

LEADERSHIP IN THE AGE OF GENERATIVE AI: RETHINKING LEADERSHIP COMPETENCIES, EMPLOYEE ENGAGEMENT, AND ORGANIZATIONAL TRANSFORMATION

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ABSTRACT

Generative artificial intelligence (GenAI) is reshaping organizational leadership by transforming decision-making, knowledge work, employee roles, and approaches to organizational change. This narrative review examines how GenAI is redefining leadership competencies, influencing employee engagement, and enabling organizational transformation in contemporary business environments. The review synthesizes literature published between 2020 and 2024 across leadership, artificial intelligence, human resource management, human–AI collaboration, and digital transformation. The synthesis indicates that effective leadership in GenAI-enabled organizations requires an integrated competency portfolio encompassing AI literacy, strategic judgment, adaptive learning, human-centered leadership, and ethical governance. GenAI can strengthen employee productivity, autonomy, learning, and creativity; however, poorly managed implementation may generate distrust, job insecurity, technostress, reduced autonomy, and resistance. Leadership therefore plays a central role in translating technological capabilities into employee engagement through transparent communication, participatory implementation, reskilling, and responsible governance. An integrative framework is proposed linking GenAI adoption with evolving leadership competencies, employee engagement, and organizational transformation while recognizing contextual influences and feedback mechanisms. The review concludes that sustainable GenAI-driven transformation depends not merely on technological adoption but on leadership capable of balancing innovation, human agency, organizational adaptability, and responsible AI use.

Keyword: Generative artificial intelligence, Leadership competencies, Employee engagement, Organizational transformation, Human–AI collaboration

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1. Introduction

Generative artificial intelligence (GenAI) has quickly transitioned from an experimental technological capability to a meaningful aspect of organizational life today. Unlike previous artificial intelligence systems, which primarily classified, predicted, or optimized a set of predefined outcomes, GenAI can generate text, code, analytical interpretations, and other synthetic content via natural-language interaction. This expands the spectrum of tasks AI can do and moves it towards more managerial, professional, and knowledge-based tasks. GenAI is thus not just another step towards workplace automation, but a transformation of how organizational knowledge can be created, shared, understood, and utilized. This broader application is exemplified by its interactive support of human resource (HR) and managerial tasks (Aguinis et al., 2024), and at the same time, its functionalities evoke questions regarding accuracy, transparency, ownership, accountability, and proper human oversight (Feuerriegel et al., 2024).

Since before generative models spread, artificial intelligence has been transforming the way organizations operate and how they utilize information. AI in organisations reveals that implementation is not a matter of replacing machines with employees, but a matter of interaction between the technological capabilities, organisational arrangements, professional practices and human judgment (Benbya et al., 2021). The value of the organization thus requires not only the technical resources but also complementary managerial and organizational capacities (Enholm et al., 2022). In the context of GenAI, this is amplified, as workers are communicating with systems that are capable of handling complex tasks without relying on technical teams. As conversational AI becomes more accessible, there is a greater need for governance, coordination and informed use in managerial and organizational settings. Analysis of ChatGPT from a multidisciplinary perspective has similarly identified significant potential and concerns related to reliability, ethics, misinformation, jobs, and institutional governance (Dwivedi et al., 2023).

These have important consequences for leadership. Traditional skills like strategic thinking, communications, interpersonal influence, ethical decision making and change management are still relevant, but are now more likely to function in a world in which algorithms play a part in decision-making and knowledge creation. Leaders need to decide when AI takes over, when it enhances skills, and when it comes to decisions with significant impacts, it is still a human call to make. This results in an automation-augmentation paradox, in which the same technology can replace and augment human activity (Raisch & Krakowski, 2021). Thus, sociotechnical alignment between the employees, the technologies, the organizational structure and the managerial process is a crucial element for effective integration (Makarius et al., 2020).

The leadership implications intensify when we add the factor of employee engagement to the mix with GenAI. AI systems can streamline repetitive tasks, enhance knowledge access, boost productivity, and

free up time for employees to concentrate on more intricate tasks. Meanwhile, workers may feel unsure of their roles, job requirements, or even the monitoring and/or control of their boss. As a result, the adoption of AI has become a human resource management concern and not just an investment in technology. Research on HRM in the international context has found opportunities and challenges of the intelligent workplace technologies (Vrontis et al., 2022). GenAI expands this agenda since its applications are directly relevant to recruitment, training, performance, communication, knowledge work and workforce development, necessitating the rethinking of HRM research and practice concerning human-AI interaction (Budhwar et al., 2023).

