

The Impact of Artificial Intelligence on Leadership Changes: An Analysis of E-Leadership and Large Language Models

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Abstract

Purpose – The purpose of this study is to identify and analyze the effects of GenAI and large language models on leadership and managerial decision making as well as human–AI collaboration in the workplace. The study examines the effects of GenAI on leadership, managerial judgment, and the nature of work and the employee experience.

Design/methodology/approach – This is a review article and is not meant to be a systematic or comprehensive review. Instead, the objective is to provide a structured and transparent review of recent articles in Web of Science and Scopus. The review targets articles that address GenAI and LLMs in relation to e-leadership, managerial decision-making, and human–AI collaboration, published in English from 2023 to 2026. From the screening and duplicate removal performed by Rayyan, 17 articles formed the basis of the thematic review.

Findings – The review finds that GenAI does not substitute leadership; it transforms it. Managers increasingly act as coordinators, interpreters, and validators of AI-based outputs. GenAI provides enhanced decision support by expanding information, options, and analytical capacity. However, GenAI also introduces risks, such as overreliance, hallucination, and reduced accountability. Human–AI collaboration poses risks to team autonomy and the meaning of work. At the same time, it can support knowledge sharing, employee capability, and task performance when it is used responsibly.

Originality - This paper is unique because it connects Generative AI to socio-technical systems and e-leadership. It portrays AI-enabled leadership through the lens of structuring, interpreting, and governing, as a human–AI system.

Keywords: e-leadership; Generative AI; human–AI collaboration; large language models; managerial decision-making.

Paper type: Review Article

1. Introduction

The emergence of GenAI and large language models ultimately creates a model to understand the changing connection between the individual and the organization, and between the individual and GenAI. The most important difference between GenAI and other digital technologies is that GenAI can generate, organize, and suggest knowledge-based outputs. GenAI therefore alters managers' ability to think and plan work outcomes. The necessity to regard GenAI both, as a technological innovation and as an organizational element, is emphasized (Danó et al., 2025).

On these points, the paper is reliant on two key theoretical frameworks. The e-leadership framework is based on how a leader can use digital technology to impact people and groups in a distance, non-face-to-face environment (Avolio et al., 2000). In the case of Socio-technical systems theory, it is both the technology and the social system, rather than technology in isolation, that perform and shape organizational outcomes (Trist & Bamforth, 1951). These theories provide a base for understanding the challenge GenAI poses: it is not just a channel of knowledge, but can also construct and shape knowledge. There is much research on AI and leadership. Most research focuses on AI's applications for recruitment, innovation, service delivery, and creative work. Fewer studies focus on how GenAI transforms leadership, decision-making, and human–AI integration. There is a need to identify the paradoxes GenAI poses. GenAI creates a paradox of augmentation and overreliance, along with the paradox of creativity and hallucinations, combined with added efficiency and loss of trust, and automation vs. human responsibility (Berde et al., 2025).

To address this, this paper synthesizes evidence using a structured review approach based on searches in Scopus and Web of Science, and with screening supported by Rayyan. The aim is not to conduct a comprehensive systematic literature review, but to provide a focused, transparent review of recent literature on GenAI, e-leadership, managerial decision-making, and human–AI collaboration.

This paper intends to address:

RQ1: How does Generative AI modify leadership and managerial roles in organizations?

RQ2: How does Generative AI modify managerial decision-making?

RQ3: How, and to what effect, does human–AI collaboration alter work execution, the employee experience, and teamwork?

By addressing these questions, the paper connects recent GenAI research with e-leadership and socio-technical systems theory. It argues that leadership in organizations is becoming a human–AI system, where managers act as facilitators and interpreters of AI-generated outputs.

