



Would you trust an AI to run your company? It turns out AI already beats human CEOs in key strategic decisions. The prospect of a robot takeover is of course alarming, but panic is not the best response. A greater immediate danger is for leaders who dismiss AI's strategic capabilities: they risk becoming obsolete.

Al isn't waiting for permission to reshape strategy: it's already happening. The companies integrating Al today will outmanoeuvre those clinging to traditional leadership models. There are many well-established use cases where generative Al (GenAl) supports businesses and organisations to improve operational efficiency, to cut costs and to increase the speed of response or development. Given the pace of Al evolution, it's not surprising that it's also being deployed for strategy development. There's good evidence that GenAl has a valuable role to play in formulating, testing and validating strategy for organisations of all sizes. But there are also clear potential risks and caveats.

Recent research has shown the sophistication and power of GenAl in making high quality decisions, compared to human CEOs. This may seem like bad news for the human board of directors. But adopting a defensive viewpoint ignores the undoubted potential of GenAl to improve business strategy in a range of different ways, depending on the nature the organisation. Savvy leaders must consider how they can realistically harness Al's strategic capability today, to optimise their business future. The real question is: can you afford NOT to integrate Al into your leadership team?

THE CHALLENGE OF UNDERSTANDING AI STRATEGY CAPABILITIES: THE JBS/STRATEGIZE EXPERIMENT

Al isn't waiting for permission to reshape strategy: it's already happening. The companies integrating Al today will outmanoeuvre those clinging to traditional leadership models. There are many well-established use cases where generative Al (GenAl) supports businesses and organisations to improve operational efficiency, to cut costs and to increase the speed of response or development. Given the pace of Al evolution, it's not surprising that it's also being deployed for strategy development. There's good evidence that GenAl has a valuable role to play in formulating, testing and validating strategy for organisations of all sizes. But there are also clear potential risks and caveats.

Recent research has shown the sophistication and power of GenAl in making high quality decisions, compared to human CEOs. This may seem like bad news for the human board of directors. But adopting a defensive viewpoint ignores the undoubted potential of GenAl to improve business strategy in a range of different ways, depending on the nature the organisation. Savvy leaders must consider how they can realistically harness Al's strategic capability today, to optimise their business future. The real question is: can you afford NOT to integrate Al into your leadership team?

Insights from the experiment - what leaders can infer

The experiment shows that advanced GenAl tools like GPT-40 show promise in decision-making, but they are limited in their capacity to handle unexpected disruptions. There were clear strengths in the Al's leadership performance: it demonstrated precision in strategy design, the ability to adapt rapidly and to optimise strategy in the short term. Its areas of weakness were in handling unpredictable market shocks and applying longer-term flexibility in decision-making.

GPT-40 ... after a string of early successes, locked into a short-term optimization mindset, relentlessly maximizing growth and profitability until a market shock derailed its winning streak. Al can rapidly learn and iterate in a controlled environment, making it less ideal for coping with highly disruptive events that require human intuition and foresight. Interestingly, top executives also fell into this trap; they, like GPT-40, were fired faster by the virtual board than the students.

Professor Shaz Ansari et al, Harvard Business Review, September 2024

The greatest risk for CEOs isn't Al taking over - it's not yet ready for that. The imperative is to master Al as a strategic co-pilot. Leadership in the Al era isn't about choosing between human or machine: it's about leading Al before it leads you.



Real-world organisations are already using AI for strategy development

Although Al is not currently capable of acting as an effective business leader across the board, strategy firms and larger commercial organisations have already begun to exploit its strengths in analysis and decision-making, developing proprietary GenAl tools to support their own consultants and leaders¹.

For example, McKinsey's Lilli is a platform that provides a streamlined, impartial search and synthesis of the firm's vast stores of knowledge. Lilli aggregates consultant knowledge and capabilities in one place so consultants can develop insights faster. This means they can spend more time with clients helping them to enrich the insights and put them into practice.

Microsoft uses its internal Al platform to research business cases for innovative products that are under development. GenAl can model different market scenarios and help assemble evidence for product prioritisation and investment. BMW uses a generative model to analyse its data. GenAl can provide insights and answer complex questions about the impact of different metrics on operations. This intelligence gives leaders the ability to make effective strategic decisions in less time.

For strategic decision-making, using free, open-source AI tools in an unconstrained manner isn't an option, because most organisations do not want to share confidential and competitively important data with external parties. That's why large organisations have created their own controllable and ring-fenced GenAI tools and models. But developing your own GenAI platform is relatively expensive. For large corporates with deep pockets it's a good option, but it's not as easy for most SMEs.

