

AI Did Not Cause the Cognitive Crisis. It Found One Already Underway.

Why twenty-five years of declining attention and cognitive performance will define competitive advantage in the AI era.

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Abstract

Artificial intelligence is frequently portrayed as the cause of declining human thinking. The evidence tells a different story. Across psychology, neuroscience, education and economics, research demonstrates that many of the cognitive capabilities most critical to effective decision-making, including sustained attention, deep reading, working memory and analytical reasoning, have been declining for more than two decades ([Bratsberg & Rogeberg, 2018](#); [Dworak et al., 2023](#); [Mark, 2023](#); [OECD, 2023](#)). The trend began long before generative AI entered the workplace, driven largely by smartphones, algorithmic content and increasingly fragmented digital environments.

Generative AI is not the origin of this decline. It is an accelerant. By reducing cognitive effort, encouraging reliance on machine-generated outputs and making sophisticated answers immediately available, AI amplifies weaknesses that were already developing across knowledge work ([Lee et al., 2025](#); [Kosmyna et al., 2025](#)). The resulting challenge is not technological but human: organizations are increasingly dependent on judgement precisely when the cognitive foundations of judgement are becoming more fragile.

For leaders, this creates a strategic imperative. Competitive advantage will depend less on access to AI, which is rapidly becoming ubiquitous, and more on the quality of human thinking that governs its use. Organizations must therefore move beyond measuring knowledge and experience alone. The next generation of talent assessment and leadership development must evaluate, strengthen and protect the cognitive capabilities that enable sound judgement, independent reasoning and resilient decision-making.

Key Insights

- **The Hidden Crisis:** The decline in attention, deep reading, working memory and analytical reasoning began more than twenty years before generative AI entered the workplace. AI inherited a cognitive ecosystem that was already under pressure.
 - **The Smartphone Effect:** Continuous digital interruption and algorithm-driven content have fundamentally altered how people process information, reducing sustained attention and weakening the cognitive foundations required for complex decision-making.
 - **The AI Acceleration:** Generative AI reduces cognitive effort by making high-quality outputs instantly available. While increasing productivity, it also encourages cognitive offloading and weakens independent critical thinking when used without deliberate oversight.
 - **The Judgement Gap:** As AI automates knowledge work, human value shifts from generating information to exercising judgement. The capability organizations need most is becoming increasingly scarce.
 - **The Assessment Challenge:** Traditional recruitment methods, including CVs, interviews and self-report psychometrics, can no longer reliably distinguish genuine cognitive capability from AI-assisted performance.
 - **The Brain Capital Imperative:** Organizations must begin treating cognitive capability as a strategic asset by measuring and developing attention, reasoning, cognitive resilience and decision quality alongside traditional leadership competencies.
 - **The Competitive Advantage:** In the AI era, sustainable competitive advantage will belong not to organizations with the best AI tools, but to those with the strongest human judgement to direct them.
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Section 1 – The Cognitive Crisis Began Before AI

The prevailing narrative suggests that artificial intelligence is making people think less. Yet the empirical evidence points elsewhere. Long before ChatGPT entered the workplace, multiple disciplines were documenting measurable declines in the cognitive capabilities that underpin effective judgement.

For almost a century, the Flynn Effect described the steady rise in IQ scores across successive generations. That trend has now reversed. Studies across Europe and North America demonstrate declines in reasoning ability that are environmental rather than genetic ([Bratsberg & Røgeberg, 2018](#); [Dworak et al., 2023](#)).

Attention has followed a similar trajectory. Gloria Mark's longitudinal research shows that average screen attention has fallen from approximately two and a half minutes in 2004 to just forty-seven seconds today ([Mark, 2023](#)). Equally concerning is the recovery cost: after a single interruption, individuals require more than twenty-three minutes, on average, to fully return to the original task.

Educational outcomes reinforce this picture. [OECD's PISA 2022](#) assessment reported the largest decline in reading and mathematics performance since the programme began, while Maryanne Wolf's work demonstrates how digital reading habits weaken the neural circuitry responsible for deep analysis and critical reflection ([OECD, 2023](#); [Wolf, 2018](#)).