2. Methodology

This is a review article, not a comprehensive systematic literature review. Nevertheless, most systematic reviews have a search and screening strategy, which aims to make the selection process more transparent, clear, and replicable. The following details are included to give an indication of how the path to identifying, filtering, screening, and selecting the articles was taken, rather than to claim that the study fulfills all the requirements of a full systematic literature review. This strategy was valuable for strengthening the methodological clarity of the review and for identifying relevant studies on generative AI, large language models, e-leadership, managerial decision-making, and human–AI collaboration in organizational contexts. The literature search was conducted in:

- Scopus
- Web of Science

The same main search logic was used:

(„generative AI” OR „large language model*” OR „LLM” OR „LLMs” OR „ChatGPT”)

AND

(„digital leadership” OR „e-leadership” OR „leadership role*” OR „managerial decision-making” OR „human-AI collaboration”)

AND

(organization* OR workplace* OR „management” OR „virtual team*”)

Database filters

The following filters were applied in both databases:

- Publication years: 2023–2026;
- Document type: Article;
- Language: English.

Database-specific subject filters were:

- Scopus: Business, Management and Accounting
- Web of Science: Management or Business

After export, all records were imported into Rayyan for duplicate removal and screening:

Inclusion criteria:

- The article focuses on generative AI, LLMs, ChatGPT, or algorithmic decision-making.
- The article is connected to at least one of the following areas:
 - e-leadership or digital leadership
 - leadership roles or managerial roles
 - managerial decision-making
 - human–AI collaboration
 - workplace collaboration

- virtual teams
- organizational or management context

The article contributes to at least one of the three research questions.

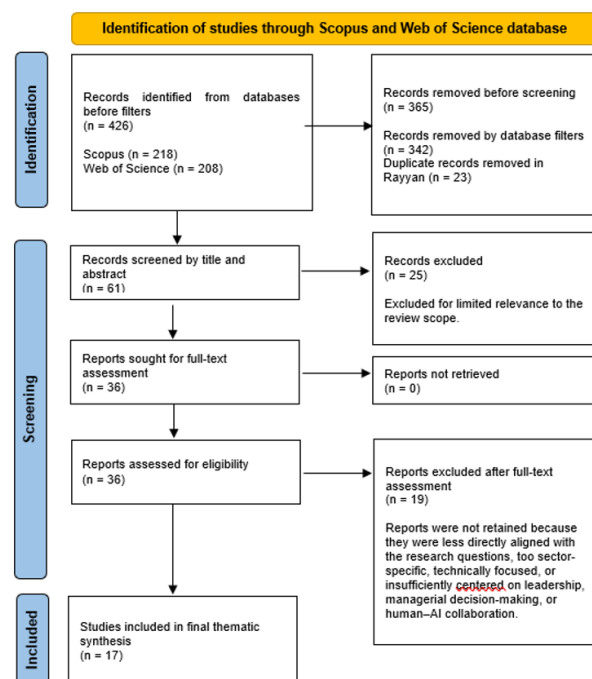
Exclusion criteria:

- Weak connection to leadership, management, decision-making, or human–AI collaboration.
- Mainly technical or engineering-focused.
- Too narrowly sector-specific without broader organizational relevance.
- Focused only on healthcare, tourism, education, or consumer applications without a clear leadership or management connection.
- Did not contribute for answering the research questions.

Screening process

- Initial records before filters: 426
- Scopus: 218
- Web of Science: 208
- Records after database filters and imported into Rayyan: 84
- Scopus: 37
- Web of Science: 47
- Duplicate records removed in Rayyan: 23
- Unique records screened by title and abstract: 61
- Records excluded after title/abstract screening: 25
- Records moved to full-text assessment: 36
- Reports excluded/not retained after full-text assessment: 19
- Final articles included in thematic synthesis: 17

Figure 1. PRISMA-style flow diagram of the article identification, screening, and selection process.



