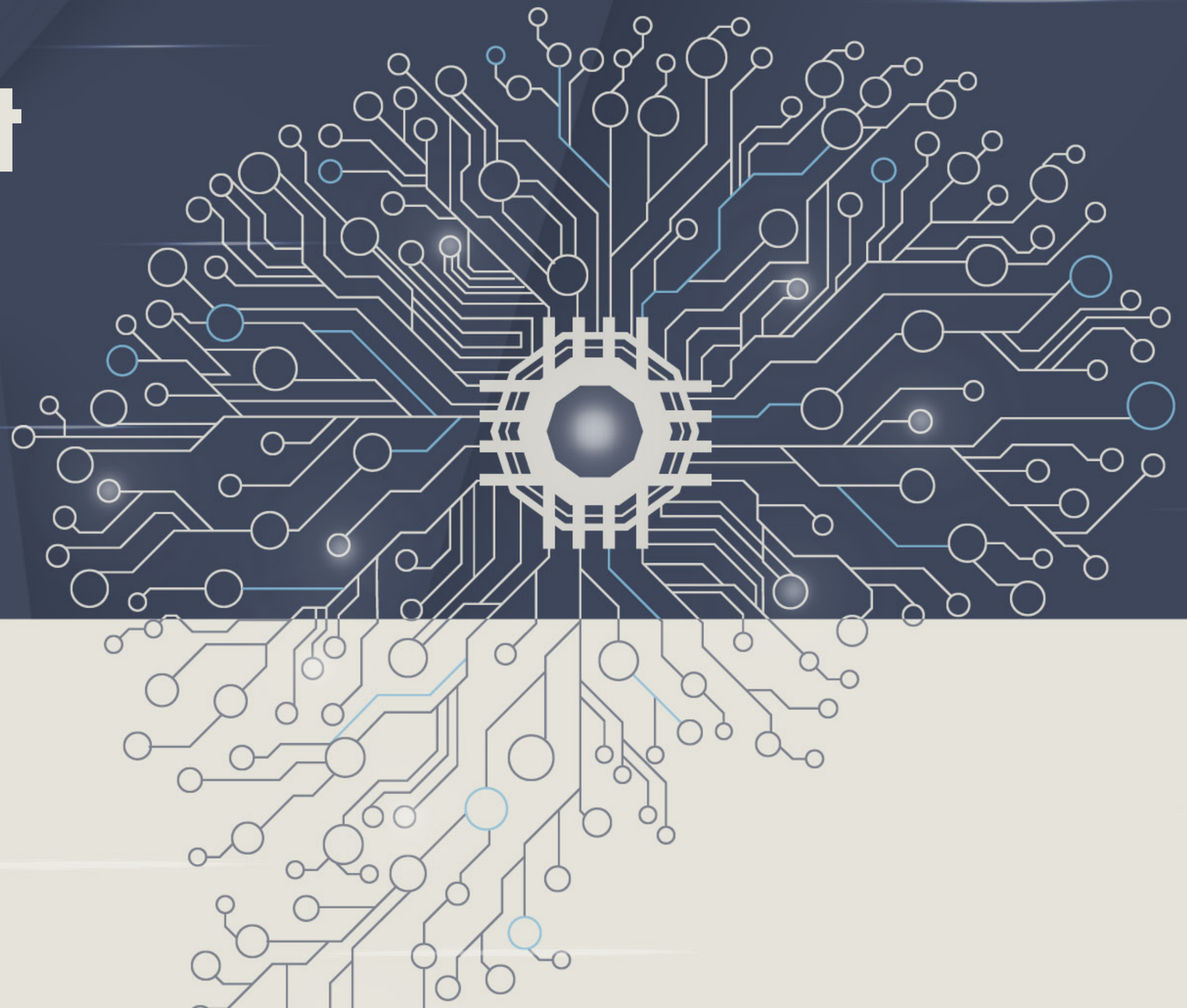
PREVIEW

Capgemini invent

THINKERS 50

Management GPT

Prototypes of AI co-thinkers



November 2023

Why ManagementGPT?

In June, **Harvard Business Review Italy** published the eBook "Generative AI for Strategy and Innovation" detailing our experiment with **ChatGPT** on AI's potential to transform 10 popular management theories and practices.

This was the first publication of its kind, and it got people very interested. It started great conversations with top experts working on using generative AI. At the same time, as expected, fast progress in AI technology for business opened up exciting new opportunities.

Starting from our experiment, many have asked us – **how can we make AI's potential real in management?**

Our vision is **ManagementGPT**. Think of it as having a **Co-Thinker**, well-versed in a variety of management practices, supporting managers in concrete applications to their business.