It is all about organizational transformation. Digital transformation is more than just technology implementation; it is fundamental changes in the way organizations create value, their organization, their processes and their strategic orientations (Verhoef et al., 2021). Literature also on organizational change suggests that organizational change is successful when it has interactions between technologies, structures, strategy and managerial capabilities (Hanelt et al., 2021). Evidence on AI-driven transformations projects indicates that the value for the business is realised when the technological projects are turned into re-imagined organisational activities and capabilities (Wamba-Taguimdje et al., 2020). GenAI thus presents a leadership challenge, not only for competency development at the individual level, but also for workforce engagement and for change in the organization.

Although much scholarship exists, these fields are often treated separately. Studies might focus on, for example, AI capabilities, digital transformation, HRM, algorithmic work, or leadership and not adequately reflect the mechanisms that link the leadership competency, employee responses, and the transformation outcomes. Leaders shape the interpretation of technology, employee involvement, building capabilities, governance structures, and the myths and narratives that explain AI-related change, necessitating a leadership-centric approach to synthesis. This narrative review thus synthesises the new GenAI scholarship with the existing literature on AI-management and organization in order to understand how leadership is currently being redefined with the advancement of AI-enabled modes of working.

- To examine how Generative AI is reshaping leadership competencies within contemporary business organizations.
- To synthesize evidence on leadership practices influencing employee engagement during Generative AI adoption.
- To explore leadership mechanisms facilitating effective organizational transformation in Generative-AI-enabled business environments.

2. Generative AI and the Changing Landscape of Business Leadership

2.1 Emergence of Generative AI in Organizations

With the rise of GenAI, AI has increasingly become a part of daily organizational tasks, beyond specific analytical roles. With a natural-language interface, managers and workers can create, summarize, interpret and reword information, without the need for sophisticated programming skills. Evidence from the field suggests that generative tools have the potential to boost the productivity of professional writing activities, though this may depend on the specific task and the characteristics of the workers (Noy & Zhang, 2023). This accessibility shifts managerial expectations as leaders will be monitoring task execution among humans and decisions on where machine-generated outputs fit into workflows. This move is an example of a longer trend of moving from replacement automation to augmentation. AI can augment human capabilities by doing specific parts of the job but retaining human control over the context, interpersonal interactions and accountability (Tschang & Almirall, 2021). The shift in managerial work through organizational GenAI adoption is therefore more a shift in the composition of managerial work than a reduction in the amount of work.

2.2 GenAI in Managerial Decision-Making and Knowledge Work

By quickly synthesizing information, producing alternatives, structuring arguments, and aiding in knowledge retrieval, GenAI can help in managerial decision processes. The studies on human–AI integration have shown that there is a need to consider human and AI complementary abilities for strategic decisions rather than total AI autonomy (Trunk et al., 2020). The complementarity is particularly applicable in the light of the fact that GenAI outputs are often presented in a fluent manner and may seem authoritative, even when there is uncertainty or a fact is wrong. Thus knowledge management is an essential area of leadership. While AI offers a vast computational power and information processing speed, human expertise brings contextual understanding, tacit knowledge, organizational memory and accountability. A partnership perspective thus provides a more solid foundation for knowledge management than does technological substitution (Jarrahi et al., 2023).

2.3 Human-AI Collaboration in Leadership

Design of managerial decision systems changes due to Human-AI collaboration. The key issue is who gets decision rights, information, expertise and accountability: people or algorithms? Human-AI decision making is not necessarily a "one-and-done" problem of relying on the technology output, but an organization design problem where roles are deliberately assigned (Puranam, 2021). At the team level, the understanding of intelligent machines as teammates also leads to questions of coordination, trust, communication, shared mental models and responsibility (Seeber et al., 2020).