Thematic classification:

The final 17 articles were classified into three thematic groups aligned with the research questions:

- Reconfiguring Leadership and Managerial Roles
- AI-Supported Decision-Making: Augmentation, Dependence, and Transparency
- Human–AI Collaboration and Team Dynamics

3. Results and Thematic Analysis

This section presents the thematic synthesis of the 17 articles included in the review. The analysis is organized around three themes: reconfiguring leadership and managerial roles, AI-supported decision-making, and human–AI collaboration and team dynamics. Each article was assigned to one primary theme based on its strongest contribution to the research questions.

4. Overview of the Selected Articles

Table 1 summarizes the final articles included in the review. It presents the author(s), article title, publication outlet, field and ranking, country or context, and thematic classification. The table shows that the selected studies cover several fields, including entrepreneurship, innovation management, information systems, human resource management, service research, strategic management, and advertising.

Table 1. The selected articles included in the thematic synthesis

No.	Author(s), Year	Article title	Source / Field / Ranking	Country/Context	Theme
1	Al-Bashrawi et al. (2026)	Agentic AI systems and the future of entrepreneurship: a perspective on co-agency, innovation, and ecosystem transformation	International Entrepreneurship and Management Journal. Field: Entrepreneurship; MIS; Technology & Innovation. SCImago: US; Springer; SJR 2025 = 1.014; Q1/Q2.	United States/conceptual-global entrepreneurship context	Reconfiguring Leadership and Managerial Roles
2	Hu & Li (2026)	Digital servitization and sustainable growth in the era of generative AI: The role of leadership, knowledge sharing, and employee attitudes	Journal of Innovation and Knowledge. Field: Innovation; Knowledge Management; Business & Management. SCImago: Netherlands; Elsevier; SJR 2025 = 2.960; Q1.	China / empirical survey of 424 employees across companies in Guangdong, Heilongjiang, and Shandong Provinces	Human-AI Collaboration and Team Dynamics
3	Urbani, Ferreira, & Lam (2024)	Managerial framework for evaluating AI chatbot integration: Bridging organizational readiness and technological challenges	Business Horizons. Field: Business & Management; Marketing; AI Chatbot Adoption. SCImago: UK; Elsevier; SJR 2025 = 2.744; Q1.	Conceptual / global managerial context; framework for AI chatbot adoption in customer service, sales, and marketing business functions	AI-Supported Decision-Making: Augmentation, Dependence, and Transparency
4	Steinhauser & Heid (2026)	Organizational Readiness, AI Literacy, and the New Frontier of R&D: How Generative AI Shapes Innovation Capacity	R&D Management. Field: R&D; Innovation; Strategy; Business & Management. SCImago: UK; Wiley; SJR 2025 = 1.839; Q1.	DACH region / empirical mixed-method study using expert interviews and survey data from 291 participants in Germany, Austria, and Switzerland	Human-AI Collaboration and Team Dynamics

Table 1. (Continued)

