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From Human-Centered Management to Human–AI Collaboration: A Viewpoint on Decision Authority in Digital Organizations

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Abstract

Management theory and practice have long been grounded in a human-centered paradigm in which people define goals, interpret information, exercise judgment, and retain final decision authority. Within this paradigm, technology is treated primarily as an instrument that extends human capability while remaining subordinate to managerial intention. This assumption is becoming increasingly fragile in digital organizations. Artificial intelligence systems now classify, recommend, prioritize, predict, allocate, monitor, and sometimes execute decisions at speeds and scales that exceed conventional managerial processes. This viewpoint argues that organizations must move deliberately from human-centered management toward a human–AI collaboration model. The central issue is not whether AI should replace managers, but how decision authority should be allocated, constrained, reviewed, and governed when AI becomes an active participant in organizational decision-making. The article develops an evidence-based viewpoint by synthesizing peer-reviewed and practitioner-oriented articles published. It identifies the limits of human-centered management, articulates a collaboration logic, proposes models of shared decision authority, and derives implications for organizational design and management practice. The shift to human–AI collaboration is not a technological inevitability but a strategic managerial choice. Organizations that fail to design decision authority explicitly risk confusion, resistance, accountability gaps, and underuse of both human judgment and AI capability.

Keywords Managerial judgment, Organizational design, Human–AI collaboration, Decision authority, Digital organizations, Viewpoint

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Introduction

Artificial intelligence is moving rapidly into organizational decision-making across strategy, operations, human resources, marketing, finance, health care, and professional services. This movement is not limited to automating routine tasks; AI systems increasingly generate recommendations, detect anomalies, rank alternatives, forecast outcomes, and influence managerial choices in ways that reshape how organizations act [1]. As AI becomes embedded in work systems, the central managerial question shifts from whether technology supports decisions to how authority is distributed between human actors and algorithmic systems [2].

Management philosophy, however, remains largely attached to a human-centered image of organization. In this image, technology is a tool, managers are the interpreters of context, and decision authority rests ultimately with people who can be held accountable for outcomes [3]. This assumption is increasingly strained because AI systems are no longer passive

repositories or calculators; they are agentic information systems that can receive delegated tasks, adapt to data, and influence decisions before human managers fully understand the basis of the recommendation [4].

The tension is therefore not simply technological but organizational. When algorithms become participants in decision processes, firms must decide whether AI will advise, challenge, filter, rank, veto, or execute decisions, and they must specify who remains accountable when outcomes are shaped by human–AI interaction [5]. Recent work on algorithmic control, human trust in AI, and AI-based organizing shows that the failure to clarify this relationship produces both overreliance and resistance, often within the same organization [6, 7].

This viewpoint argues that digital organizations must deliberately design for human–AI collaboration, with decision authority treated as a core element of organizational design rather than a technical afterthought. The article first critiques the limits of human-centered management in AI-enabled firms, then develops a collaboration logic, examines models of decision authority, and concludes with organizational design implications and practical recommendations for managers [8]. The argument is intentionally forward-looking: as AI systems become more capable, the organizations that thrive will not be those that simply adopt AI, but those that govern how humans and AI decide together.

Central Viewpoint

The central viewpoint of this article is that the traditional human-centered management paradigm is becoming insufficient for AI-intensive organizations. Human-centered management assumes that humans define the problem, technology supplies information, and managers integrate that information into judgment, but this sequence no longer captures the reality of algorithmic systems that identify patterns, generate options, and shape attention before human judgment begins [9]. In this sense, AI does not merely support existing managerial work; it changes the conditions under which managerial work is performed [10].

The new management frontier is human–AI collaboration, not simple substitution or uncritical automation. The automation–augmentation paradox shows that AI can simultaneously displace human activity and create new demands for human oversight, interpretation, and intervention [1]. This means that organizations must abandon the false binary between human control and machine autonomy and instead specify the decision configurations in which humans and AI each contribute distinctive capabilities [11].

