

Gener(AI)ting the future

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GENERATIVE ALFOR MANAGEMENT



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More details on their new book are available at https://www.capgemini.com/insights/research-library/hbr-guide-to-generative-ai-for-managers/



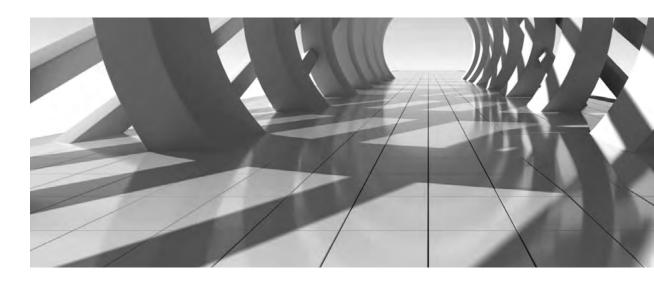
The era of manager-Al co-thinking

he integration of generative AI (Gen AI) in business operations is becoming more widespread, yet its application in the realm of management¹ is often overlooked.

While executives recognize Gen Al's potential for their businesses' operations, they do not seem aware of its managerial potential in strategic thinking and complex decision making. According to a survey conducted by the Capgemini Research Institute, nearly all executives (96%) cite generative Al as a hot topic of discussion in their respective boardrooms. However, Harvard Professor Karim Lakhani found that less than 10% of executives use individual generative Al tools in their daily tasks.

Talking with executives, the common perception is that Gen AI can help managers only in basic use cases (such as generating summaries on subjects, creating briefs on industry trends, distilling findings from extensive studies and documents, summarizing meeting minutes, or drafting emails), but it's not yet ready for more sophisticated managerial tasks.

Leveraging AI as a "co-thinker" for complex managerial tasks is already possible today."



1. Harvard Business Review Italia, "Generative AI for Strategy and Innovation", e-book, June 2023.

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Contrary to the common perception, our experiments conducted jointly with Thinkers 50 suggest that leveraging AI as a "co-thinker" for complex managerial tasks is already possible today. It all starts with embracing this new

conversational mindset.2

This goes beyond leveraging AI as a "co-pilot" and unlocks new possibilities to consider it as a "co-thinker." Using AI as a "co-thinker" means engaging in structured dialogues with AI on a complex managerial problem. Humans and machines mutually contribute and co-create the output of the conversation, building on each other's strengths.

Unlike a co-pilot assistant, using AI as a co-thinker emphasizes questioning over answering, nurturing the reflection and stimulating critical judgement for better problem solving. Although technology is well-versed in both modes, it's up to the human to choose the appropriate mode depending on the task at hand.

This approach prioritizes thoughtful reflection over speed, leading to better-informed decision making. Executives who start exercising the cothinking muscle with AI now are positioning themselves for a substantial edge, in terms of augmenting their managerial skills within a new way of collaborating with AI.³



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- 2. For more details refer https://www.capgemini.com/be-en/insights/research-library/managementgpt prototypes-of-ai-co-thinkers/.
- 3. Why Every Manager Needs an Al Co-thinker, MIT Sloan Management Review Polska, February 2024.



The spectrum of human-AI interaction for management

Typical managerial tasks, ranging from strategic to operational, can be positioned along a spectrum. While some tasks are more suited to a co-pilot interaction mode with AI, others align better with a co-thinker mode. There isn't a clear-cut choice between one or the other. As we move towards the right of the spectrum (see Figure 1), the necessity for human engagement and interaction with AI increases. Conversely, on the left end, AI can handle most of the execution.

Figure 1: The spectrum of interaction modes between managers and AI

More co-thinker More copilot Provide Sort Draft Assess Help in self narratives emails emails choices reflection Frame Prepare Grammar Suggest complex Ponder key meeting correct ideas problems decisions minutes texts (perspectives) Respond to Visualize Extract Evaluate Co-create simple data findings trade-offs solutions questions Complete Challenge code assumptions

Spectrum of human-AI interaction mode

Today, we see a gap in perception, a lack of recognition that AI can be used as a valuable sparring partner well beyond a mere executor and task automator.

Al's capability to collaborate on a cognitive and emotional level, offering insights and contributing to complex decision-making processes, is an area that many managers have yet to fully realize or integrate into their strategic thinking.

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Moreover, the lack of managerial guidance around the implementation of and the experimentation with this new mode keeps managers trapped in the conventional mode.

