

OPEN-MINDED LEADERSHIP

RESEARCH PAPER

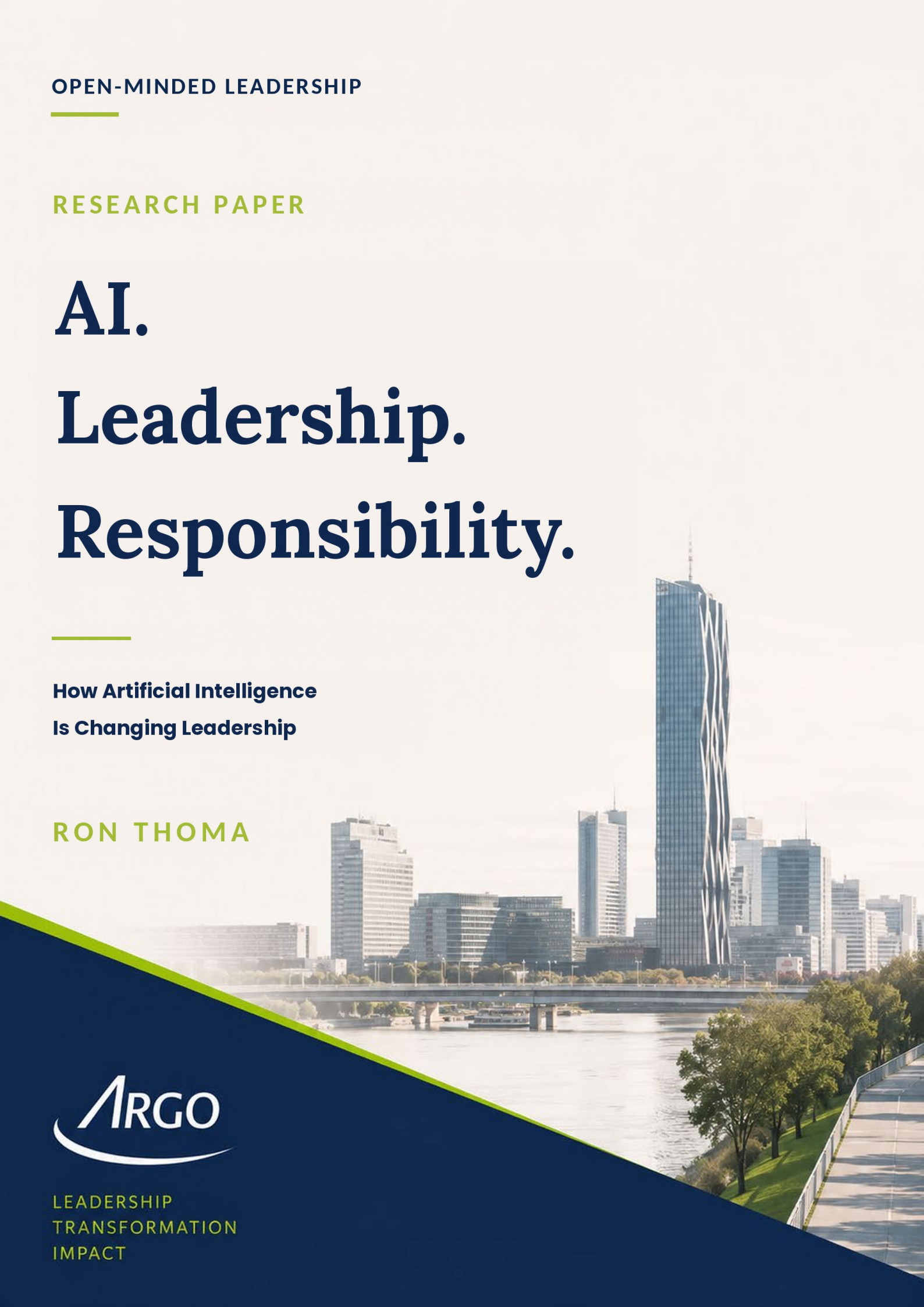
AI. Leadership. Responsibility.

