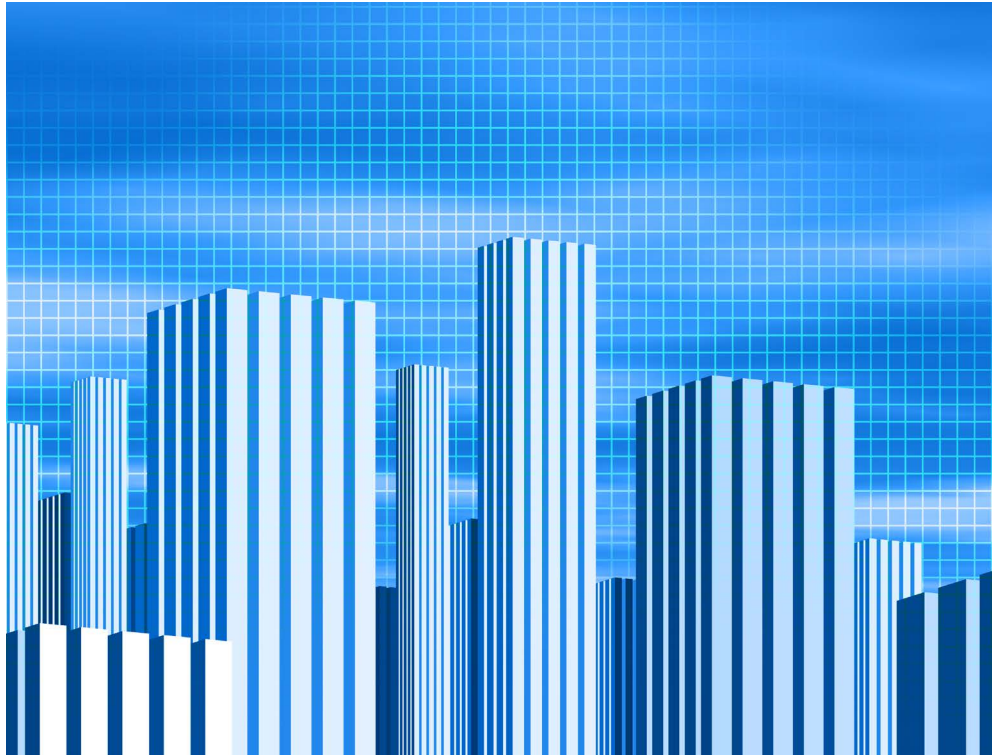




**Harvard
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Perspectives



Succeeding in the Digital Age

Why AI-First Leadership
Is Essential

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Why AI-First Leadership Is Essential

In today's rapidly evolving business and technological landscape, AI is a defining force in reshaping industries and determining competitive advantage. To succeed, organizations must fully embrace an "AI-first" strategy.

Being AI-first means positioning AI as a catalyst for sustained innovation and growth throughout the organization. This approach goes beyond just adopting the technology. It emphasizes the need for leaders—at all levels—to develop AI proficiency and the ability to lead their teams through an ongoing series of complex digital transformations.

"AI won't replace humans—but humans with AI will replace humans without AI."

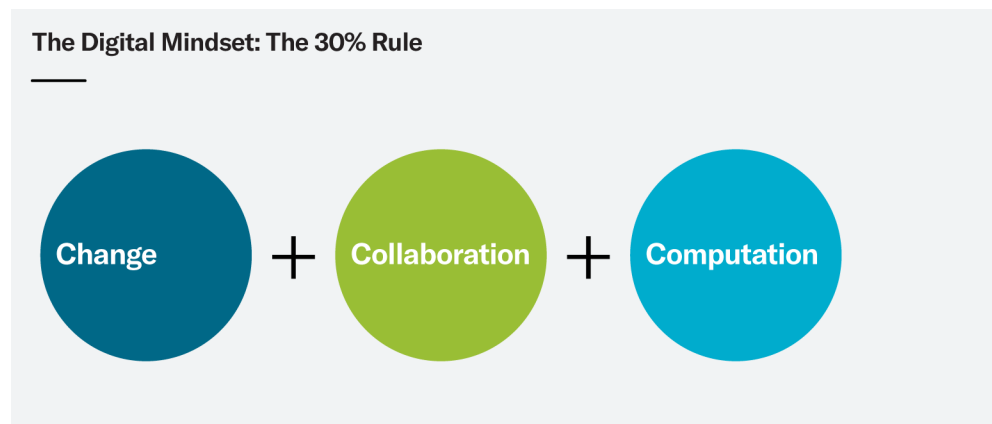
Karim Lakhani, Professor, Harvard Business School