1. https://indatalabs.com/blog/companies-using-generative-ai

THE STRATEGIC VALUE OF DIGITAL TWINNING

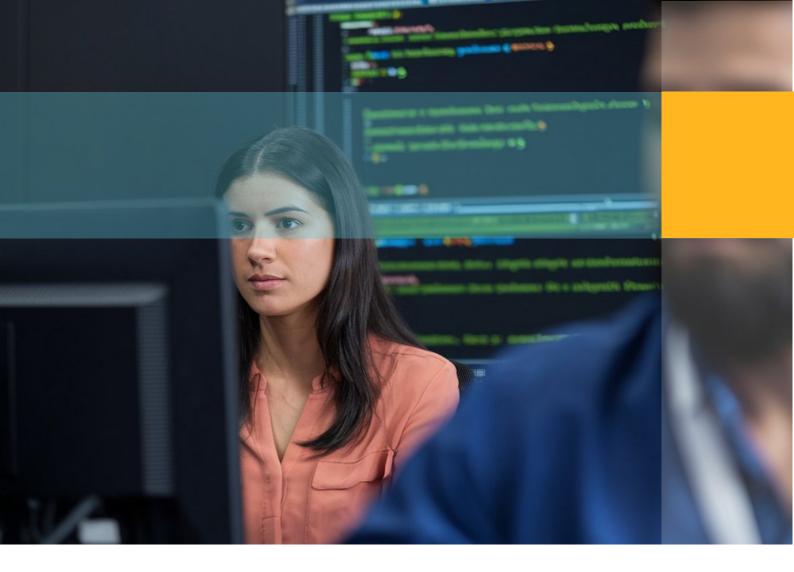
But there is an alternative. Digital twinning allows you to use very large amounts of data to model what could happen when you implement proposed strategies in a digital twin environment which organisations can own and keep private. Cambridge-based start-up Strategize has developed a customisable digital twinning platform that organisations can adapt to represent their own business at a relatively low cost.

Digital twins create a large-scale environment, so you can view and interrogate many aspects of many scenarios. This can allow you to experiment and compare the likely outcomes for different strategies in a range of market conditions. For example, if an organisation is considering whether to expand into Hong Kong, the digital twin could put the decision into practice virtually to see what might happen, and to extrapolate future impacts. Because the digital twin reflects the resources, processes, constraints and external factors unique to the organisation, it can simulate the scenario quite realistically in a range of possible market and external conditions.

The digital twin approach provides richer and more sophisticated predictive analysis than number-crunching alone. Digitally led organisations are already invested in developing their own digital twin platforms, for example, to optimise on-demand advertising strategy or to refine targeting for an omnichannel customer communications programme. These simulations can reveal insights that a human analyst might not have uncovered and allow testing and comparison in a safe environment before live launch. But they're not a replacement for a human CEO or marketing director. The organisation's leaders must still make the ultimate decisions about which course to take.

Even without a full digital twin (or sandbox) environment, SMEs can make use of OpenAl tools like Google's Gemini and Meta's Llama 2 to research opportunities, compare scenarios and look for precedents. These services include a degree of privacy and data protection, so that commercial submissions aren't fed back into the Al nor reviewed by humans. The next generation browser Perplexity combines search results with Al to give comprehensive and tailored research results using real-time information and verified sources.





GenAl for strategic data modelling and analysis

Business leaders have historically used academically developed strategic frameworks like SWOT to help with ideation and decision-making. But these old-style models can't accommodate the huge volumes of data that we now want to examine and combine in a sophisticated and rapid way.

GenAl has superseded these frameworks and methods for analysing performance and identifying opportunities. It's capable of using combinations of the best existing models and approaches and reviewing historic performance metrics to provide refined and customised analysis that's unconstrained by volume limitations.

Generative Al's greatest strength is not in replacing human CEOs but in augmenting decision-making. By automating data-heavy analyses and modeling complex scenarios, Al allows human leaders to focus on strategic judgment, empathy, and ethical decision-making — areas where humans excel.

Professor Shaz Ansari et al, Harvard Business Review, September 2024

GenAl tools for modelling and analytics are relatively affordable and accessible to SMEs, including well-established products like Tableau, Alteryx, Microsoft PowerBl and Qlik.

RISKS AND DEPENDENCIES OF AI STRATEGY GENERATION

There are caveats when it comes to using AI for corporate decision-making. As in all analytics, the source data that the AI works with is critical. Organisations need to make their company data available to AI tools in suitable formats and quantities and make sure it can be processed and used internally without risk of contravening industry regulations or GDPR. AI hallucination is a much-discussed risk factor, but it is becoming a less significant problem, because GenAI platform providers are incorporating trust checks and providing citations to ensure that results are reliable and unbiased.