How Artificial Intelligence
Is Changing Leadership

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LEADERSHIP
TRANSFORMATION
IMPACT



AI & Leadership

Current Research, Trends and Implications for Leadership and Organizational Development

Introduction

This research paper summarizes the current state of international research on the impact of artificial intelligence on leadership, organizations, and corporate culture. It focuses on findings from leading business schools, academic publications, and international studies. The goal is to document the current state of research before deriving proprietary models or recommendations for action.

1. Why This Topic Matters Now

The rapid development of generative artificial intelligence and new AI agents is confronting organizations with profound organizational change. Unlike previous waves of digitization, AI affects not just individual processes, but nearly all knowledge-intensive activities. This shifts the focus from the introduction of new software to the redesign of work, leadership and collaboration.

International research is increasingly describing AI as a transformation and leadership issue. The real challenge is not to provide powerful models, but to enable organizations to use them in a responsible, learning, and strategic way.

2. What Is Happening Right Now?

The first wave of AI adoption was characterized by generative AI. Systems generated text, images, presentations, or program code to support individual work steps.

The second wave is increasingly characterized by agentic AI. AI agents independently perform multi-step tasks, coordinate information, communicate with other systems, and support complex workflows. As a result, AI is evolving from a tool to an active component of organizational value creation.

In research, this evolution is sometimes referred to as "above the loop. Building on the concepts of human-in-the-loop, human-on-the-loop, and human-over-the-loop, humans are increasingly taking on the role of defining goals, orchestrating AI agents, evaluating results, and taking responsibility for decisions. Employees are shifting from simply executing tasks to orchestrating outcomes.

International studies such as the Microsoft Work Trend Index, as well as research from McKinsey, BCG, Deloitte, and PwC, consistently show a sharp increase in the use of AI. The exact percentages vary by sample and industry, but the trend is clear: In just a few years, AI is moving from an experiment to an everyday work tool. A recent BCG study, AI at Work (2026), reports that about three-quarters of employees surveyed are already using AI on a regular basis, and more than six in 10 expect autonomous AI systems to perform at least half of their tasks within the next three years.

Notably, several studies independently describe a contradictory pattern: as AI use increases, so does employee confidence and concern. This pattern is similar to previous technological disruptions and suggests that acceptance and uncertainty in the AI transformation should be understood not as opposites, but as parallel developments.

From a historical perspective, the transition from generative to agentic AI represents a **qualitative leap**. While generative systems primarily generate content, agents increasingly take over entire workflows. This changes not only the efficiency of individual tasks, but also the **architecture of organizations** themselves. Roles, responsibilities and leadership are redefined. This links technology and organization.

3. What Do Research and Leading Institutions Say?

Leading institutions such as Harvard Business School, MIT Sloan, Stanford Graduate School of Business, London Business School, and IMD consistently argue that AI is primarily a management and organizational issue. International consulting firms such as McKinsey, BCG, Deloitte, and PwC come to similar conclusions in their studies.

A frequently cited idea by Harvard Business School professor Karim Lakhani is that AI will not replace humans, but that humans who use AI effectively will gain a competitive advantage over those who do not. This idea is one of the most frequently cited starting points for current leadership research on AI.

The research consensus can be grouped into three areas:

Strategy

- **AI is Leadership** – AI is primarily a leadership and transformation task, not solely a technology project
- **Governance** that remains with humans, even as AI supports decision-making processes
- **Strategy** – connecting technological possibilities with strategic business goals through leadership

People

- **Human-AI Collaboration** as a new way of working – the greatest benefit comes from collaboration, not from fully replacing human work
- **AI Literacy** as a core competency for leaders, enabling them to assess the opportunities, limits and risks of the technology
- **Learning** – continuous learning and experimentation as key success factors, as AI technologies keep evolving in short innovation cycles

Responsibility

- **Ethics** as an integral part of every AI implementation, not a downstream question
- **Human Judgement** as an indispensable corrective mechanism, precisely because AI supports decision-making processes
- **Responsibility** for decisions, ethical questions and governance, which remains with humans

A key, often overlooked finding concerns the role of **strategic clarity**: several studies show that success is not determined by mere access to AI tools, but by whether employees receive clear direction and a sense of purpose from their leaders. Employees with clear direction outperform those with greater access to tools but without strategic leadership.