Table 1. Emerging Changes in Business Leadership Under AI and GenAI

Leadership domain	Traditional emphasis	AI/GenAI-enabled shift	Leadership requirement	References
Knowledge work	Human information processing	AI-assisted synthesis and generation	Validate and contextualize outputs	Jarrahi et al. (2023)
Strategic decisions	Managerial analysis	Human-AI decision configurations	Allocate decision authority	Puranam (2021)
Teamwork	Human team coordination	Humans collaborating with intelligent agents	Build coordination protocols	Seeber et al. (2020)
Productivity	Human task execution	Augmented knowledge work	Redesign workflows appropriately	Noy & Zhang (2023)

Table 1 shows that GenAI does not eliminate leadership responsibilities; it relocates them toward orchestration, verification, role allocation, and governance. Leadership therefore increasingly concerns the architecture of collaboration between human expertise and machine capability.

2.4 Changing Expectations of Organizational Leaders

The use of AI changes the landscape of strategic-management expectations by accelerating and complexifying the information conveyed to managers. AI and strategic management have evolved in the context of decision support, organizations capabilities, competitive advantage, and changing managerial role (Keding, 2021). Digital leadership is therefore transitioning from traditional technology use to how the evolving impacts of AI affect leadership, communication, delegation, and the dynamic between leaders and followers (Van Quaquebeke & Gerpott, 2023).

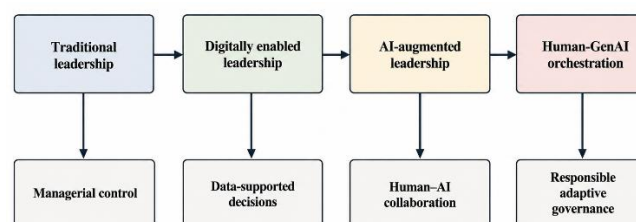


Figure 1. Evolution of Business Leadership in the Generative AI Environment

Figure 1 conceptualizes leadership evolution as a progression in the locus of managerial value. As routine information generation becomes increasingly automated, leadership value shifts toward contextual judgment, integration, relationship management, ethical oversight, and orchestration of complementary human and AI capabilities.

3. Rethinking Leadership Competencies in the Generative AI Era

3.1 AI and Digital Literacy

GenAI transforms AI literacy from a specialist skill to a managerial competency. Leaders need to be knowledgeable enough to be able to ask the right questions, know how to use the outputs appropriately, understand the limitations and communicate realistic expectations. Digital transformation research reveals that competency profiles of leaders are increasingly starting to include technological knowledge, in addition to strategic or interpersonal skills (Gilli et al., 2023). GenAI can also play a role in leadership development, enabling individuals to engage in self-directed learning and tailor their skill set to their personal needs, allowing leaders to leverage it as a tool in the workplace as well as in developing their own skills (Rukadikar & Khandelwal, 2024).

3.2 Strategic and AI-Augmented Decision-Making

The understanding of AI must be converted into strategic thinking. Organizational AI capability refers to technical resources, human skills, coordination and managerial capacity, and such capability has been linked to organizational creativity and performance (Mikalef & Gupta, 2021). Leaders thus must separate the responsibility for information generation and for decision. While GenAI can help broaden the range of options that are explored, there is still room for interpretation of organizational priorities, stakeholder interests, uncertainty and consequences when it comes to making strategic decisions.

3.3 Adaptive and Learning-Oriented Leadership

The pace of technological change makes adaptability crucial. Digital transformation has been associated with leadership, organisational agility and digital strategy, which suggest that any changes should not be episodic technology interventions, but should be ongoing and continuous adjustment, supported by leaders (AlNuaimi et al., 2022). The readiness of organizations for AI is also related to strategic alignment, resources, knowledge, culture, and preparedness (Jöhnk et al., 2021). Learning-oriented leaders need therefore to establish an environment where experimentation takes place and there are processes for assessing and correcting.

3.4 Emotional Intelligence and Human-Centered Leadership

Technical skills increase and interpersonal leadership is not replaced. Trust is key among the factors determining whether people embrace AI recommendations and work well with intelligent software.

Research and studies on human trust of AI systems indicate that trust can be influenced by attributes related to the technology, task, individual and context (Glikson & Woolley, 2020). Thus, managers must translate workers' concerns, convey ambivalence and avoid the marginalization of human experience by technological enthusiasm.