No.	Author(s), Year	Article title	Source / Field / Ranking	Country/Context	Theme
5	Dutta & Naveen (2026)	Transforming Recruitment and Selection Practices in Organizations Through Discriminative and Generative AI Adoption: A Structuration Lens	Human Resource Management. Field: HRM; Organizational Behavior; Strategy; AI Adoption. SCImago: US; Wiley; SJR 2025 = 4.598; Q1.	India / empirical qualitative study with 43 HR and talent acquisition leaders in a high-growth emerging market context	Reconfiguring Leadership and Managerial Roles
6	Shonubi (2026)	Unwrapping generative AI paradigms for product and service innovation differentiation	Journal of Strategy & Innovation. Field: Strategy; Innovation; GenAI; Product & Service Innovation. SCImago: Netherlands; Elsevier; H-index = 3; SJR/Quartile not yet available.	Conceptual / global business context; qualitative cases from NVIDIA, DiDi, JPMorgan Chase, and IBM Watson Health	Reconfiguring Leadership and Managerial Roles
7	Park (2026)	AI as a cognitive collaborator: Assimilation and accommodation in human-machine teaming for innovation	Journal of Innovation & Knowledge. Field: Innovation; Knowledge Management; Human-AI Collaboration; GenAI. SCImago: Netherlands; Elsevier; SJR 2025 = 2.960; Q1.	South Korea / randomized 2 × 2 factorial field experiment with 371 professionals across technology, marketing, and R&D contexts	AI-Supported Decision-Making: Augmentation, Dependence, and Transparency
8	Przegalinska et al. (2025)	Collaborative AI in the workplace: Enhancing organizational performance through resource-based and task-technology fit perspectives	International Journal of Information Management. Field: Information Management; AI; MIS; Decision Support. SCImago: UK; Elsevier; SJR 2025 = 5.899; Q1.	Central Europe / mixed-method study with lab experiment and text analytics using 94 business school participants and a generative AI assistant for marketing-related tasks	AI-Supported Decision-Making: Augmentation, Dependence, and Transparency
9	Rady, Townsend, & Hunt (2026)	From algorithmic hallucinations to alien minds: Addressing the ideator's dilemma through entrepreneurial work	Journal of Business Venturing. Field: Entrepreneurship; Entrepreneurial Judgment; GenAI; Decision-Making. SCImago: US; Elsevier; SJR 2025 = 5.778; Q1.	Conceptual / global entrepreneurship context; theoretical framework for evaluating GenAI-generated venture ideas	AI-Supported Decision-Making: Augmentation, Dependence, and Transparency
10	Bagchi & Sharma (2026)	Managerial decision-making and AI: A decision canvas approach	Business Horizons. Field: Business & Management; Managerial Decision-Making; LLMs; Business Intelligence. SCImago verified earlier for same journal: UK; Elsevier; SJR 2025 = 2.744; Q1.	Conceptual / managerial decision-making context; decision canvas framework for integrating LLMs such as ChatGPT into organizational decisions	AI-Supported Decision-Making: Augmentation, Dependence, and Transparency
11	Hou, Wang, Wang, & Yang (2025)	The Double-Edged Roles of Generative AI in the Creative Process: Experiments on Design Work	Information Systems Research. Field: Information Systems; GenAI; Creative Work; Human-AI Collaboration. SCImago: US; INFORMS; SJR 2025 = 5.679; Q1.	China / experimental design-work context; lab experiment with 192 students and field experiment with professional designers	AI-Supported Decision-Making: Augmentation, Dependence, and Transparency

Table 1. (Continued)