Decision authority is the core unresolved issue in this transition. If organizations adopt AI without clarifying who decides, when AI input is binding, when human override is expected, and how accountability is assigned, they create ambiguity that undermines both trust and performance [12]. A human–AI collaboration paradigm therefore requires managers to treat decision authority as a designed organizational architecture rather than as an inherited feature of hierarchy [2].

Figure 1 presents the article's central viewpoint by showing the shift from human-centered management to human–AI collaboration through the redesign of decision authority.

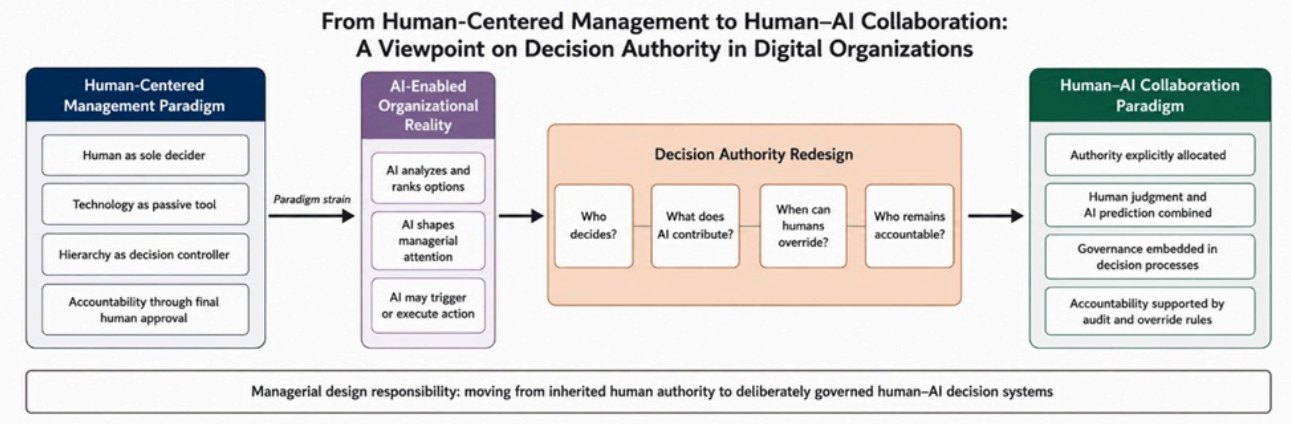


Figure 1. From Human-Centered Management to Human–AI Collaboration: Reconfiguring Decision Authority in Digital Organizations

Limits of Human-Centered Management in AI-Enabled Firms

Human-centered management is valuable because it protects judgment, ethical reflection, contextual understanding, and human accountability. Its limitation is that it often assumes technology remains a neutral and subordinate instrument, even when AI systems actively classify situations, structure alternatives, and recommend actions [13]. In AI-enabled firms, this assumption becomes problematic because algorithms can shape what managers see, which options appear legitimate, and which outcomes are treated as probable [14].

A second limitation is cognitive scale. Human managers are skilled at interpreting meaning and navigating ambiguity, but they cannot process high-volume, high-velocity, multimodal data with the same consistency as AI systems [3]. When organizations insist that humans remain the sole meaningful decision-makers in every case, they may create bottlenecks, delay action, and ignore algorithmically detectable patterns that could improve decisions [9].

A third limitation concerns accountability. Human-centered management often treats accountability as something that follows from human final approval, yet research on opacity and professional engagement with AI shows that approval alone does not guarantee understanding, responsibility, or meaningful control [15]. A manager who rubber-stamps an AI recommendation without understanding its basis is formally human-centered but substantively dependent on algorithmic authority [16].

These limitations do not imply that human-centered management should be discarded; they imply that it must be reframed. The issue is not whether humans matter, but whether the organization has designed decision processes that recognize AI as a consequential participant rather than a silent tool [17]. Table 1 contrasts the assumptions of human-centered management with the realities of AI-enabled firms.