We tested AI co-thinking on multiple tasks that make up an executive's day. Using AI as a co-thinker can be applied to various managerial use cases such as conducting strategic assessments, framing complex problems from multiple perspectives, evaluating trade-offs, challenging assumptions, aiding in self-reflection, deliberating key decisions, and co-creating solutions. More specifically, here below is a list of complex managerial issues from culture and leadership to strategy and innovation issues that we have tackled using Gen AI as a co-thinker in a dialogue:

How to cultivate responsible leadership: All helps an executive reflect on how to translate company values into character features, stop bad habits, and embrace concrete actions for modeling virtuous behaviors.

How to foster employee engagement: All helps leaders interpret the latest employee survey results, identify the most critical issues, reflect on the root causes, and devise concrete actions to tackle them in a timely manner for their team/unit.

How to ponder complex decisions: Al enables decision-makers to take multiple perspectives on a given issue, consider a wider range of factors, balance difficult trade-offs, and simulate potential impacts to ensure responsible and sustainable decisions.

How to plan under uncertainty: All helps planners unearth, define, and articulate the most critical assumptions, and to test them in the correct sequence to ensure risk minimization and learning maximization while optimizing resources.

How to better serve key customers: Al can aid in conducting strategic reflection on growing accounts by assessing clients' landscape and needs, and how to customize the service solution and stand out from competitors' propositions.

How to evaluate new market opportunities: Al guides a business leader through a structured analysis of expanding into a new market, identifying where to play, how to win, and which capabilities are required.

How to innovate a traditional business model: All helps product managers innovate offerings by considering alternative value propositions and pricing models, and assessing their strategic fit and feasibility.

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We have tested this novel way of interacting with AI as a thought partner with hundreds of managers, MBA students, and academics from leading universities. They all recognized the transformative potential of engaging with AI in this overlooked collaborative manner.

"Co-thinking with the machine helped me reflect in a structured way on several key dimensions. Using AI as a co-thinker helped me understand the problem and expand it by considering other relevant stakeholders I hadn't mentioned initially."—Cristiano Bellucci (technology vision strategist, Fujitsu).

"It's not just about finding answers, but about crafting questions that lead to cooperative advantage. It's where dialogue, understanding, and stakeholder alignment converge to create a fertile ground for sustainable solutions."—Leon Prieto, director of the Center for Social Innovation & Sustainable Entrepreneurship in the College of Business, Clayton State University.

"What surprised me was the breadth of recommendations on such a complex topic as network effects. [...] Based on this first experiment, the human-machine interaction shows promise for future co-thinking between humans and AI."—Marshall Van Alstyne, Questrom School of Business, Boston University.

Let's delve into two different examples of human-AI executive conversations: one pertains to a business task, such as innovating the business model, while the other is centered around culture, specifically how a leader can exemplify behavior alignment with the company's values outlined in its manifesto.

Deep dive 1: How to cultivate responsible leadership

There is a twofold growing expectation for companies to embed sustainable, responsible values into their strategy and for their leaders to truly embody these values in their actions. However, most leaders find themselves constrained by ingrained habits, which they struggle to change also because of the little space afforded for profound self-examination of virtuous behaviors. In collaboration with Edward Brooks (executive director of the Oxford Character Project) and Corey Crossan (research and teaching fellow at the Oxford Character Project), we designed a human-AI dialogue that provides methodological guidance to managers who want to make a personal reflection translating their company's values in measurable behaviors.

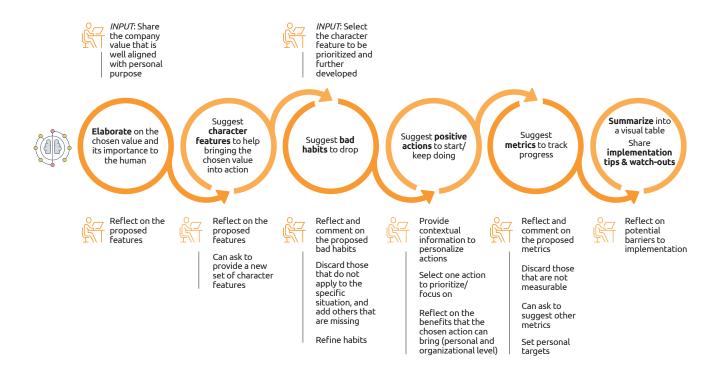
"There is concern that Gen AI will have a dehumanizing effect on organizations, and it is important to underline that Gen AI cannot replace the human development needed for responsible leadership.

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What we are thinking about is how AI can help leaders by prompting ways of thinking and acting that are in line with the best of what it means to be human."—Edward Brooks, director of the Programme for Global Leadership at DPIR and executive director of the Oxford Character Project.