3.5 Ethical Judgment, Accountability, and Responsible AI Leadership

When models, data, or the process of using AI results in discriminatory patterns, AI-mediated decisions can perpetuate or exacerbate unfairness. Algorithmic discrimination in recruitment and HR development is proof of this as it shows the need for leadership competencies in fairness assessment and responsible deployment (Köchling & Wehner, 2020). Similarly, organizational AI design should integrate fairness considerations, not simply as post-implementation fixes (Robert et al., 2020).

Table 2. Leadership Competency Portfolio for the Generative AI Era

Competency	Core capability	Organizational application	Principal risk addressed	References
AI literacy	Understand capabilities and limitations	Evaluate GenAI applications	Uncritical adoption	Gilli et al. (2023)
Strategic AI judgment	Combine AI insights with managerial reasoning	Decision support	Automation bias	Mikalef & Gupta (2021)
Adaptive leadership	Learn and reorganize rapidly	Transformation initiatives	Organizational rigidity	AlNuaimi et al. (2022)
Human-centered leadership	Maintain trust and interpersonal awareness	Employee interaction	Distrust and disengagement	Glikson & Woolley (2020)
Ethical judgment	Evaluate fairness and accountability	AI-mediated HR decisions	Bias and discrimination	Köchling & Wehner (2020)

Table 2 indicates that effective GenAI leadership requires a hybrid competency portfolio. Technical understanding is necessary but insufficient without strategic, adaptive, interpersonal, and ethical capabilities.

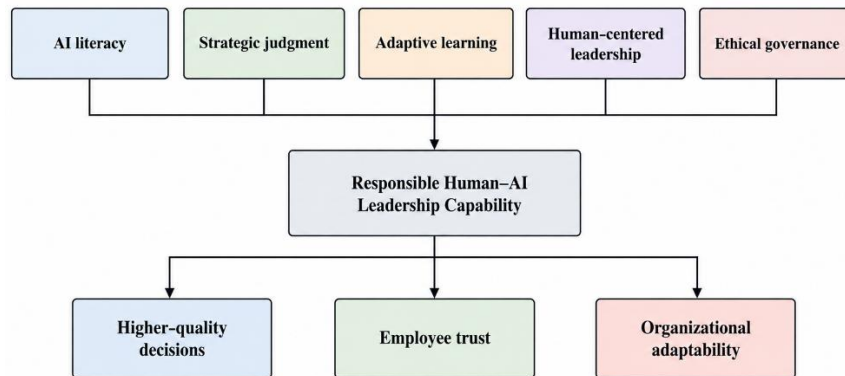


Figure 2. Integrated GenAI Leadership Competency Model

Figure 2 positions responsible human-AI leadership as the convergence of five complementary competencies. Weakness in any one dimension can constrain the organizational value of otherwise sophisticated GenAI capabilities.

4. Generative AI and Employee Engagement

4.1 GenAI and Changing Employee Experiences

GenAI redefines employee experience by reshaping the nature of tasks, access to information, workload, and the intersection of human and machine capabilities. Such a ChatGPT-enabled workforce can have new affordances for productivity and learning but also have unintended consequences of dependence, role ambiguity, and changed expertise (Retkowsky et al., 2024). Work-design scholarship highlights how the impacts of technology can be heavily conditioned by the way automation and algorithms redefine autonomy, task variation, feedback and social interaction (Parker & Grote, 2022).

4.2 Employee Autonomy, Empowerment, and Creativity

Algorithmic technologies either diminutive or expansive with respect to autonomy. They can be used as means of control to curtail discretion, or as means of support so that employees can focus on higher value activities. Thus, the relationship between algorithmic management and autonomy and value creation is ambivalent (Meijerink & Bondarouk, 2023). Algorithms can consequently affect basic job aspects and related employee outcomes (Parent-Rocheleau & Parker, 2022) as they are becoming more prevalent as work designers.

4.3 Trust and Acceptance of AI

The success of acceptance is determined by the employees' understanding and acceptance of AI-based management. Algorithmic management alters information asymmetries and may shift authority from supervisors, who are visible, to a code, which is not. Research in the workplace has thus focused on the understanding of algorithmic management in the context of its surrounding organization and employment (Jarrahi et al., 2021). GenAI leadership needs to communicate not only the capabilities of the technologies but also the rationale behind specific applications and the measures for oversight and responsibility.