Table 1. Human-Centered Management versus AI-Enabled Reality: Mismatched Assumptions and Emerging Tensions

Human-centered management assumption	AI-enabled organizational reality	Emerging tension for managers
Humans are the sole meaningful decision-makers.	AI systems increasingly generate, rank, and filter decision options before human review.	Formal authority may remain human, while practical influence shifts toward AI.
Technology is a passive tool controlled by managerial	AI systems learn from data, adapt outputs, and shape managerial attention.	Managers may not fully control how decision inputs are produced or

intention.		prioritized.
Human judgment enters after information is collected.	AI often defines which information becomes visible, relevant, or actionable.	Judgment becomes dependent on algorithmically structured evidence.
Accountability follows from final human approval.	Human approval may be superficial when AI recommendations are opaque or technically complex.	Accountability gaps emerge between system designers, users, managers, and organizations.
Hierarchical review is sufficient for decision control.	AI decisions may occur continuously, automatically, and across distributed workflows.	Traditional hierarchy may be too slow or distant to govern real-time algorithmic action.
Trust is built mainly through human expertise and managerial experience.	Trust depends on explainability, reliability, calibration, and the ability to intervene.	Managers must learn when to trust AI, when to question it, and when to override it.
Organizational roles are stable around human expertise.	AI redistributes expertise by automating analysis and creating new oversight responsibilities.	Firms need new roles for auditing, escalation, model monitoring, and decision governance.
Better technology simply improves human decision-making.	AI can improve, distort, displace, or reconfigure decision-making depending on design.	Technology adoption without authority design may produce confusion rather than capability.

Human–AI Collaboration Logic

Human–AI collaboration begins from the recognition that neither human judgment nor AI prediction is sufficient in isolation. Humans contribute contextual reasoning, moral evaluation, organizational memory, and sensitivity to exceptions, while AI contributes scale, consistency, speed, pattern recognition, and probabilistic comparison across alternatives [18]. The managerial task is therefore to design complementary decision architectures rather than to defend human control as a symbolic principle.

This collaboration logic requires a spectrum rather than a single model. At one end, AI acts as an advisor that provides analysis while humans retain full authority; at the other end, AI operates as an autonomous agent within predefined boundaries, with humans monitoring exceptions and outcomes [4]. Between these positions, organizations may design human-led, AI-led, or jointly sequenced decision processes depending on the decision’s uncertainty, reversibility, ethical sensitivity, and operational urgency [19].

The most productive human–AI collaboration occurs when organizations understand complementarity as a design condition, not as an automatic consequence of AI adoption. Research on complementarity shows that human–AI teams perform best when human and machine strengths are deliberately matched to the structure of the task, the quality of available data, and the need for interpretation [11]. Without this design discipline, organizations may either over-automate decisions that require judgment or overburden humans with routine decisions that AI could handle more reliably.

Collaboration also depends on calibrated trust. Algorithm appreciation research shows that people may prefer algorithmic judgment under some conditions, while algorithm aversion research shows that people may reject algorithms after observing even small errors [20, 21]. The practical implication is that managers cannot simply instruct employees to trust AI; they must create decision settings in which trust is earned through transparency, feedback, modification rights, and clear escalation rules [22].

Decision Authority and Managerial Judgment

Decision authority is the right to determine what action will be taken, but in AI-enabled organizations this right is increasingly distributed across designers, data pipelines, algorithms, managers, frontline workers, and governance bodies. The conventional image of a manager making a decision after reviewing information becomes incomplete when AI systems influence problem framing, option ranking, and risk assessment before the manager enters the process [2]. This means that decision authority must be understood as a configuration of influence, approval, intervention, and accountability rather than as a single final signature.