In the figure below, we illustrate the dynamics between humans and AI going through this reflection: the machines follow a structured sequence while humans are engaged throughout the journey, providing input and feedback to enrich the quality of the human-AI dialogue.



The feedback collected from our testers emphasized how the neutrality of an AI interface can encourage more open sharing. When people talk to each other, they may worry about being judged or encountering biases. So, they feel less safe admitting gaps in knowledge or discussing issues.

"It felt like a safe space where I could freely express my thoughts and feelings without any fear of judgment."—middle manager, energy utility company.

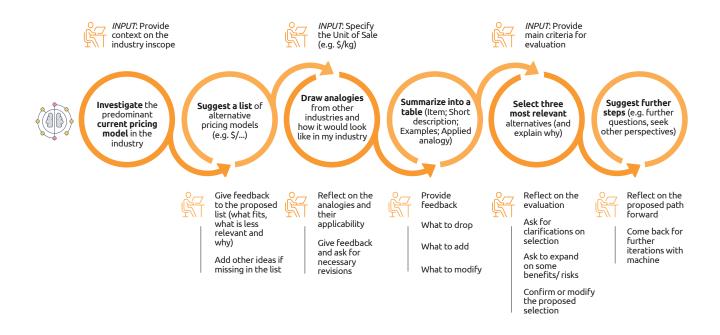
This neutral approach makes testers more comfortable revealing challenges without fear of criticism. It creates a sense of psychological security lacking in some human interactions.



Deep dive 2: How to innovate business models

Relying solely on traditional ways of selling the product often blocks new and creative strategies. Based on our experience with past projects, when considering new business models, exploring alternative units of sale (e.g., \$/kg, \$/outcome, \$/month) can help lateral thinking and escape from traditional lenses. We developed and tested an AI co-thinker that shakes up conventional, constrained thinking by engaging the manager in a strategic session to reexamine pricing options from scratch.

Using AI as a co-thinker, the product manager provides contextual information about the current industry standard unit of sale, then collaborates with the AI to explore innovative alternative models. They draw on cross-sector analogies to inspire paradigm-shifting ideas. The product manager provides perspective and feedback on the proposed ideas, considering contextual elements for feasibility. Last, AI helps the manager evaluate the most promising options. In the figure below, we illustrate the human-AI dialogue:



The testers of our structured dialogues stressed the importance of having diverse perspectives and industry examples from AI. However, they also highlighted that humans bring depth with their expertise, especially in specific industries.

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It's worth noting that some AI suggestions may not perfectly fit a particular industry's unique characteristics. However, AI's ability to show how analogies could apply to an industry can improve understanding and encourage creative thinking, helping to break away from old ways of thinking.

Managerial lessons from the experiments

Do not delegate. Managers should engage directly, both in developing and testing the dialogue, as well as in the co-thinking interactions with AI, applying these to the real tasks they face in their day-to-day managerial roles. While the technology itself is not inherently complex to use, employing it as a co-thinker necessitates the strengthening of skills for a new form of collaboration between humans and AI.

Customize for your managerial issues. Managers should be proactive in crafting their own customized interactions with AI. They need to strategize the conversation based on their specific managerial challenges. This involves wearing the strategist's hat, contemplating the optimal structure of the interaction: defining the roles of both AI and manager, selecting appropriate approaches and managerial frameworks to employ, considering relevant case examples, and so forth.

Put effort in the conversation. For successful co-thinking, humans shouldn't rely on AI to do everything. Active and thoughtful participation is key for co-creating highly relevant and valuable output with AI. Humans need to engage heavily, by providing detailed information, specific context, personal examples, and insightful comments. It's the depth of human engagement that truly enhances the conversation and leads to exceptional output.

The dawn of a new management skill

The way humans interact with AI as a co-pilot fundamentally differs from when AI is a co-thinker. This necessitates a learning curve for humans to engage with the machine in a co-thinking capacity, signifying a fundamental shift in human-AI interaction mode. When using AI as a co-pilot, humans expect the AI to do most of the work, with minimal intervention. In contrast, the co-thinking mode requires an equal effort from both humans and the AI, to create high-quality value together. The power of the algorithm alone may not be the sole determinant of success – a lower-performing LLM, coupled with an actively engaged human, can outperform a top-performing LLM paired with a passive and disengaged human. Executives need to cultivate the ability to adopt the co-thinking mindset. Whether in individual tasks or team endeavors, mastering this shift is vital and will become a competitive advantage.

