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Managing in a world saturated with AI

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Abstract

Organizations have spent the past decade asking how AI can automate tasks and augment human work. But what happens when AI is used by everyone, everywhere, and at negligible cost? Emerging evidence suggests that the consequences are often counterintuitive. Recruitment systems become less effective as AI erodes traditional signals of talent. Automation can increase workloads rather than reduce them. And in some contexts, fully automated systems outperform human–AI collaboration. Drawing on recent research, this article argues that AI saturation creates a new set of managerial challenges that cannot be addressed through traditional adoption strategies. Rather than focusing on how to deploy AI, managers must learn how to design organizations for a world in which AI is ubiquitous. The article proposes three managerial imperatives: preserve signal quality when AI standardizes performance, manage systems rather than individual tasks when automation reshapes demand, and position humans where they create the greatest value rather than assuming they belong in every process. The central challenge of the AI era is no longer technological adoption but organizational design.

Keywords: AI saturation, human–AI collaboration, organizational transformation, managerial decision-making

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Managing in a world saturated with AI

A CEO is reviewing a hiring shortlist. Every candidate looks exceptional: polished CVs, compelling cover letters, flawless communication. Yet something feels off. Unknown to her, candidates and recruiters have both relied heavily on AI. The signals she once trusted no longer differentiate talent. This is a symptom of a broader shift: we are entering a world where AI is used by everyone, everywhere.

Over the past few years, organizations have focused on identifying high-value use cases for AI: enhancing marketing performance, improving financial analysis, accelerating software development, and more. These discussions largely centered on a familiar dilemma: how to balance automation with human augmentation. In 2026, however, the conversation shifted. With unprecedented adoption levels and dramatically lower AI costs, we now operate in environments where AI is used everywhere, by everyone. This ubiquity reshapes work in ways that are often counterintuitive: job applicants and recruiters both rely on AI, teams collaborate through AI-mediated workflows, and leaders must maintain legitimacy when algorithms increasingly inform decisions.

Drawing on emerging research, this article examines how AI saturation transforms organizational dynamics and challenges existing management models. This paper argues that once AI becomes ubiquitous, the core managerial challenge shifts from adopting AI to designing organizations around it. In such environments, traditional signals break down, workloads expand rather than shrink, and human-AI collaboration does not always outperform full automation. The task of management is no longer to deploy AI, but to decide where humans still matter and why.

The shift

Two trends accelerated and reinforced one another: adoption rate and lower technology costs. Consultancy reports recently highlighted how widespread AI adoption is. Singla et al. (2025) estimated at almost 90% the share of companies using AI in at least one business function. And Rapoport et al. (2025) reported AI is a top priority for 74% of the executives they surveyed.

This adoption is accelerated by the fact that access to the technology becomes cheaper every day. For example, according to Sam Altman, OpenAI CEO, the cost-per-task for frontier AI models has dropped 300-fold year-on-year in 2025. It's true that the higher accessibility of the technology acts as a reinforcing loop for adoption. The technology is performing better, so it's more used, so learning curve effects and economies of scale make it cheaper and so more people are using the technology.

The main implication of this recent acceleration is that the technology is now everywhere. The question is no longer "How can AI do X?" but rather "How do we operate when everyone employs AI to do X by default?"

Surprising insights from recent research

A wave of new research challenges our assumptions about how AI transforms work. Here are three surprising findings.

1. Recruitment is broken

Recruitment is one of the first domains where AI saturation reveals its second-order effects. Candidates now routinely use generative models to draft CVs, refine cover letters, and rehearse interview answers. Recruiters, meanwhile, deploy similar systems to filter applications, assess tone, and detect patterns at scale. On both sides, the technology optimizes for what the other side is assumed to value. The result is not better matching, but signal erosion. When everyone writes well, with the same statistical sense of “good,” writing quality ceases to be informative. Recent research makes this distortion visible: with the widespread use of generative AI in written applications, candidates in the highest ability quintile are hired 19% less often than before large language models became ubiquitous (Galdin & Silbert, 2025). Lower-ability applicants are not cheating the system; they are simply presenting closer to the mean. When optimization becomes symmetric, traditional indicators of potential collapse. In a world where AI equalizes surface competence, organizations can no longer rely on polish, fluency, or preparation as proxies for talent. The managerial challenge is therefore not to detect AI usage, but to redefine what counts as signal in the first place and to design selection processes that surface qualities AI cannot so easily smooth away.