Managerial judgment does not disappear in human–AI collaboration; it changes location and function. Instead of personally analyzing every decision input, managers increasingly judge when AI should be used, whether the model is appropriate for the situation, whether the recommendation fits organizational values, and when exception handling is required [23]. This creates a higher-order form of judgment in which managers evaluate decision systems, not only decision cases.

Four broad models can guide authority allocation: human-only, human-led with AI input, AI-led with human override, and AI-only within governed boundaries. These models should not be treated as maturity stages, because highly responsible organizations may use all four depending on the decision domain [24]. **Table 2** outlines models of decision authority in human–AI collaboration and their implications for managerial judgment.

Table 2. Models of Decision Authority in Human–AI Collaboration: Configurations, Managerial Judgment, and Accountability

Decision authority model	Core configuration	Appropriate decision conditions	Role of managerial judgment	Accountability requirement
Human-only decision authority	Humans make the decision without direct AI recommendation.	Ethically sensitive, novel, ambiguous, or politically consequential decisions where contextual judgment dominates.	Managers interpret context, weigh values, and accept full responsibility for the decision.	Accountability rests primarily with the human decision-maker and the organization.
Human-led with AI input	AI provides analysis, predictions, rankings, or warnings, but humans make the final decision.	Decisions requiring both data-driven insight and contextual interpretation, such as hiring, diagnosis, strategy, or resource allocation.	Managers assess AI relevance, question assumptions, integrate human knowledge, and decide whether to follow the recommendation.	Accountability requires evidence that AI input was reviewed critically rather than accepted passively.
AI-led with human override	AI makes or triggers the default decision, while humans monitor, intervene, and override when necessary.	High-volume, time-sensitive, rule-bounded decisions where exceptions are important but routine human review is inefficient.	Managers define override criteria, monitor performance, review exceptions, and intervene when risk thresholds are crossed.	Accountability requires traceability, override logs, monitoring routines, and clear escalation ownership.
AI-only within	AI executes decisions autonomously inside	Low-risk, reversible, standardized, data-rich	Managers design boundaries, approve	Accountability shifts to governance design,

governed boundaries	predefined operational, legal, and ethical constraints.	decisions where speed and consistency are more important than case-by-case judgment.	deployment, monitor aggregate outcomes, and revise rules when performance changes.	system validation, auditability, and organizational responsibility.
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The central danger is not that AI will always take authority away from managers, but that authority will become implicit, fragmented, and difficult to contest. Studies of algorithmic work and learning algorithms show that AI can quietly reorganize control, knowledge, and expertise through routines that appear technical but function managerially [6, 25]. A responsible collaboration model therefore requires explicit authority maps that identify who may accept, reject, override, audit, or suspend AI-supported decisions.

Figure 2 visualizes the four decision authority configurations that organizations can use to allocate responsibility between human managers and AI systems.

