits of Agentic AI. Business organizations have shown that persistent utilization of AI-driven decision-making processes can be a strategic approach for striking a significant balance between human monitoring and automation to bring sustainable innovation and growth.

Recommendations

The recommendations given below can be prioritized:

- Developing policies for addressing security risks, ensuring transparency, and promoting responsible AI use shall be assessed for maintaining the ethical utilization of Agentic AI (Sheth et al., 2025).
- Implementing training programs should be effective in upskilling employees and developing effective collaboration with AI systems (Joshi, 2025).
- Combining AI-driven information in association with human expertise should be assessed for optimizing strategic business outcomes (Aveni, 2025).

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Appendices

Appendix 1: Systematic Literature Review Table

Topic	DOI	Authors	Codes/ Themes	Key Findings	Recommendations
AI Agentic workflows and Enterprise APIs	https://arxiv.org/pdf/2502.17443	Tupe and Thube (2025)	AI workflows, Enterprise APIs, Agentic AI	AI agentic workflows require adaptive API architectures to improve efficiency and interoperability.	Enterprises should invest in API strategies optimized for AI agents and automation.

Agentic Systems	https://arxiv.org/pdf/2501.00881	Bousetouane (2025)	Vertical AI, Industry Transformation	Vertical AI agents enhance industry-specific automation and decision-making.	Businesses should implement domain-specific AI agents for better efficiency.
Agentic AI in the Age of Hyper-Automation	10.30574/wjaets.2023.8.1.0042	Samdani, Paul and Saldanha (2023)	Hyper-automation, AI Agents	AI agents significantly reduce human workload in hyper-automated environments.	Organizations should align AI agent adoption with hyper-automation strategies.
Agentic AI: Autonomous Intelligence for Complex Goals	https://ieeexplore.ieee.org/iel8/6287639/6514899/10849561.pdf	Acharya, Kuppan and Divya (2025)	Autonomous AI, Goal-oriented AI	Agentic AI can execute complex tasks with minimal human intervention.	Companies should enhance AI governance and regulatory frameworks.
Review of autonomous systems and collaborative AI agent frameworks	https://satyadharjoshi.com/wp-content/uploads/2025/02/Review-of-autonomous-systems-and-collaborative-AI-agent-frameworks-IJSRA-2025-0439.pdf	Joshi (2025)	Autonomous Systems, AI Collaboration	AI agent collaboration improves workflow efficiency.	AI frameworks should integrate collaboration-enhancing mechanisms.
AI Agency	https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=5109326	Canayaz (2025)	AI Agency, AI-driven decision-making	AI agency principles shape how machines interact with environments.	Policymakers should establish AI agency regulations.
AI Agents: Evolution, Architecture, and Real-World Applications	https://arxiv.org/pdf/2503.12687	Krishnan (2025)	AI Evolution, AI Architecture	Evolutionary trends in AI enhance real-world applications.	Businesses should adapt to AI advancements for competitive advantage.
Human-Artificial Interaction in the Age of Agentic AI	https://arxiv.org/pdf/2502.14000	Borghoff, Bottoni and Pareschi (2025)	Human-AI Interaction, AI Systems Theory	AI's role in human interaction follows system-theoretical principles.	Further research is needed in AI-human co-working dynamics.
The PTSA Framework	10.32628/CSEIT.2410612395	Manda (2024)	AI Frameworks, Enterprise Architecture	PTSA framework improves enterprise AI deployment.	Enterprises should adopt structured AI frameworks.
Generative AI	10.1007/s12599-023-00834-7	Feuerriegel et al. (2024)	Generative AI, Business Applications	Generative AI transforms business models and decision-making.	Businesses should leverage AI for operational efficiency.
Conceptualizing generative AI as style engines	10.1016/j.ijinfo.mgt.2024.102824	Riemer and Peter (2024)	Generative AI, AI Styles	AI functions as a style engine in creative industries.	Creative industries should integrate AI-enhanced tools.