For managers, this creates a concrete dilemma: should hiring processes continue to rely on AI-polished signals, or shift toward formats that are harder to optimize (e.g., live assessments, work samples)? Maintaining current processes preserves efficiency but degrades signal quality; redesigning them restores differentiation but increases cost and complexity.

2. Automation doesn't always reduce workloads

In 2016, Geoffrey Hinton famously suggested that radiology was on the verge of obsolescence. Image recognition was improving so fast, he argued, that training new radiologists made little sense. Technically, he wasn't wrong: today's AI systems often outperform humans at identifying anomalies in medical images. And yet, nearly a decade later, the empirical outcome points in the opposite direction. In the UK, the number of radiologists employed by the NHS has increased by more than 40% since that prediction. AI did not arrive as a substitute that cleanly removed human labor from the system. It arrived as a complement that reshaped the work around it and, in doing so, expanded it.

What explains this paradox is that automation changes systems, not just tasks. AI tools in radiology are used by radiologists, not instead of them, and they bring with them new forms of work: validating model outputs, monitoring performance over time, handling edge cases, and assuming responsibility for decisions made with algorithmic assistance. At the same time, efficiency triggers a classic rebound effect. If AI makes magnetic resonance imaging scans faster and cheaper, the system responds by producing more scans, not fewer reports. Factor in an ageing population and a structurally rising demand for medical imaging, and the result is workload expansion rather than contraction. Unsurprisingly, surveys show that only a small minority of clinical directors report workload reductions, while a far larger share report the opposite. The broader lesson extends well beyond healthcare: when organizations assess automation purely through a cost-reduction lens, they systematically underestimate the ways in which efficiency creates new demand, new responsibilities, and new forms of coordination needs. Many AI projects disappoint not because the models underperform, but because the organization misunderstood what exactly would be automated.

This forces organizations to make a strategic choice: is the objective of AI to reduce labor or to expand output? In practice, most organizations drift toward the latter without explicitly deciding and this leads to heavier workloads and misaligned expectations.

3. Sometimes, full automation outperforms human-AI collaboration

A recent study on visual generative AI in advertising (Lee et al., 2025) adds an uncomfortable twist to the standard narrative of human-AI collaboration. The researchers compared three approaches: ads created by human experts, ads created by humans and then “improved” with generative AI, and ads generated entirely by visual AI systems. The intuitive expectation is that augmentation should dominate and that combining human judgment with machine capability would yield the best results. The data says otherwise. Fully AI-generated ads consistently outperform both human-only and human-plus-AI variants, while AI-modified ads show no statistically significant improvement over human benchmarks (Lee et al., 2025). In other words, adding AI to human creative work doesn't help, and in some cases, it actively hurts. This echoes findings from other domains, such as medical diagnosis, where hybrid human-AI decision-making underperforms the best standalone performer. The mistake is assuming that “human in the loop” is always an advantage; in some settings, it is a source of noise.

What makes this result more unsettling is what happens when audiences are told the truth. Disclosing that an ad was generated by AI reduces its effectiveness by up to 31.5%. The same output performs materially worse once its origin is revealed. This suggests that part of AI's advantage lies not just in pattern optimization, but in the absence of interpretive framing: viewers respond to the stimulus, not to its authorship. From a managerial perspective, this creates a stark tension. If full automation performs best, and disclosure undermines performance, then the performance gap becomes, in effect, the cost of transparency. The broader implication is not that ethics should be abandoned, but that the familiar playbook of augmentation and disclosure may be poorly suited to environments where AI already exceeds human performance. In such cases, insisting on collaboration or visibility does not humanize the system. And that raises a harder question for organizations: when AI works better alone, what exactly are we preserving by keeping humans visibly in the process?

This creates a tension managers cannot avoid: if fully automated systems perform better, should humans be removed from the loop, even at the cost of transparency and legitimacy?