4.4 Job Insecurity, Technostress, and Resistance

AI can be seen as a development opportunity or a threat to job security and autonomy for employees. Algorithmic management literature in the context of app work shows the way that digital mediated control can raise new employment-relation issues (Duggan et al., 2020). While the nature of the work created with GenAI is not gig work, the issue of fostering engagement is still pertinent: it is hard to keep people engaged if technology is seen as a tool of replacement, supervision or unilateral control.

4.5 Leadership Practices for Sustaining Employee Engagement

These can be moderated by leadership combining with direction and participation. The experimental findings regarding digital transformation point to complementary leadership behaviors supporting employees' ability to deal with organizational change (Weber et al., 2022). Similarly, research directly studying AI and employee performance and work engagement highlights change leadership as a critical contextual factor in employee attitudes towards AI (Wijayati et al., 2022).

Table 3. GenAI Conditions Associated with Employee Engagement

GenAI-related condition	Potential positive effect	Potential negative effect	Leadership response	References
Task augmentation	Productivity and learning	Dependence on AI	Preserve meaningful human contribution	Retkowsky et al. (2024)
Work redesign	Greater task focus	Reduced autonomy	Use participatory job redesign	Parent-Rocheleau & Parker (2022)
Algorithmic coordination	Faster information flows	Perceived control	Clarify decision processes	Jarrahi et al. (2021)

Organizational change	Skill development	Resistance and uncertainty	Combine supportive change behaviors	Weber et al. (2022)
AI-supported work	Performance opportunities	Engagement variability	Strengthen change leadership	Wijayati et al. (2022)

Table 3 demonstrates that GenAI itself cannot be assumed to increase or decrease engagement. Outcomes depend on work design and leadership-mediated implementation, particularly autonomy, transparency, participation, and development opportunities.

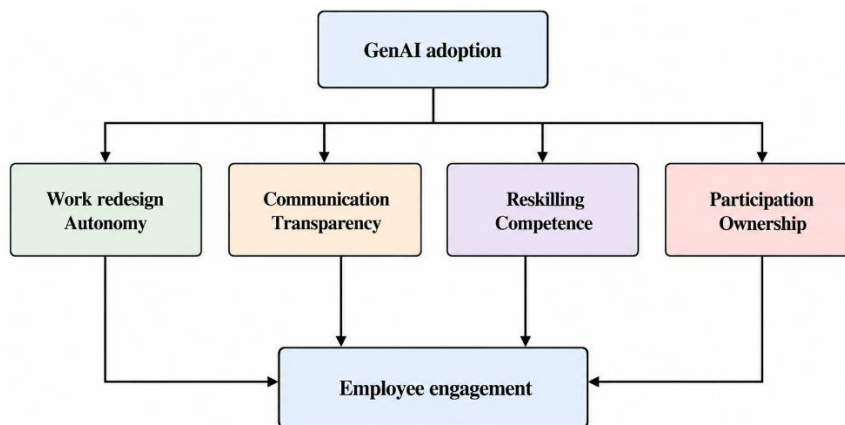


Figure 3. Leadership Pathways from GenAI Adoption to Employee Engagement

Figure 3 illustrates why employee engagement should be treated as a mediated organizational outcome rather than an automatic consequence of technological adoption.

5. Leadership and AI-Driven Organizational Transformation

AI can revolutionize organizations by rewriting their configuration of knowledge, decisions, workflows, and human resources. AI has been found to be an opportunity to enhance organizational processes and simultaneously creates new managerial challenges according to studies in the field of International HRM (Budhwar et al., 2022). This means HR systems need to be able to accommodate new ways of working rather than being new technologies that are bolted onto existing systems (Qamar et al., 2021).

5.2 Organizational Culture and AI Readiness

Transformation is contingent on whether organizations have conditions needed to be able to absorb AI into their daily work. AI enhanced HRM research views adoption as a multi-level process, with its antecedents, assimilation, and consequences (Priksht et al., 2023). Leaders need to foster cultures

where staff can take risks responsibly, challenge AI-generated content, collaborate on learning and share learnings and failures without assuming that adopting technology is an inevitability of progress.