No.	Author(s), Year	Article title	Source / Field / Ranking	Country/Context	Theme
12	Reinhard, Li, Peters, Janson, & Leimeister (2026)	GenAI-Infused Service Delivery: Micro-Level Augmentation Patterns at the Service Frontline	Journal of Service Research. Field: Service Research; Information Systems; OB/HRM; Human–AI Collaboration. SCImago: US; SAGE; SJR 2025 = 5.517; Q1.	Germany / Switzerland / qualitative longitudinal study of four customer support organizations using 41 interviews with employees, managers, and AI experts	Human-AI Collaboration and Team Dynamics
13	Callari & Puppione (2025)	Meaningful work as shaped by employee work practices in human-AI collaborative environments: a qualitative exploration through ideal types	European Journal of Innovation Management. Field: Innovation Management; Human–AI Collaboration; Meaningful Work; Workplace AI. SCImago: UK; Emerald; SJR 2025 = 1.755; Q1.	Multinational company / qualitative ideal-type analysis of 357 employee responses from Microsoft 365 Copilot users	Human-AI Collaboration and Team Dynamics
14	Yokoi, Laureiro-Martinez, Magni, & Brusoni (2026)	Organizing across cognitive asymmetry in human–AI collaboration: A study of perfume creation	Strategic Management Journal. Field: Strategic Management; Human–AI Collaboration; GenAI; Knowledge Sharing; Organizing. SCImago: UK; Wiley; SJR 2025 = 10.154; Q1.	Multinational fragrance house / qualitative study of perfume creation using interviews, secondary sources, and think-aloud exercises with professional creators	Human-AI Collaboration and Team Dynamics
15	Hai, Long, Honora, Japutra, & Guo (2025)	The dark side of employee-generative AI collaboration in the workplace: An investigation on work alienation and employee expediency	International Journal of Information Management. Field: Information Management; GenAI; Employee–AI Collaboration; Workplace Ethics. SCImago verified earlier for same journal: UK; Elsevier; SJR 2025 = 5.899; Q1.	China / experience sampling study with 229 service industry employees and 1050 matched daily observations in hospitality and tourism contexts	Human-AI Collaboration and Team Dynamics
16	Yin & Wang (2026)	The Paradoxical Effects of Generative Artificial Intelligence Induced Stressors on Employee Adaptive Performance: Evidence From China	Asia Pacific Journal of Human Resources. Field: Human Resource Management; GenAI Use; Human–AI Collaboration Stressors; Adaptive Performance. SCImago: US; Wiley-Blackwell; SJR 2025 = 1.346; Q1.	China / three-wave survey of 246 full-time employees using GenAI tools at work across technology, finance, manufacturing, education, marketing, HR, and technical roles	Human-AI Collaboration and Team Dynamics
17	Yang, Dong, Chu, & Rheu (2026)	Transforming advertising in the age of generative AI: exploring advertising professionals’ perceptions of human-AI value co-creation	International Journal of Advertising. Field: Advertising; Marketing Communication; GenAI; Human–AI Value Co-creation. SCImago: UK; Taylor & Francis; SJR 2025 = 3.182; Q1.	Advertising industry context / exploratory qualitative study using 34 semi-structured interviews with advertising and related industry professionals	Human-AI Collaboration and Team Dynamics

Source: Created by the authors, 2026

Table 2 presents the thematic classification used to organize the analysis. Although some articles are conceptually cross-cutting, each study was placed under the theme where its main contribution was strongest.

Table 2. Thematic classification of the selected articles

Theme	Articles included
Reconfiguring Leadership and Managerial Roles	Al-Bashrawi et al. (2026); Dutta and Naveen (2026); Shonubi (2026)
AI-Supported Decision-Making: Augmentation, Dependence, and Transparency	Urbani, Ferreira, and Lam (2024); Park (2026); Przegalinska et al. (2025); Rady, Townsend, and Hunt (2026); Bagchi and Sharma (2026); Hou et al. (2025)
Human–AI Collaboration and Team Dynamics	Hu and Li (2026); Steinhauser and Heid (2026); Reinhard et al. (2026); Callari and Puppione (2025); Yokoi et al. (2026); Hai et al. (2025); Yin and Wang (2026); Yang et al. (2026)

Source: Created by the authors, 2026

5. Reconfiguring Leadership and Managerial Roles

The first theme addresses RQ1 by suggesting that GenAI is changing what we expect of managers and leaders. More than adopting a new digital tool, the change is moving from direct supervision to the coordination, checking, and governance of human–AI work. The core articles in this theme point in the same direction across entrepreneurship, HR, and innovation strategy. Al-Bashrawi et al. (2026) discuss the implications of GenAI for human–AI co-agency. From this perspective, managers and entrepreneurs are not only those who develop ideas and plans. They are also the ones who connect AI-generated ideas with human intention and judgment. Dutta and Naveen (2026) describe a similar change in the context of recruitment and selection. AI can help HR make faster and more structured decisions, but managers have to ensure that AI-supported decisions are still fair, transparent, accountable, and appropriate in the context of the organization. Shonubi (2026) points to a similar process in the context of innovation strategy. While GenAI can help create and combine ideas for product and service innovation, managers have to provide direction to the human–AI innovation process. This change can also be seen in the articles placed in other themes. Bagchi and Sharma (2026) argue that managers cannot be passive consumers of LLM outputs. AI-assisted decision-making still requires problem structuring, stakeholder consideration, and boundary checking. Rady et al. (2026) make a comparable argument about entrepreneurial ideas generated by AI, which require human judgment of possibility and plausibility: some may fit neither reality nor context, while others could be valuable but require further interpretation before their value is recognized. In the context of work, Reinhard et al. (2026) and Yokoi et al. (2026) also argue that in service and knowledge work, human workers are required to interpret, check, validate, organize, and give direction to AI-generated work outcomes. All these contributions taken together make a strong case that GenAI has changed several organizational routines, but it has not eliminated the necessity of leading people. What they illustrate is that managers’ roles have changed from executing to structuring the interaction between humans and AI, engaging with AI outputs, and ensuring that the use of AI upholds ethical, accountable, and strategic management practices. Therefore, in response to RQ1, GenAI mainly redistributes leadership work toward coordination, interpretation, and responsible governance of AI-mediated organizational processes.