4. What Does This Mean for Leadership and Organizational Culture?

A New Competency Profile for Leadership

Research describes a changing skill profile for leaders. Several institutions, including the London School of Economics, identify a set of core skills for 2026: **strategic thinking about AI, building effective governance, leading through organizational change, using AI to support decision making, and cross-functional collaboration**. Notably, these are not detailed technical skills - leaders do not need to code or understand models in detail - but the ability to manage uncertainty, make decisions under probability, and take responsibility for outcomes that AI has helped to shape.

At the same time, research highlights the growing importance of the human skills that AI cannot replace: **Emotional intelligence, critical thinking, ethical judgment**, and the ability to lead teams through periods of uncertainty. As routine tasks-reporting, scheduling, data analysis-are automated, the core of leadership shifts more toward relationship work, meaning making, and strategic judgment.

Human Judgment as a New Leadership Task

Current research reveals a tension in this context: the very skills that contribute most to long-term business **success-problem analysis, judgment, creative thinking, systems thinking, and complex problem solving-also** carry the highest risk of skill loss from unreflective AI use (see Figure 1). Researchers refer to this pattern as **distributed de-skilling** - a collective erosion of human capabilities that is not primarily an individual competency problem, but rather a consequence of governance, work processes, and organizational culture in dealing with AI.

This is not to say that AI will replace these skills. The real danger lies not in the technology itself, but in people using AI as a substitute for their own thinking, rather than as a tool to enhance their own judgment.

Successful organizations will not use AI simply to increase efficiency. They will create ways of working in which AI performs routine tasks while humans consciously develop their **judgment, creativity, reflective capacity, and strategic thinking**, rather than gradually losing them.

Leadership thus takes on a new role. In the future, leadership will not only mean introducing AI, but also creating working conditions in which AI enhances human competence rather than replacing it. **Human-AI collaboration** therefore means more than just human-machine cooperation. What matters is whether AI enhances human judgment or gradually replaces it.