ManagementGPT has the potential to make **management expertise more accessible** to all managers, irrespective of their level, power, education, or geography. Forget a past where innovative methods and practices were reserved for a privileged few in ivory towers.

To make ManagementGPT a reality there's a gap to fill. Today, the performance of pre-trained open large foundation models in relation to management theories suffers from the limited availability of specific context and related methodological prompts.

That's why we decided, as co-authors, to move forward with our experimentation to fill this gap and join forces with top experts, who are part of the unique **Thinkers50 community**, to develop AI Co-Thinker prototypes. The values guiding our journey are curiosity, collaboration, discovery, and the pursuit of making good management achievable for everyone.

In this brief excerpt we describe our first prototypes, share our methodological approach and first lessons. The results of our experimentation will be published in December 2023.

Capgemini Invent's Management Lab

Prototypes of AI Co-Thinkers

In our view, an AI Co-Thinker is a way to leverage pre-trained open large foundation models to trigger valuable **human-machine conversation** on complex topics and trade-offs. To do so, general models should be enhanced with **specialized context setting, sound prompt sequences and proper guardrails**.

Starting from the 10 management theories and practices covered in our HBR eBook, we selected **three concrete use cases** addressing relevant management needs (spanning from strategy, innovation, and organizational culture), with the potential to be expanded for **meaningful impact**.

AI CO-THINKER ON RESPONSIBLE LEADERSHIP

GOAL:

Help single leaders translate Responsible Leadership values into character features and behaviors and select the right metrics to track behavioral change.

OUTPUT:

Human's selection of concrete actions to start/ stop doing and related metrics.

TEAM:


Elisa Farri


Gabriele Rosani


Corey Crossan


Edward Brooks

AI CO-THINKER ON PLATFORM BUSINESS MODELS

GOAL:

Help business teams prioritize the most relevant network effects, design concrete actions and metrics to boost them.

OUTPUT:

Ranking of network effects, designed actions, and set of guardrails for responsible application.

TEAM:


Paolo Cervini


Marshall Van Alstyne

AI CO-THINKER ON MULTI-STAKEHOLDER CO-CREATION

GOAL:

Help organizations and institutions articulate a problem to be tackled cooperatively, identify the right stake-holders, and clarify their needs and expectations.

MAIN OUTPUT:

Well-framed problem statement meeting guardrails and criteria for cooperative advantage.

TEAM:


Elisa Farri


Gabriele Rosani


Leon Prieto


Simone Phipps

Methodological Approach

STEP 1 — Prompt Strategy

Prompt strategy goes beyond the mechanics of prompt engineering. It takes strategic lenses.

- Setting the right framing and related scope and boundaries of the use case.
- Defining the logical structure and the strategic sequence of steps.
- Deciding the role of human and the role of machine. Who leads whom, when and why.
- Embedding responsibility in the flow, through identification of most appropriate guardrails in the forms of alerts, red flags, or recommendations.

STEP 2 — Content Curation, Creation & Injection

It enhances the performance of pre-trained open large foundation models.

- Expert-led scouting and screening of credible, authoritative, and reliable references at the frontier of research (not yet publicly available).
- Leveraging real-life examples.
- Building ad hoc documents that can be uploaded in the models' chat (for example, a spreadsheet or a visual to be used for output display).

STEP 3 — Detailed Human-Machine Interaction

The best prompt sequence is iteratively constructed and tested.

- Expert-led drafting of prompt sequence.
- Joint refinement with the machine.
- Simulations to further improve the sequence and output.

STEP 4 — Ad-hoc Guardrails and Red Flags

It requires a customized set of rules and instructions.

- Setting rules to ensure the machine follows the sequence in a disciplined way.
- Injecting expert advice to improve the quality of the final output.
- Defining thresholds and instructions that trigger red flags.

First Lessons Learned

Activate the flow.

When properly designed, the interaction between humans and machines can foster personal introspection and spark critical judgment. It should transcend mere “answer-my-question” or “perform this task” dynamics but elevate its value within the sequence and the dialogue.

Make a team

Don’t limit it to 1:1. Generative AI thrives in collaboration. The involvement of colleagues and users can refine prompts, foster human-machine dialogue, and ultimately enrich final outcomes.

Dance like a tango

It’s not only about defining the machine’s role; it’s equally crucial to clarify the role of the human. Like in a tango dance, either partner can take the lead role at different points.

Compare scenarios

Discover the value leap between different scenarios: simple versus advanced prompt strategies; general model versus customized model (with proprietary content injection).

The machine goes fast, the human should slow down

Pause, reflect, and think deliberately to manage the machine’s pace, while exercising good human judgment and critical thinking.