5.3 Workforce Reskilling and Capability Development

To enable transformation, workforce skills must complement AI. A framework of AI capabilities for HRM highlights the importance of integrated technological, human and organizational capabilities to realize value (Chowdhury et al., 2023). Reskilling should, therefore, extend beyond tool-based training, and include critical thinking, manual use, data skills, ethics, and the ability to collaborate on problem-solving and identify situations where a human touch is required.

5.4 Managing Resistance and Organizational Change

Employees might develop resistance to AI if they feel it is threatening, not well understood, or unfair, or if it conflicts with their professional identity. The interdisciplinary research on AI-HRM highlights significant challenges regarding employee acceptance, skills, ethics, and implementation in organizations (Pan & Froese, 2023). Resistance should therefore be viewed as a diagnostic indicator of the design of the transformation, not just as something to be overcome.

5.5 AI Governance and Organizational Accountability

With GenAI integration into HR and managerial processes, who will be responsible for selecting the technology, using the data, checking GenAI's accuracy, making decisions, and safeguarding employee data? The application of AI in HRM needs to be aligned with the overall goals of the organization and the technological capabilities of the HRM system, which is crucial for strategic application (Malik et al., 2023). There is a need to redesign HR systems to include new relationship dynamics between employees, managers, and AI technologies (Tinguely et al., 2023).

Table 4. Leadership Mechanisms Supporting AI-Driven Organizational Transformation

Transformation requirement	Leadership mechanism	Expected organizational contribution	References
Human-AI integration	Align people and technology	Sustainable implementation	Qamar et al. (2021)
AI assimilation	Build supportive organizational conditions	Greater AI readiness	Prikshat et al. (2023)

Capability development	Reskill employees and managers	Stronger AI capability	Chowdhury et al. (2023)
Change acceptance	Address employee concerns	Reduced implementation resistance	Pan & Froese (2023)
Governance	Establish accountability and controls	Responsible AI use	Malik et al. (2023)

Table 4 reinforces that organizational transformation is not produced by GenAI capability alone. Leadership connects technological potential with workforce capability, cultural readiness, change management, and governance.

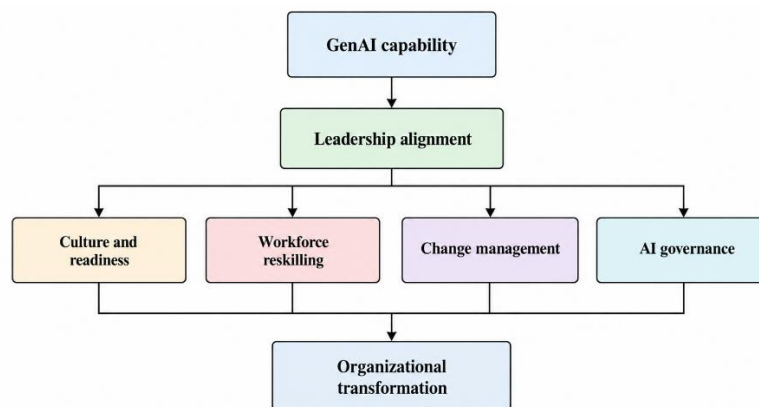


Figure 4. Leadership Architecture for GenAI-Driven Transformation

Figure 4 depicts transformation as a leadership-mediated process. Technology provides enabling capability, whereas organizational outcomes depend on whether leaders align human, cultural, strategic, and governance mechanisms around its use.

6. Integrating Leadership, Engagement, and Organizational Transformation

6.1 Interrelationships Among the Three Dimensions

Leadership competency, employee engagement, and organizational transformation shouldn't be viewed as standalone outcomes of AI uptake. AI delivers organizational results via several layers of individual, team, managerial, structural and institutional interaction (Bankins et al., 2024). Moreover, GenAI makes HRM more relevant in the strategic context as organizations need to figure out how workforce capabilities and management systems should change as generative technologies become more powerful

(Chowdhury et al., 2024). Leadership competency is a linking mechanism since it is leadership who take the technological opportunities, decide on acceptable uses, allocate resources, communicate change and guide employee participation.