In the strategic planning simulation experiment, Al didn't do well when faced with 'black swan' events like Covid 19, hyper-inflation and war. Because it can only work with what it knows, it's very effective when used for responsive strategy, based on clear data and precedents, but less reliable where there is little evidence for a rare scenario. And It's not just the lack of precedent that restricts Al in black swan situations. Al is well suited to short-term optimisation and cannot (yet) replicate the intuitive, foresight-driven nature of human judgment.

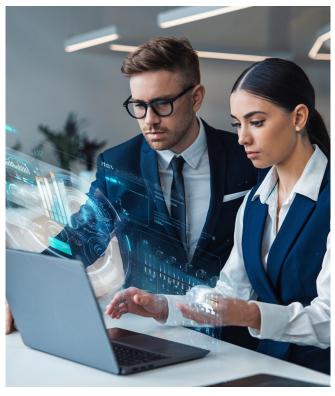
GenAI can also help leaders to assess novel ideas objectively, finding evidence to support or disprove business cases. But the sources it's using always need to be verified. Be aware too that the person who operates the AI can shape the results: you need to know the right questions to ask and think carefully about how to pose them to avoid misdirection or omission. Strong professional knowledge and experience of the business area is needed. And of course, open source GenAI tools also ingest your questions, so you need to be careful about

Conclusion:

confidentiality.

According to Professor Shaz Ansari et al, "Al allows human leaders to focus on strategic judgment, empathy, and ethical decision-making areas where humans excel. The biggest risk to human CEOs is clinging to the illusion that they alone will hold the reins in the future. The future of leadership is hybrid – where Al complements human CEOs' focus on vision, values, and long-term sustainability. The leaders who thrive will be those who master this synergy, leveraging Al not as a rival but as a partner in decision-making."

Will you be the leader who harnesses AI, or the one left behind by it? AI won't replace you, but another leader who knows how to use it will.





You must act to incorporate Al into the strategy formulation process, at least to maintain competitiveness, or, better still, to improve it.

The future of leadership is undoubtedly hybrid: the question for leaders is, what are the immediate steps they should take to master this synergy between human and Al capabilities? Human leaders' ideation and consideration are still entirely necessary in strategy development, because generative Al is already a strategic resource that can enhance corporate decision-making, even though it's not fully creative.

Purposeful and ongoing engagement with GenAl developments is essential. You need to grasp the potential for your organisation and how GenAl is changing the market and competitive landscape.

Almost every organisation can harness the power of complex Al processing in some way, to augment and validate human-designed strategy, including business innovation. Talk to other leaders and seek GenAl opportunities for your organisation, even or perhaps especially if they are not comfortable or obvious. Encourage innovation and experimentation and share your belief in a hybrid future, so your team is confident of your support for Al suggestions and initiatives.

ABOUT THE AUTHOR

Shahzad (Shaz) Ansari Professor of Strategy and Innovation

Professor Ansari's research explores framing and social movements, technological and management innovations, platform ecosystems, new markets, social and environmental challenges, institutional change, and the diffusion of practices.

He is Head of the Strategy and International Business subject group at Cambridge Judge Business School and actively contributes to academic and business communities. His research has been published in top journals, including Academy of Management Journal, Strategic Management Journal, and Organization Science. He serves on editorial boards for leading publications and is a member of the Erasmus Research Institute of Management (ERIM) at Erasmus University, Rotterdam.

Additionally, he is an Honorary Professor at UCL and a consultant for Thinfilms, a New Jersey-based company providing thin film and coating services to over 150 corporations in the microelectronics, semiconductor, optical, medical, and sensor industries.



Contact us

To find out more about organisational strategy and leadership learning solutions for your teams, get in touch today: executive.education@jbs.cam.ac.uk

To discuss individual placement on an open programme, please call: +44 (0)1223 762183 or visit our open programmes page

For customised programmes for your organisation, please call: +44 (0)1223 765508 or visit our <u>custom programmes page</u>

Cambridge Judge Business School
Executive Education
University of Cambridge
Trumpington Street
Cambridge CB2 1AG
United Kingdom

www.jbs.cam.ac.uk/executive-education

© JBS Executive Education Limited has copyright of all original material contained in this brochure (Janurary 2025)

JBS Executive Education Limited is a wholly-owned subsidiary of the University of Cambridge. JBS Executive Education Limited is the limited company designing, developing and delivering Executive Education from Cambridge Judge Business School at the University of Cambridge.





ExecutiveEducation