Three managerial imperatives for AI-saturated organizations

Design for signal quality, not process efficiency

The first managerial imperative is to preserve signal quality. The recruitment example illustrates a broader phenomenon: when AI becomes widely available, it standardizes performance presentation. This challenge extends far beyond recruitment. Similar dynamics emerge in performance evaluations, consulting reports, software development, marketing content, and customer interactions. Whenever AI helps individuals produce outputs that conform to widely accepted standards of quality, once observable differences between people become harder to detect.

Managers must therefore shift their attention from productivity gains to signal preservation. This may require introducing forms of assessment that are harder to

optimize through AI alone, such as simulations, live problem-solving exercises, work samples, or collaborative tasks conducted under observation.

The deeper implication is that AI saturation transforms information abundance into signal scarcity. Organizations have access to more content than ever before, yet distinguishing exceptional judgment from average competence becomes increasingly difficult. In such environments, competitive advantage may depend on identifying reliable signals within it.

Table 1: Three managerial imperatives for AI-saturated organizations

Research finding	What AI saturation changes	Managerial risk	Managerial imperative	Key question for leaders
<i>Recruitment is broken</i>	AI standardizes performance presentation and reduces differentiation	Mistaking polished outputs for underlying capability	Preserve signal quality	How do we identify talent when AI makes everyone appear more competent?
<i>Automation doesn't always reduce workloads</i>	AI reshapes systems, creates new demand, and generates new coordination work	Underestimating second-order effects and workload expansion	Manage systems, not tasks	What new work, demand, and responsibilities will automation create?
<i>Full automation sometimes outperforms human-AI collaboration</i>	Human involvement is not always beneficial	Keeping humans in processes where they add little value	Put humans in the right place	Where does human judgment genuinely improve outcomes?

Manage systems, not tasks

The second managerial imperative is to manage systems rather than tasks. The radiology example demonstrates that AI rarely affects a single activity in isolation, but rather alters the broader system in which that activity is embedded. By making tasks faster, cheaper, or easier, AI changes patterns of demand, creates new coordination requirements, and generates new forms of work. As a result, automation often transforms work rather than eliminating it. Beyond healthcare, comparable situations emerge in customer service, software development, financial analysis, and administrative work.

Managers should concentrate their attention more on system redesign than on task automation. If they evaluate an AI initiative solely through expected labor savings, they risk overlooking its broader organizational effects. Instead, organizations should assess how automation changes demand, responsibilities, workflows, and coordination mechanisms. They should also explicitly decide whether the objective is to reduce labor requirements or to increase output, as these two outcomes often require different organizational choices.

The deeper implication is increased organizational complexity. The performance of an AI system depends not only on what it automates, but also on how the surrounding organization adapts to it. In such environments, competitive advantage may depend less on automating individual tasks and more on anticipating and managing the systemic consequences that automation creates.

Put humans in the right place

The third managerial imperative is to position humans where they create the most value. The advertising example illustrates a broader phenomenon: human involvement does not automatically improve outcomes. This challenge extends far beyond advertising. Similar dynamics have been observed in areas such as medical diagnosis, forecasting, content generation, and customer service.

Hence managers should focus on designing effective division of labor between humans and AI. The challenge is to identify where human judgment creates value and where it merely adds friction. This requires evaluating human contribution not as a symbolic necessity but as a source of measurable organizational benefit.

As AI systems become increasingly capable, the value of human contribution shifts away from routine execution and toward areas characterized by ambiguity, accountability, and value-based trade-offs. In such environments, competitive advantage may depend less on keeping humans in every process and more on placing them where their judgment, responsibility, and contextual understanding matter most.

Three questions every leader should ask when deploying AI

- What signals will become less informative once everyone uses AI?
- What new work will this automation create elsewhere in the system?
- Where does human involvement improve outcomes, and where does it simply add friction?

Conclusion

The three cases examined here reveal a common pattern. AI saturation changes not only how tasks are performed but also how organizations generate signals, absorb demand, and allocate human involvement. As AI becomes ubiquitous, managers face three design choices: how to preserve meaningful signals, how to manage the system-level consequences of automation, and where to position humans in relation to increasingly capable AI systems. The organizations that succeed will be those that treat these choices as strategic design decisions rather than technological ones.

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