While AI makes powerful operational efficiencies possible, it cannot yet replace the creativity, adaptability, and contextual understanding that humans bring to strategic decision making. Effective AI integration requires leaders who can act as bridges between organizational goals and AI capabilities and then inspire their teams to trust and adopt AI tools to help achieve those goals. In a *Harvard Business Review* article, David De Cremer and Gary Kasparov describe this AI-human collaboration as "augmented intelligence," where AI complements human insight rather than replaces it. This collaborative approach can help organizations move from simply automating tasks to creating synergies that yield innovative solutions and enhanced productivity.¹

Developing this collaboration requires leaders with the right digital knowledge, mindset, and skills. In a 2023 survey by Harvard Business Publishing Corporate

Learning, 46% of the 1,274 respondents reported that there will be a greater need for leaders to adapt to the penetration of emerging technologies and leverage them to the benefit of business.² Harvard Business School professor Tsedal Neeley expresses the current challenge and digital capability imperative in the following way: “Everyone in your organization should be working toward at least 30% fluency in a handful of topics, such as systems architecture, AI, machine learning, algorithms, AI agents as teammates, cybersecurity, and data-driven experimentation.”³



While the race to integrate generative AI has underscored the necessity of building tech-savviness across organizations, there is also an imperative to build the requisite next-generation leadership competencies to ensure that everyone in the organization is prepared for continuous adaptation and change.⁴ In fact, data from 1,700 executives in a study led by Harvard Business School professor Linda Hill revealed a critical set of “future-proof” skills required for leaders to level up to succeed in a future shaped by digital transformation.⁵

Clearly, senior leaders who set strategy need to understand the implications that AI has for the business model. But leaders throughout the organization now need to embrace digital intelligence, too.

Midlevel Leaders: Essential Drivers of AI Transformation

At the heart of successful AI integration are midlevel leaders. They serve as the link between high-level strategic vision and operational execution and are uniquely situated to drive AI adoption within their teams as well as connect AI initiatives to broader business objectives. Researchers are finding that “[i]n the rapidly evolving digital landscape, the role of middle managers in organizational structures and processes is increasingly pivotal. Positioned at the nexus of strategic directives and operational execution, they play an important role in driving digital transformation.”⁶

Our Point of View

In today’s AI-driven world, mastering AI is not optional—it’s the defining advantage for organizations looking to lead, not follow. AI-first companies are already outpacing slower adopters by integrating AI into their core products, services, and processes. The progression from using AI tools for individual productivity to piloting initiatives and ultimately reinventing processes and offerings hinges on effective leadership. But before they can lead confidently with AI, leaders must first build their own foundational knowledge, adopt an AI-first mindset, and develop AI-specific skills. Only then can they bring together ideas, people, and resources to operationalize AI at scale and reshape their organizations into AI-driven powerhouses, poised to excel in a rapidly evolving landscape.

Realizing the competitive edge promised by AI requires more than simply using AI-powered productivity tools at an individual level. The real value comes from integrating AI into core products, services, and business processes. In a 2023 *Harvard Business Review* article, Mike Walsh and Nitin Mittal explain that “[t]he mandate is to identify what is working, connect the dots between teams and resources, and orchestrate people around the company’s objectives while giving autonomy to test and pilot in a more coordinated fashion.”⁷

Midlevel leaders are close enough to the business that they can spot opportunities for AI-driven efficiencies that may not be visible to others—if

they have the knowledge, mindset, and skills to know what to look for. Their involvement is essential to bringing together the ideas, people, and resources needed to operationalize AI at scale.