6.2 Human-AI Complementarity in Organizations

Human-AI complementarity is an important aspect to manage in effective integration. It is important to recognize that there may be times when the outputs of opaque AI are relied upon by professional users without their realizing it, especially when making consequential judgements (Lebovitz et al., 2022). Changes in the organisation can also lead to changes in the regimes of knowledge and expertise, and to symbolic and material changes how employees create professional authority (Pachidi et al., 2021). Leaders must thus maintain a meaningful human agency and leverage the computational and generative power of AI.

6.3 Proposed Conceptual Framework

The synthesis suggests a framework that is integrative, where the adoption of GenAI is not the end of organizational change but a starting point. Leadership competencies determine the meaning of technology and how it's managed; these practices determine employee experiences and engagement; employee engagement determines how much new practices are adopted; and successful adoption determines organizational transformation. GenAI also generates innovation opportunities and, therefore, it has relevance in the future organizational innovation systems (Mariani & Dwivedi, 2024).

Table 5. Integrative Synthesis of GenAI, Leadership, Engagement, and Transformation

Framework component	Primary organizational question	Leadership responsibility	Expected consequence	References
GenAI adoption	What should AI augment or automate?	Strategic technology selection	Appropriate AI use	Bankins et al. (2024)
Leadership competency	How should AI-enabled work be governed?	Judgment and orchestration	Responsible implementation	Chowdhury et al. (2024)
Human-AI complementarity	When should humans override or rely on AI?	Define decision boundaries	Preserved human agency	Lebovitz et al. (2022)

Knowledge transformation	How does AI alter expertise?	Manage changing knowledge structures	Adaptive work practices	Pachidi et al. (2021)
Innovation and transformation	How can GenAI create sustainable organizational value?	Align innovation with strategy	Organizational renewal	Mariani & Dwivedi (2024)

Table 5 integrates the review's central argument: GenAI's organizational consequences depend on a sequence of managerial and employee mechanisms rather than technological sophistication in isolation.

6.4 Key Tensions and Organizational Trade-Offs

There are constant tensions in integration. The use of AI can potentially boost efficiency and enhance managerial control at the same time. The introduction of algorithms can reshape workplace authority and give rise to conflictual expressions of control over the workplace between management and workers (Kellogg et al., 2020). Efforts in relation to efficiency and autonomy, standardization and professional discretion, personalization and privacy, and fast experimentation and governance are all factors that must be addressed by leadership. The context within a sector is important. In the field of service robots and leadership in the hospitality industry, significant changes in the roles of managers were predicted to occur because of the use of smart technology in service delivery (Xu et al., 2020). What it all means is that the GenAI leadership model must not be completely context free.

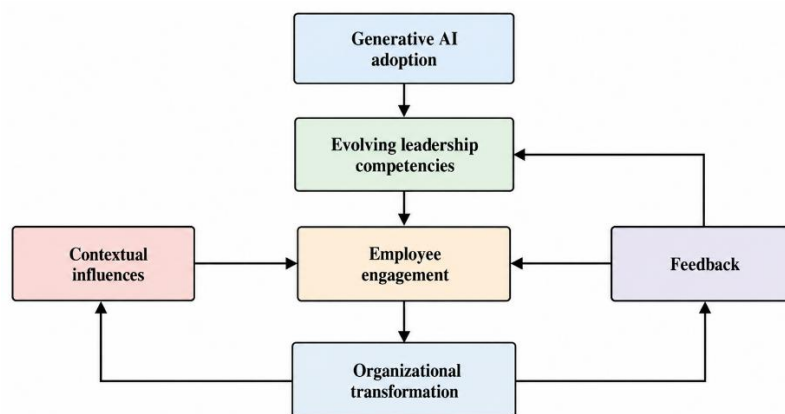


Figure 5. Integrative Framework for Leadership in the Age of Generative AI

Figure 5 presents the principal synthesis of the narrative review. Rather than depicting transformation as a linear technological effect, the framework identifies leadership competencies and employee engagement as interconnected mechanisms translating GenAI adoption into organizational change. The

feedback pathway recognizes that transformation subsequently creates new leadership requirements, making GenAI-enabled organizational change iterative rather than terminal.