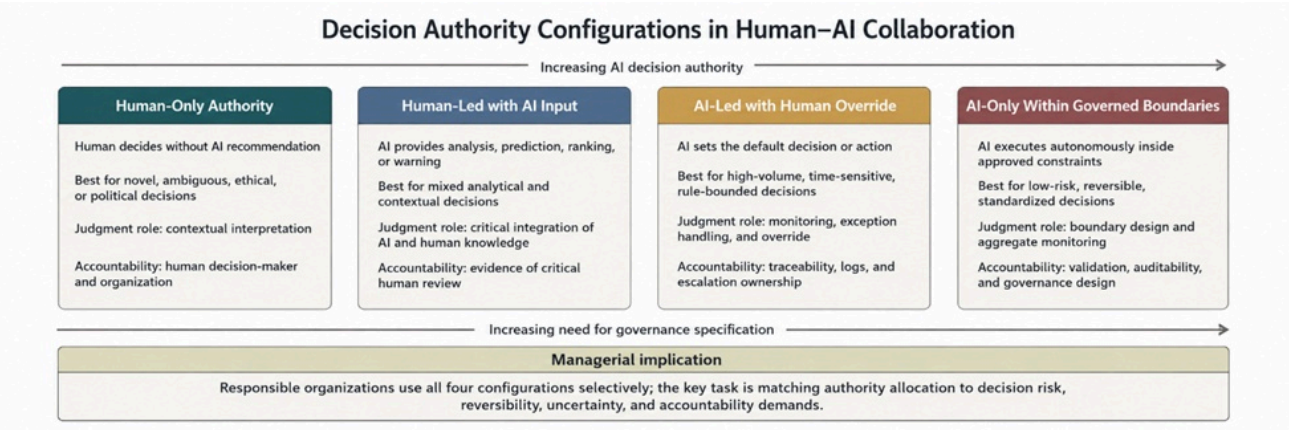


Figure 2. Decision Authority Configurations in Human-AI Collaboration: From Human-Only Judgment to Governed AI Autonomy

Organizational Design Implications

The shift from human-centered management to human-AI collaboration has direct consequences for organizational design. If AI participates in decisions, then organizations must redesign decision rights, escalation paths, review forums, and role boundaries around hybrid decision processes [8]. This moves AI governance from the information technology function into the core of organizational design and strategic management [5].

New roles will be required because traditional managerial positions were not built for continuous algorithmic decision participation. Organizations may need AI decision auditors, model-risk owners, human-AI workflow designers, escalation stewards, and cross-functional governance councils that connect technical knowledge with managerial accountability [17]. These roles should not merely check compliance after deployment; they should shape how AI systems enter decision processes from the beginning.

AI also changes hierarchy. When algorithms make operational recommendations continuously, information no longer flows neatly upward for managerial interpretation and downward for execution [14]. Instead, authority may become more distributed, with frontline workers interacting directly with AI systems, managers supervising decision architectures, and senior leaders setting the boundaries within which AI can act [26].

Culture is equally important because human-AI collaboration challenges professional identity and managerial status. Employees may resist AI when it appears to devalue expertise, while managers may overuse AI when it offers a

convenient shield against responsibility [15]. Organizations therefore need a culture of collaborative intelligence in which questioning AI is legitimate, learning from AI is valued, and accountability remains humanly meaningful even when decisions are algorithmically mediated [7].

Practical Recommendations

Managers should begin with a decision authority audit. This audit should identify where AI is already influencing decisions, whether that influence is advisory or binding, who can override the system, and how decisions are documented [2]. Such an audit should also distinguish between formal authority and practical authority, because AI may shape outcomes even when human managers technically retain approval rights [16].

Organizations should then map AI readiness to decision types. Decisions that are repetitive, data-rich, reversible, and low-risk may be suitable for AI-led or AI-only configurations, while decisions that are ambiguous, value-laden, high-impact, or reputationally sensitive should remain human-led with carefully governed AI input [19]. This mapping prevents both reckless automation and symbolic human control that adds delay without adding judgment [1].

Finally, leaders should pilot human–AI collaboration models before scaling them across the organization. Pilots should include AI literacy for managers, explanation and feedback mechanisms, override protocols, accountability documentation, and evaluation of both decision quality and user trust [18, 22]. The goal is not merely to implement AI but to institutionalize a disciplined way of deciding with AI.

Conclusion

Human-centered management remains morally and organizationally important, but it is no longer sufficient as a complete paradigm for digital organizations. AI systems have become active participants in decision processes, and this development requires a shift from treating technology as a subordinate tool to treating human–AI collaboration as a designed managerial capability.

The central issue in this shift is decision authority. Organizations must decide where authority remains human, where it is shared, where AI may lead, and where autonomous AI action is acceptable within governed boundaries.

Leaders who confront this question directly will be better positioned to combine human wisdom with AI capability. The future of management will not be defined by humans or AI alone, but by the quality of the decision systems that organizations deliberately create between them.

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