6. AI-Supported Decision-Making: Augmentation, Dependence, and Transparency

The second theme responds to RQ2 by showing how GenAI augments managerial decision-making only when human intervention to shape, evaluate, and rationalize GenAI outputs occurs. The articles chosen never position AI as a substitute for managerial decision-making. They illustrate how AI modifies the preparation, assessment, and justification of decisions. Bagchi and Sharma (2026) illustrate this directly using their decision canvas. They argue that the contribution of LLMs to managerial decision-making is the ability to generate and explore frameworks, alternatives, and pertinent knowledge, but this is possible only with the active construction of the decision problem by the manager. Their decision canvas demonstrates how decision levels, guiding principles, and AI alternatives within the stakeholders’ and the organization’s context need to be determined and evaluated by the manager. AI, in this case, augments decision-making by expanding the knowledge base and the alternatives. However, the structuring and interpretative aspects of the decision remain the responsibility of humans. Urbani, Ferreira, and Lam (2024) explain that AI adoption also requires readiness assessments, as it is a managerial decision. In their chatbot framework, expected efficiency gains are balanced against potential issues related to trust, data protection, bias, interoperability, compatibility, and facilitation. Hence, the question of “Can AI improve performance?” changes to “Is the organization ready to use AI in a justified manner?” In support of this, Przegalinska et al. (2025) show that GenAI can enhance the performance of tasks in the fields of automation, decision-support, creativity, and even innovation. Their findings also suggest that AI can create value when there is a viable task–technology fit and the required level of skill to work with the outputs of the AI. Consequently, AI-supported decision-making depends on the fit between the task, tool, and human capability rather than the mere acceptance of technology.

At the cognitive level, Park (2026) explains this process GenAI excels when users regard it as a cognitive partner rather than a passive answer generator. The value of AI comes through accommodation, where users rethink their assumptions and adjust their original thinking. However, this deeper engagement can create anxiety and cognitive disequilibrium because users may need to question familiar routines.

Hou et al. (2025) document a double-edged effect in creative work. GenAI reduces cognitive fixation and broadens possible solutions during ideation. During the implementation phase, however, it can disrupt expert work patterns and require increased effort. This indicates that GenAI is stronger in the exploratory phase than in the convergence phase of creative practices. While assisting the searching and generation of creative alternatives, GenAI does not automatically aid in the selection and implementation of the best alternative.

Rady, Townsend, and Hunt (2026) provide the most pronounced caveat and say that with GenAI, entrepreneurial ideation can be expanded, yet it tends to work at the edges of the possible, leading to wrong, confusing, or opaque outcomes. The balance between possibility and plausibility in judgment shows that managers ought to assess whether AI-generated ideas are feasible and under what conditions they could be implemented. This requires more human judgment, rather than less.