Expectations of midlevel leaders in this arena are growing. A recent survey of senior leaders by Harvard Business Publishing Corporate Learning found that 81% have significantly greater expectations this year of midlevel leaders to lead the adoption of digital tools and technologies compared with last year.⁸

Evidence already suggests that getting midlevel leaders involved pays off. Research published in *Harvard Business Review* in 2024 analyzed data from more than 300 large companies that attempted transformations. Among those that succeeded, “driving change from the middle out” was a critical factor contributing to enduring results.⁹ This research follows decades of evidence published at Harvard and elsewhere highlighting the influential role that middle managers play in the success¹⁰—or failure¹¹—of organizational initiatives, changes, and strategies.

At the same time, the Harvard Business Publishing Corporate Learning survey mentioned above also revealed that just 48% of midlevel leaders and only 60% of senior leaders feel their organizations effectively utilize the creativity and ingenuity of midlevel leaders to drive transformation efforts.¹²

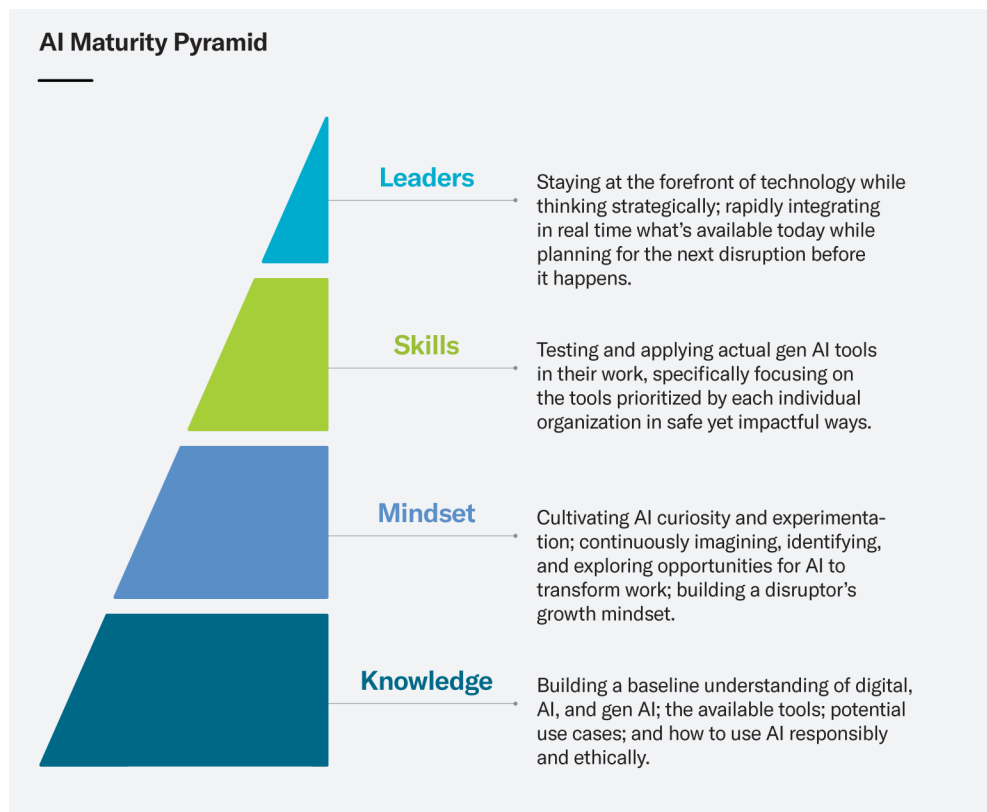
The AI Maturity Model as a Path for Leadership Development

The AI maturity model below reflects the deliberate developmental journey leaders need to navigate to master AI within their organizations. At the base of the pyramid lies foundational knowledge—an understanding of AI concepts and available tools, data analytics, and topics such as cybersecurity and digital governance—that establishes a grounding for leaders at all levels. In this phase of the model, firms get AI tools into employees’ hands and establish the parameters for acceptable usage.

Moving up the pyramid, leaders develop an AI-first mindset that embraces curiosity and experimentation. It also involves letting go of limiting beliefs

that may cause leaders to fear or avoid new technologies and replacing them with a balanced perspective of the technology's potential.¹³ In this phase, leaders actively experiment with AI tools and encourage their teams to do the same, building familiarity and reducing resistance. Firms see improvements in individual-level practices as employees become more productive and explore what the technology can do within existing personal or team processes.