7. Challenges, Research Gaps, and Future Directions

While there has been a surge in interest in GenAI, knowledge about it is not uniform. Within a brief span of time, in which technologies, business applications and governance practices have evolved rapidly, much organizational discourse has emerged. Decisions are often made about organisation strategies at a time when there is not enough robust evidence of long-term effects. One of the biggest challenges is determining the difference between short-term boost in productivity and long-term organizational capability. While there may be immediate gains in faster content production, quicker information retrieval, and faster task completion, there is a need for evidence in terms of decision quality, innovation, learning, employee development, customer outcomes, and organizational resilience for sustainable transformation.

The other gap is in measuring leadership competency. There are ongoing debates over what desirable competencies might be with regard to AI literacy, adaptability, ethical judgement and strategic thinking, but consensus is lacking on how these competencies might be operationalized or assessed in GenAI contexts. Future studies are needed to build multi-faceted competency instruments that differentiate between technical knowledge and managerial application. Longitudinal studies could test if skills can develop via formal development, experience, organizational experimentation, or repeated human-AI interaction.

Equally careful investigation is needed at the employee level. Productivity is not an indicator of engagement: an employee may be more productive and feel less autonomous, secure about his or her job, or less professional. Future research should investigate the relationship between engagement and trust, meaningful work, psychological safety, autonomy, technostress, learning and perceived employability. Specific focus is needed on variation among occupational groups as GenAI can potentially deskill or standardize some jobs, and deskill or empower others.

Additionally, there is lacking information regarding the impact of leadership actions on employee perceptions of GenAI implementation. While plausible, the relative significance of these mechanisms can shift based on organizational culture, task characteristics, AI maturity, and workforce composition. To overcome this fragmentation, multilevel studies linking leader behaviours with individual employee reactions, team processes and organisational level transformation outcomes would be useful.

Rethinking organizational transformation research to go beyond binary, AI adoption or not. While two organizations can use the same technologies, their results can vary significantly because one is redesigning the entire workflows, decision rights, capability systems, and governance, while the other is simply layering GenAI on top of what they're already doing. The following indicators should thus be

measured in the future: depth of assimilation, human-AI task configuration, maturity of governance, learning capability, and organizational structure changes. Comparative case studies and longitudinal designs might help to elucidate how some implementations lead to organizational renewal, while others remain as singular productivity tools.

Another research front is that related to ethical and governance issues. Organizations should have more transparency around accountability when using outputs produced by the AI, disclosure levels, acceptable monitoring, data protection, intellectual property, and how to contest AI-assisted decisions. Governance also needs to be learnt as an organizational capability and not as just regulatory compliance. There is potential research to explore how higher levels of governance can boost employee trust and sustainable adoption, and how over-controlling can stifle experimentation and innovation.

Last, the contextual constraints are not given enough consideration. Technology company, professional knowledge work, or digital mature company findings can be difficult to transfer to small companies, public sector organisations, labor intensive industries or lowly developed economies. Cross-cultural and cross-industry studies are thus needed to conclude if there are differences in GenAI leadership competencies and in employees' responses to leadership across institutions. Rather than whether or not GenAI alters leadership, future studies should aim to understand what configurations of leadership enable organizational transformation in approach, people, purpose, and practice to be responsible, engaging, and sustainable, for whom, and under what conditions.

8. Conclusion

Generative AI is transforming leadership not because it is replacing the manager, but because it will shift the value of managerial judgement. Leaders need to manage the relationship between technological capability and human expertise as generative systems take on more and more of a role in information production, analysis, communication and knowledge work. This narrative review illustrates that AI and digital literacy need to be combined with strategic thinking, flexibility, social skills, moral decision-making, and responsibility. But, leadership competency does not in itself guarantee organizational outcomes. Employee engagement is one of the key mechanisms that propel the acceptance, adaption, challenge, or rejection of GenAI initiatives. Technologies that increase autonomy, learning, creativity, and meaningful contribution can improve engagement; those that are correlated with opaque control, insecurity, or reduced discretion can negatively affect engagement. Organizational change is therefore reliant on practices that link the adoption of GenAI with the development of workforces, participatory change, cultural readiness, work redesign, and responsible governance. Based on the integrative framework presented in this review, GenAI adoption, evolving leadership skills, employee engagement, and organizational transformation are interconnected and recursive processes. The real human and organizational challenge for contemporary business organizations is not just the adoption of more and

more capable generative technologies but the building of human and organizational capabilities to make them responsible and sustainable to create value and maintain trust and agency in learning.

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