Overall, Theme 2 shows GenAI expands the boundaries of information and alters the available alternatives and problem articulation in a given context, which, by means of paradoxical and conditional augmentation on the one hand and dependence on the other, raises risks of dependence, weak trust, hallucination, opacity, and implementation difficulty. As such, in the context of RQ2, GenAI does not simply improve the quality of managerial judgment. Rather, it makes decision-making more information-rich, more AI-mediated, and more dependent on human validation, accountability, and responsible use.

7. Human–AI Collaboration and Team Dynamics

The third theme addresses RQ3 by explaining that GenAI modifies work practices not only by automating tasks but also by restructuring employee collaboration. Reinhard et al. (2026) illustrate this in frontline service work, where GenAI assists employees in triaging service requests, summarizing cases, identifying solutions, matching expertise, and improving service dialogues. Yokoi et al. (2026) elaborate by illustrating that human–AI collaboration requires bridging cognitive asymmetry between human tacit knowledge and AI codified knowledge. In this regard, GenAI can produce a wide range of alternatives, but employees remain responsible in the process of problem framing, translating tacit context knowledge into prompts, interpreting AI outputs, and steering them toward contextually meaningful solutions. In parallel, Callari and Puppione (2025) argue that employees do not experience AI collaboration in one uniform way. Some employees regard Copilot as a basic tool, while others see it as a smarter assistant or an expert-like teammate, thereby affecting autonomy, meaningful work, teamwork, and the perceived value of human expertise.

These articles suggest that human–AI collaboration is a mix of organizational and employee factors. Hu and Li (2026) state that digital leadership is necessary for employees to understand how to use AI and to have positive attitudes towards AI use. Digital leadership can strengthen knowledge sharing and support more positive employee attitudes toward AI.

Similarly, Steinhauser and Heid (2026) state that in R&D contexts, GenAI can support innovation capacity when employees have sufficient AI literacy and when the organization provides a supportive culture.

Additionally, Yang et al. (2026) show how GenAI can support advertising professionals in analytical, technical, creative, and communicative functions. They also show that, if employees do not verify the AI output, rely on AI too much, and ignore the risks associated with AI in terms of hallucinations, copyright uncertainty, bias, and privacy and data security concerns, value co-creation may turn into value co-destruction.

Theme 3 also does not maintain an entirely positive view of human–AI collaboration. Hai et al. (2025) note that when employees collaborate with GenAI, work alienation can increase, particularly when there are many digital job demands. This alienation can, in turn, cause employees to cut corners or compromise work standards. Yin and Wang (2026) further argue that when employees appraise AI-related demands as manageable and emotional tensions are not left unmanaged, frequent GenAI usage can encourage adaptive performance. Overall, these studies address RQ3 by arguing that GenAI alters work practices through augmentation, knowledge sharing, interpretation of AI outputs, and new forms of human–AI interaction while also creating risks related to autonomy, trust, ethics, and employee well-being. Human–AI collaboration therefore depends more on how organizations structure roles, uphold AI literacy, and safeguard meaningful work, rather than on the AI itself.

8. Discussion and Implications

The results of the review show that GenAI is not just another addition to the collection of digital instruments that assist leadership and management. GenAI alters the landscape of leadership, judgment, and collaboration. In the three themes of the review, although these benefits depend on human interpretation and organizational structuring, GenAI shows the potential to expand information, create options, assist in creative and analytical thinking, and enhance task-related activities. In relation to RQ1, leadership becomes more focused on facilitating human–AI coordination, validating AI outputs, and governing responsible use. In relation to RQ2, managerial decision-making becomes more information-rich and AI-mediated, but not automatically better, and in the context of RQ3, human–AI collaboration changes work routines and employee experience. It also poses risks to autonomy, trust, the meaningfulness of work, and the ethical nature of the work.