The Skills That Matter Most Are Those Most at Risk

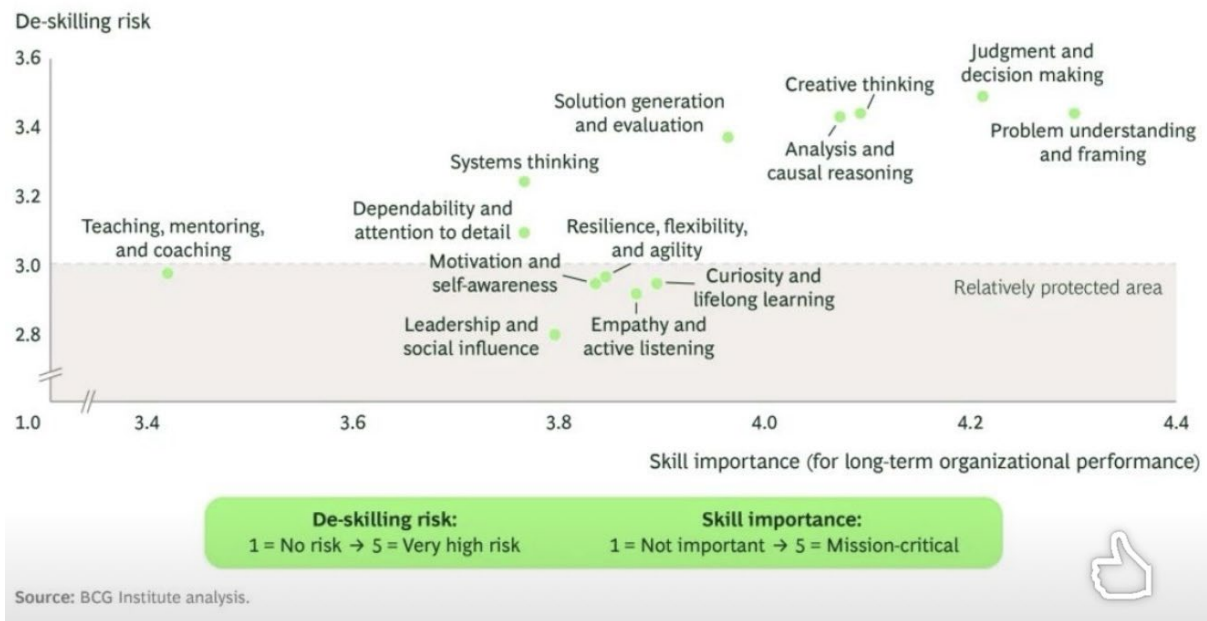


Figure 1. Comparison of skill importance and de-skilling risk. The chart shows that the competencies with the greatest importance for long-term organizational performance – judgment, problem understanding, creative thinking, analytical and causal ability, and solution generation – simultaneously carry the highest de-skilling risk, while more relationship-based competencies (e.g., empathy, motivation, mentoring) form a comparatively protected area. Source: BCG Institute, cited in Goel, Martin & Kaffe (2026), “When Everyone Uses AI, Companies Risk Losing Critical Skills,” Boston Consulting Group.

There is a visible gap in the research regarding pace: the spread of AI tools is accelerating faster than leadership capability is developing. This so-called **AI literacy gap** is increasingly cited as a central risk for the failure of AI initiatives – it is not the technology itself, but the lack of leadership capability to use it effectively, that is seen as the limiting factor.

This shift can be summarized on a single page. The following overview contrasts traditional leadership logics with the corresponding requirements of the AI era:

Traditional Leadership	Leadership in the AI Era
Possessing knowledge	Asking the right questions
Preparing decisions	Supporting and taking responsibility for decisions made with AI
Controlling processes	Orchestrating people and AI agents
Conveying expertise	Enabling continuous learning
Delegating tasks	Shaping human-AI collaboration
Ensuring stability	Fostering change and experimentation
Monitoring results	Creating orientation, meaning and trust

AI as a Context and Mirror of Leadership

Recent research suggests that the successful use of artificial intelligence in organizations is less a technology issue than a leadership and culture issue. Two recent research findings complement each other in a remarkable way.

In its recent research on AI adoption in the workplace, Gallup shows that access to AI tools alone is not enough to make a lasting difference at work. A key variable is the support of immediate supervisors. Employees whose managers actively support the use of AI use AI significantly more often and are far more likely to experience AI as truly transforming their work and enabling them to better use their strengths. Gallup concludes that managers play a **central role in translating** the availability of technology into actual job change.

AI transformation therefore appears less as an implementation task and more as a leadership task. Leaders need to provide direction in a situation where they do not have all the answers, create psychological safety for experimentation, organize learning, support different reactions to change, and redesign work with their teams.

A notable second finding comes from Ben Weidmann, Yixian Xu, and David J. Deming in their study **Measuring Human Leadership Skills with AI Agents**. In a large, pre-registered laboratory experiment, they examined whether leadership skills were also evident when working with AI agents.

An individual's performance in leading AI agents correlated with their causally estimated contribution to the performance of human teams at $p = 0.81$. To determine this individual leadership contribution, leaders were repeatedly and randomly assigned to different human teams. Even after controlling statistically for hard skills, a strong relationship remained at $p = 0.69$.

What's notable here is not only the strength of this correlation, but also the leadership behaviors observed. Successful leaders exhibited similar communication patterns with both human team members and AI agents: they asked more questions and generated more conversational turn-taking. They also scored higher on social intelligence, fluid intelligence, and decision-making skills.

The results do not conclude that a single interaction with an AI system can directly diagnose a person's leadership style. However, they do provide strong empirical evidence that effective leadership skills are not exclusively tied to leading human teams, but are also evident in interactions with AI agents.