With the development of AI-related skills further up the maturity model, leaders ready themselves to pilot projects, troubleshoot challenges, and guide their teams through AI-enabled processes. As they attempt to scale early experimental successes across teams and functions to improve or reinvent existing processes, collaboration becomes increasingly important. Leaders who combine these new skills with strong traditional leadership capabilities, such as customer-centricity, design thinking, and the ability to sell ideas internally, can become valuable change agents. At this point, organizations gain efficiency, better decision making, and improved innovation as AI begins to have a significant impact on the operating model.



At the peak of the maturity pyramid, AI-proficient leadership means fully embedding AI into the organization's strategic and operational framework and having the ability to rapidly alter that framework in response to the external business environment. At this stage, leaders use AI insights to refine strategies, streamline processes, create new business models, and position the organization as a forward-thinking, innovative entity.

The maturity model serves as a roadmap for the development of leaders. This approach fosters a culture that embraces AI as a tool for progress and empowers leaders to drive the transformation needed for their organizations to thrive in an increasingly digital and competitive world.

The Bottom Line: Transforming with AI for Sustained Success

Becoming AI-first means leaders across the organization need to step into new roles as educators and advocates for how AI can enhance performance. Senior leaders are essential for embedding AI into the organization's strategy, while midlevel leaders play a critical role in connecting the ideas, people, and resources needed to operationalize AI at scale.

This transformation requires support for leaders at every level as they build foundational AI knowledge, adopt an AI-first mindset, develop AI-related skills, and confidently guide their teams into a new era of AI-human collaboration. The time to act is now—delay will only widen the gap between organizations harnessing the transformative power of AI and those already falling behind.

ENDNOTES

- 1 David De Cremer and Garry Kasparov, "AI Should Augment Human Intelligence, Not Replace It," HBR.org, March 18, 2021. <https://hbr.org/2021/03/ai-should-augment-human-intelligence-not-replace-it>.
- 2 Harvard Business Publishing Corporate Learning, "2023 Global Leadership Development Study: Ready for Anything," 2023.
- 3 Tsedal Neeley, "8 Questions About Using AI Responsibly, Answered," HBR.org, May 9, 2023. <https://hbr.org/2023/05/8-questions-about-using-ai-responsibly-answered>.
- 4 Ibid.
- 5 Linda A. Hill, Ann Le Cam, Sunand Menon, and Emily Tedards, "Curiosity, Not Coding: 6 Skills Leaders Need in the Digital Age," *Harvard Business School Working Knowledge*, February 14, 2022. <https://hbswk.hbs.edu/item/six-unexpected-traits-leaders-need-in-the-digital-era>.
- 6 Zhenli Li, Cuibai Yang, Zhuohang Yang, and Yunlu Zhao, "The Impact of Middle Managers' Digital Leadership on Employee Work Engagement," *Frontiers in Psychology*, March 28, 2024. <https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2024.1368442/full>.
- 7 Mike Walsh and Nitin Mittal, "To Scale GenAI, Companies Need to Focus on 3 Factors," HBR.org, December 1, 2023. <https://hbr.org/2023/12/to-scale-genai-companies-need-to-focus-on-3-factors>.
- 8 Harvard Business Publishing Corporate Learning survey data, 2024.
- 9 Michael Mankins and Patrick Litre, "Transformations That Work," *Harvard Business Review*, May 2024. <https://hbr.org/2024/05/transformations-that-work>.
- 10 Quy Nguyen Huy, "In Praise of Middle Managers," *Harvard Business Review*, September 2001. https://www.researchgate.net/publication/11796187_In_praise_of_middle_managers.
- 11 Joseph L. Bower and Clark Gilbert, "How Managers' Everyday Decisions Create—or Destroy—Your Company's Strategy," *Harvard Business Review*, February 2007. <https://hbr.org/2007/02/how-managers-everyday-decisions-create-or-destroy-your-companys-strategy>.
- 12 Harvard Business Publishing Corporate Learning survey data, 2024.
- 13 Tom Popomaronis, "Is Your Mindset About Generative AI Limiting Your Professional Growth?" HBR.org, May 17, 2024. <https://hbr.org/2024/05/is-your-mindset-about-generative-ai-limiting-your-professional-growth>.

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