The central theoretical conclusion is that leadership in AI-supported organizations is a human–AI phenomenon and not a solely human or technological process. AI is not a human leader; rather, leadership is performed by managers, employees, AI, and data, along with the organization's rules. Managers remain responsible for problem framing, boundary setting, output interpretation, and accountability. This builds upon the previous discourse on e-leadership by clarifying that digital leadership is no longer only about directing individuals through technology. It is a new way to design the interactions of human judgement and machine output. In this case, the GenAI's contribution is that, rather than replacing leadership with a more technology-driven process, GenAI makes leadership a more complex and interrelated activity requiring more coordination, validation, sensemaking, and governance.

Review findings indicated that the consequences of GenAI are ambivalent rather than consistently beneficial. GenAI can support augmentation, but it can also create dependence. Opaque, biased, or difficult-to-verify GenAI outputs may erode trust. GenAI can support creativity and innovation, but hallucinations and unfeasible ideas require human checking. GenAI can also support collaboration by facilitating knowledge sharing and task execution, however, employees can become alienated and stressed in a work context that lacks personal resonance. This may weaken employees' sense of responsibility and accountability. The complexities of AI are essential to resisting the oversimplification of AI as either a hazard or a panacea. GenAI, in its strongest interpretive frame, is a conditional benefit. Its value depends on the quality of human orchestration, congruence of task and tool, employees' AI literacy, and the systemic infrastructure of the organization in relation to its application.

For practice, the findings suggest that organizations should consider other implications for GenAI adoption beyond simple technical implementation. Managers must define clear roles for AI-assisted work, delineate the boundaries of judgment, and establish the systematic processes to monitor, justify, and amend the outputs of AI (Czucka-Varga, 2025). AI literacy is important, because workers should understand GenAI and its shortcomings. Organizations must safeguard the integrity of work, to be sure that employees participate in the process and not simply be passive users of AI-generated work. Ethical guidance, data protection, transparency, and accountability should be built into GenAI implementation from the beginning. The goal for management, therefore, is not simply to use GenAI more often. The objective should be to use GenAI in ways that improve decision quality, strengthen employee capability, and support responsible human–AI collaboration.

This review has limitations too. It is not intended to be a comprehensive systematic literature review, despite having transparent screening criteria and conducting the search in Scopus and Web of Science. It is based on the synthesis of 17 English-language articles published between 2023 and 2026, representing an evolving field and recent literature. There is no primary empirical fieldwork in the review because it is focused on the interpretation of published literature, and not on collecting primary empirical data. Furthermore, the geographic scope of the included studies (China, Europe, and the United States) may limit the geographical breadth of the findings. Additionally, conceptually broad articles (i.e. articles describing concepts in different fields) were mostly aligned to a single theme, although each article was classified based on its strongest contribution to the research questions. The search in future research could be broadened not only in terms of the keywords and databases but also in terms of the geographic areas and different organizational contexts in which the understanding of leadership as a human–AI system could be empirically validated.

9. Conclusion

This paper examines the implications of Generative AI and large language models for leadership and managerial decision-making, as well as for collaboration between humans and AI within organizational contexts. Drawing on 17 selected articles, it shows and suggests that GenAI tends to alter the boundaries of managerial work rather than replace it. Regarding RQ1, GenAI reconfigures leadership roles toward coordination, validation, interpretation, and governance of human–AI systems. For decision-making, GenAI expands the information and decision-making alternatives. However, this does not automatically improve decision quality, which still depends on human judgment, task–technology fit, transparency, and accountability. GenAI reshapes work practices and the employee experience by providing new ways of collaborating and sharing knowledge, while also creating risks related to dependence, trust, ethics, alienation, and meaningful work.

For organizations, the main suggestion is to treat GenAI adoption as a managerial and socio-technical challenge rather than

only a technological change. Managers should define clear roles, maintain human oversight, strengthen AI literacy, and create ethical and transparent routines for using AI outputs. Overall, the review suggests that GenAI extends e-leadership from leading through technology toward leading alongside AI. Future empirical work should examine unresolved questions of responsibility, trust, and accountability in human–AI systems across sectors, countries, and organizational settings.

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