Taken together, the findings of Gallup and Weidmann, Xu, and Deming point to two interrelated levels: Gallup shows, at the organizational level, how critical a leader's behavior is to whether AI is actually integrated into work and collaboration. At the individual level, Weidmann, Xu, and Deming show a strong relationship between successfully leading human teams and successfully leading AI agents.

This leads to another hypothesis:

AI is not only a new challenge and context for leadership. Interaction with AI can also become a mirror of observable leadership behavior.

This opens up an interesting perspective for leadership development. In the future, a manager's interaction with an AI agent could be used as a space for reflection. The focus would not be on the technical quality of a prompt, but on observable behavior: How is a task explained? Is enough context provided? Are questions asked? How will errors and unexpected results be handled? Are alternatives allowed? Is there dialogue? Is feedback taken into account and is one's position changed on the basis of new information?

The critical question to consider, then, would not be: "How well can a leader work with AI?" but rather: "What leadership patterns emerge in working with AI - and to what extent are they also evident in working with people?"

At this point, this application in leadership development should be understood as an inference or hypothesis, not as an already empirically validated diagnostic method.

Psychological Safety as a Key Cultural Factor

Psychological safety is highlighted in numerous studies as a decisive success factor for AI transformations – not as a soft cultural factor, but as a **structural success factor**. Employees need to be able to try out new ways of working, openly address mistakes and experiment with AI without fear of negative consequences. Current surveys show that the vast majority of leaders consider a culture of psychological safety to measurably improve the success of AI initiatives.

Several authors describe a **"Trust Paradox"** in this context: successful AI adoption requires high trust and willingness to learn, while at the same time the change creates uncertainty for many people regarding their future role, competence and identity – precisely at the moment when they feel most vulnerable professionally. This gives rise to a key leadership task: actively shaping trust, orientation and transparency, rather than expecting them as a by-product of the transformation.

This dynamic also has a serious downside: a scientific study of South Korean employees shows a link between AI adoption and psychological strain among employees, with psychological safety acting as a decisive mediating factor. Ethical leadership behavior can significantly mitigate this negative effect. This underscores that cultural work in the AI context is not only a question of adoption speed but also of the duty of care toward employees.

In practice, this means for leaders: demonstrating **role-model behavior** themselves by openly sharing their own AI experiments and their failures; creating spaces where experimentation is shielded from short-term efficiency pressure; and establishing feedback and participation structures that give employees a voice in the change process. Several studies suggest that, without this structural safeguard, it is primarily those employees who already have high social capital and trust within the organization who adopt AI tools, while others hold back – which can result in a deepening skills gap.

Shared Leadership Responsibility

Another finding relevant to organizational development is that current research increasingly describes successful AI transformation not as the task of a single function (such as IT), but as a **distributed leadership model**. This requires a close link between technology leadership, business strategy, and people development, which together redesign roles, structures, and incentive systems. Middle-level leadership - the level that actually drives day-to-day change - is explicitly identified in the research as an underinvested lever.

Overall, the research suggests that successful AI transformation depends less on the capabilities of individual systems than on leadership, organizational culture, learning, and accountable governance.

Preliminary Key Theses

- AI is primarily a leadership and transformation task.
- The shift from generative AI to agentic AI is fundamentally changing roles and work processes – people are moving “above the loop.”
- Human-AI collaboration is becoming the dominant organizational model.
- Strategic clarity from leadership matters more for AI success than mere access to tools.
- Psychological safety is a measurable and structural success factor for AI adoption.
- The “Trust Paradox” makes building trust an active leadership task, not a by-product.
- Leadership is shifting from control toward orientation, learning and orchestration – and is increasingly becoming a shared responsibility across functions.
- The ability to lead AI agents effectively is closely related to the ability to lead human teams effectively. AI thus becomes not only an object of leadership but potentially also a mirror of observable leadership behavior.
- Long-term competitive advantage arises not from the mere use of AI, but from leaders’ ability to shape AI as an amplifier of human judgment, creativity and the capacity to learn.

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