Leading-edge techs and AI trends 2025	https://periodicos.processus.com.br/index.php/ppds/article/download/1368/1311	Aveni (2025)	AI Trends, Future Technologies	AI trends shape job markets and required skills.	Workforce training should adapt to AI skill requirements.
Bridging the AI Skills Gap	10.5281/zenodo.14944939	Joshi (2025)	AI Skills Gap, Workforce Training	Financial services need AI-skilled professionals.	Companies should invest in AI training programs.
C3AN: Custom, Compact and Composite AI Systems	https://scholarcommons.sc.edu/cgi/viewcontent.cgi?article=1646&context=aai_fac_pub	Sheth et al. (2025)	NeuroSymbolic AI, Intelligent Systems	NeuroSymbolic AI enhances complex decision-making.	AI researchers should explore hybrid AI models.
AI and the Economy	10.1086/699936	Furman and Seamans (2019)	AI and Economy, Innovation Policy	AI impacts economic growth and employment trends.	Policymakers should create AI-focused economic policies.
Through the Chat Window and Into the Real World	https://files.reporthify.cn/media/production/s_1531667ff2d49af52112ea6006f9447b.pdf	Painter et al. (2024)	AI-human Interaction, AI Deployment	AI agents interact effectively with real-world data.	AI should be designed with human-centered usability.
Cognitive reapportionment and decision rights	https://www.jmis-web.org/articles/1661	Konsynski et al. (2024)	AI Decision-making, Cognitive Reapportionment	AI modifies human decision-making processes.	AI integration should balance human-AI roles.
The Future of SAP ERP	https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=5115409	Singh and Singh (2025)	SAP ERP, AI Innovations	AI drives ERP efficiency and predictive analytics.	SAP systems should integrate AI-driven automation.
The mechanisms of AI hype	10.1007/s43681-024-00461-2	Markelius et al. (2024)	AI Hype, Ethical AI	AI hype affects industry investment and sustainability.	Ethical AI principles should guide AI development.
Cognition is All You Need	https://arxiv.org/pdf/2403.02164	Spivack et al. (2024)	AI Cognition, LLMs	AI cognition extends beyond Large Language Models.	Future AI systems should focus on reasoning capabilities.
AI agents as team members	10.1080/07421222.2023.2196773	Dennis et al. (2023)	AI Teams, Workplace AI	AI agents impact teamwork, trust, and collaboration.	Work environments should foster AI-human cooperation.
OWASP Top 10 for LLM Apps and Gen AI Security	https://hal.science/hal-04985337v1/file/Agentic-AI-Threats-and-Mitigations_v1.0.1.pdf	John et al. (2025)	AI Security, LLM Security Risks	AI security threats require structured mitigation strategies.	AI security frameworks should be standardized.

To Delegate or Not to Delegate?	https://www.researchgate.net/profile/Leonardo-Banh/publication/385302864_To_Delegate_or_Not_to_Delegate_Factors_Influencing_Human-Agentive_IS_Interaction/links/6720da065852dd723c9c8e69/To-Delegate-or-Not-to-Delegate-Factors-Influencing-Human-Agentive-IS-Interaction.pdf	Strunk et al. (2024)	Human-Agent Delegation, AI Ethics	Delegation of AI responsibilities affects human decision-making.	Organizations should define AI accountability structures.
AI literacy	https://scholarpace.manoa.hawaii.edu/bitstreams/06fa6203-9d34-4c05-89c5-d00eebaca1e8/download	Pinski and Benlian (2023)	AI Literacy, AI Competency	AI literacy is critical for effective AI usage.	Education systems should incorporate AI literacy programs.
AI Risk Assessment in Businesses	10.3390/app15031412	Muria-Tarazón et al. (2025)	AI Risk Assessment, AI in Business	AI poses operational and strategic risks in businesses.	AI risk frameworks should be integrated into corporate strategies.
Practices for governing Agentive AI systems.	https://cdn.openai.com/papers/practices-for-governing-agentive-ai-systems.pdf	Shavit et al. (2023)	Governance, Risk, Policy	Identifies best practices for governing Agentive AI systems to ensure safety and alignment with human goals.	Develop regulatory frameworks and oversight mechanisms for AI deployment.
Agentive AI in Predictive AIOps: Enhancing IT Autonomy and Performance	10.18535/ijssrm/v12i11.ec01	Sivakumar (2024)	Predictive AIOps, IT Autonomy	Discusses how Agentive AI improves IT operations through predictive analytics and automation.	Invest in AI-driven predictive maintenance and anomaly detection.
Toward Agentive AI: Generative Information Retrieval Inspired Intelligent Communications and Networking	https://arxiv.org/pdf/2502.16866	Zhang et al. (2025)	Intelligent Networking, Information Retrieval	Proposes a generative AI-inspired model for Agentive AI in communications and networking.	Enhance AI models for better efficiency in network automation.