Even the mere presence of a smartphone reduces working memory and fluid intelligence without being used, illustrating how digital environments continuously compete for cognitive resources ([Ward et al., 2017](#)).

The conclusion is increasingly difficult to ignore. AI did not create a cognitive crisis. It entered one already underway.

Section 2 – AI as the Accelerant

If smartphones weakened attention, generative AI is amplifying the consequences.

Large language models dramatically reduce the effort required to draft reports, analyse information and generate recommendations. This productivity gain is undeniable. Yet research consistently shows that as confidence in AI increases, independent cognitive effort decreases ([Lee et al., 2025](#)).

MIT Media Lab researchers observed measurable reductions in neural connectivity and recall among participants using ChatGPT during writing tasks, providing neurological evidence of cognitive offloading ([Kosmyna et al., 2025](#)).

Economists are now modelling scenarios in which AI enables increasingly sophisticated outputs while gradually reducing society's underlying capacity to generate original knowledge ([Acemoglu, Kong & Ozdaglar, 2026](#)). Simultaneously, researchers warn of "cognitive sovereignty", the gradual erosion of independent judgement as humans increasingly defer to algorithmic systems ([Branda, 2025](#); [Herrington & Mark, 2026](#); [Schuller, 2026](#)).

The danger is not that AI replaces intelligence overnight.

It is that humans progressively exercise critical thinking less often.

Just as physical fitness deteriorates through inactivity, judgement weakens when repeatedly delegated to highly capable machines.

Section 3 – Why This Matters for Organizations

The implications for organizations are profound.

The World Economic Forum identifies analytical thinking as the most important capability for the future workforce ([World Economic Forum, 2025](#)). Ironically, this is the very capability showing the strongest signs of decline.

At the same time, generative AI has transformed recruitment. CVs, interview preparation and personality questionnaires can all be optimised using language models, making it increasingly difficult to distinguish genuine capability from polished presentation.

Organizations therefore face two simultaneous challenges.

First, they must identify people capable of exercising independent judgement in AI-enabled environments.

Second, they must deliberately preserve and strengthen those capabilities after hiring.

This requires a broader understanding of **Brain Capital**, the combination of cognitive performance and brain health that increasingly determines organizational adaptability ([Eyre et al.](#)).

Rather than assuming cognitive capability, organizations will increasingly need to observe, measure and develop it as rigorously as financial or human capital.

Section 4 – Building Cognitive Resilience

The evidence also provides reason for optimism.

Attention, critical thinking and cognitive resilience are not fixed traits. They are capabilities that can be strengthened through deliberate practice and appropriate feedback.

This shifts assessment away from asking individuals what they believe about themselves toward observing how they actually process information, allocate attention and make decisions under realistic conditions.

Behavioural assessment approaches capable of measuring these cognitive processes are emerging as an important complement to traditional selection methods. By observing decision-making behaviour rather than relying solely on self-report, organizations can obtain a richer understanding of judgement quality while simultaneously creating personalized development pathways.

[Mindmarqs](https://www.mindmarqs.com) was founded on this principle. Its behavioural assessment and development platform is designed to help organizations measure and strengthen the cognitive capabilities that underpin high-quality decision-making. By focusing on observable behavioural processes rather than self-report alone, organizations can better identify, develop and retain the judgement required to lead effectively in an AI-enabled world.

Conclusion

Artificial intelligence did not create the cognitive crisis.

It entered a world in which attention, deep reading, working memory and analytical reasoning had already begun a measurable decline. AI is accelerating this trend by making cognitive delegation easier, faster and increasingly invisible.

The organizations that thrive over the coming decade will not simply be those that adopt AI fastest. They will be those that preserve and strengthen the uniquely human capabilities required to govern it wisely.

Technology will increasingly become universal.

Sound judgement will remain scarce.

Learn more at <https://www.mindmarqs.com>

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