Building Living Software Systems with Generative and Agentic AI	https://arxiv.org/pdf/2408.01768	White (2024)	Generative AI, Living Software Systems	Explores how Agentic AI can create adaptive and evolving software systems.	Develop self-improving AI models for sustainable automation.
Risk alignment in Agentic AI systems	https://arxiv.org/pdf/2410.01927	Clatterbuck, Castr and Morán, (2024)	Risk Alignment, AI Safety	Analyzes the alignment risks in Agentic AI decision-making.	Implement robust risk assessment protocols in AI governance.
Agentic AI for Scientific Discovery: A Survey of Progress, Challenges, and Future Directions	https://arxiv.org/pdf/2503.08979	Gridach et al. (2025)	Scientific Discovery, AI Innovation	Surveys the role of Agentic AI in accelerating scientific breakthroughs.	Foster interdisciplinary AI research for broader applications.
Agentic AI in Computer Vision Domain-Recent Advances and Prospects	https://www.researchgate.net/profile/Daniel-Ogbu/publication/n/386292786_Agentic_AI_in_Computer_Vision_Domain-Recent_Advances_and_Prospects/links/674c6ec6a7fbc259f1a33618/Agentic-AI-in-Computer-Vision-Domain-Recent-Advances-and-Prospects.pdf	Ogbu (2023)	Computer Vision, AI Automation	Discusses how Agentic AI enhances automation in computer vision tasks.	Utilize AI-driven vision systems for improved industrial applications.
Security Threats in Agentic AI System	https://arxiv.org/pdf/2410.14728	Khan et al. (2024)	Security Threats, AI Vulnerability	Examines potential security risks in Agentic AI systems.	Strengthen AI security frameworks against adversarial threats.
Harms from increasingly agentic algorithmic systems	10.1145/3593013.3594033	Chan et al. (2023)	Algorithmic Harm, Ethical AI	Evaluates societal and ethical concerns arising from agentic AI.	Implement transparent AI policies to mitigate biases.
The AI Agent Index	https://arxiv.org/pdf/2502.01635	Casper et al. (2025)	AI Agent Index, Performance Benchmarking	Proposes an index to evaluate Agentic AI performance.	Develop standardized metrics for AI evaluation.
Bioethics Artificial Intelligence Advisory (BAIA): An Agentic	https://www.cureus.com/articles/347765-bioethics-artificial-intelligence-	Roy (2025)	Bioethics, Clinical AI	Introduces an Agentic AI framework for ethical clinical decision-making.	Ensure AI-driven clinical systems adhere to ethical principles.

Artificial Intelligence (AI) Framework for Bioethical Clinical Decision Support	advisory-baia-an-agentic-artificial-intelligence-ai-framework-for-bioethical-clinical-decision-support.pdf				
Do men have no need for "feminist" artificial intelligence? Agentive and gendered voice assistants in the light of basic psychological needs	10.3389/fpsyg.2022.855091	Moradbakhti, Schreibelmayer and Mara (2022)	Gendered AI, Voice Assistants	Analyzes the gender implications of Agentive AI in digital assistants.	Promote inclusive AI design to reduce gender biases.
SustAI-SCM: Intelligent Supply Chain Process Automation with Agentive AI for Sustainability and Cost Efficiency	10.3390/su17062453	Aylak (2025)	Supply Chain, AI Automation	Discusses AI-driven automation in sustainable supply chain management.	Use AI to optimize logistics and reduce operational costs.
Agentive AI: Service Operations with Augmentation and Automation AI	https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=5109470	Yang (2025)	Service Operations, AI Augmentation	Examines the role of Agentive AI in business operations.	Leverage AI for enhanced decision-making in service sectors.
Agentive AI: A Comprehensive Framework For Autonomous Decision-Making Systems in Artificial Intelligence	https://www.researchgate.net/profile/Research-Pub/publication/388188752_AGENTIC_AI_A_COMPREHENSIVE_FRAMEWORK_FOR_AUTONOMOUS_DECISION-MAKING_SYSTEMS_IN_ARTIFICIAL_INTELLIGENCE/links/678e451395e02f182ea2fc9c/AGENTI	Viswanathan (2025)	Autonomous Decision-Making, AI Frameworks	Proposes a comprehensive decision-making framework for agentive AI.	Develop scalable AI architectures for diverse applications.

	C-AI-A-COMPREHENSIVE-FRAMEWORK-FOR-AUTONOMOUS-DECISION-MAKING-SYSTEMS-IN-ARTIFICIAL-INTELLIGENCE.pdf				
Being Considerate as a Pathway Towards Pluralistic Alignment for Agentic AI	https://arxiv.org/pdf/2411.10613	Alamdari et al. (2024)	AI Alignment, Ethical Considerations	Explores ethical pluralism in Agentic AI alignment.	Design AI models that consider diverse ethical perspectives.
Agentic Relationship Dynamics in Human-AI Collaboration: A study of interactions with GPT-based agentic IS artifacts	https://scholar.space.manoa.hawaii.edu/bitstreams/0db8344c-6e60-42c0-af45-744ec0b3a822/download	Svensson and Keller (2024)	Human-AI Collaboration, Interactive AI	Investigates AI-human relationship dynamics in Agentic AI systems.	Enhance user experience by improving AI explainability.
Rise of the Agentic AI Workforce	10.1109/MM.2025.10916416	Lee (2025)	AI Workforce, Automation	Predicts the impact of Agentic AI on workforce automation.	Develop workforce adaptation strategies for AI integration.
A Multi-AI Agent System for Autonomous Optimization of Agentic AI Solutions via Iterative Refinement and LLM-Driven Feedback Loops	https://arxiv.org/pdf/2412.17149	Yuksel and Sawaf (2024)	Multi-Agent Systems, AI Optimization	Proposes a multi-agent approach for optimizing AI systems.	Implement iterative AI refinement for improved adaptability.
Agentic Generative AI and the Future US Workforce: Advancing Innovation and National Competitiveness	https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=5126922	Joshi (2025)	AI Workforce, National Competitiveness	Discusses how Agentic AI influences national innovation and competitiveness.	Foster AI talent development for economic growth.

Enhancing AI systems with agentic workflow patterns in large language model	10.36227/techrxiv.173092393.30216600	Singh et al. (2024)	AI Workflows, LLMs	Analyzes AI workflows in large language models.	Optimize AI pipeline efficiency for better performance.
Agentic AI for Improving Precision in Identifying Contributions to Sustainable Development Goals	https://arxiv.org/pdf/2411.17598	Ingram et al. (2024)	AI for SDGs, Precision AI	Explores AI's role in identifying contributions to sustainability.	Utilize AI for targeted SDG implementation.
Automated design of agentic systems	https://arxiv.org/pdf/2408.08435	Hu et al. (2024)	Automated AI Design, Engineering	Examines automated design processes for agentic AI.	Develop AI systems with minimal human intervention.
Conversational AI multi-agent interoperability, universal open APIs for agentic natural language multimodal communications	https://arxiv.org/pdf/2407.19438	Gosmar et al. (2024)	Conversational AI, Multi-Agent Systems	Proposes open APIs for seamless AI communication.	Enhance AI interoperability for wider application.
Performant LLM Agentic Framework for Conversational AI	https://arxiv.org/pdf/2503.06410	Casella and Wang (2025)	LLM Agentic Framework, Conversational AI	Discusses AI frameworks for optimizing conversational systems.	Improve AI natural language capabilities for better engagement.