

Intelligence gathering: Bringing AI technology into strategic planning

At this point, many CFOs probably don't need to tap into raw analytics or sophisticated algorithms to decide to invest in artificial intelligence (AI)—and not simply because its transformational capability has been likened to other industry-defining inventions, such as the steam engine and electricity.¹

The destabilizing impacts of the COVID-19 pandemic have shaken loose many entrenched assumptions about the future. With only a quick glimpse at the road ahead, many companies can foresee the challenges of retaining customers, suppliers, and employees while confronting numerous mega-forces, including accelerating climate change, shifting demographics, and the perpetual

need to integrate new technologies. Some of these interrelated forces will likely be more powerful than others. Still, it may be hard for company leaders to get a more granular view of their impact—without, that is, incorporating AI into their strategic planning.

AI's wide scope of applications extends from the routine (predictive maintenance) to cutting edge (self-driving trucks). But for C-suite leaders, AI's ability to generate decisions and assess outcomes based on complex data sets, combined with its dynamic capacity for adapting to new rules and information, offers another advantage: continuously monitored strategic plans. Such a capability can help boost the ability of decision-makers to understand complex

problems and enhances their capacity for action. So explains a new book, *Real Time Strategy: When Strategic Foresight Meets Artificial Intelligence* (Emerald Publishing Limited, 2020),² co-authored by three practitioners from the [Center for the Long View](#), Deloitte's center of excellence for scenario planning and AI-enabled sensing.

The authors maintain that conventional planning processes that use historical performance to map a company's strategy over three, five, or even 10 years are inadequate for today's uncertain world. Often, those plans simply fail to adapt quickly enough to, say, a game-changing technology, a fast-emerging competitor, or even a debilitating pandemic. The goal of real time strategy, however, isn't to figure out what will happen in the future.

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Instead, it leverages AI to equip companies to employ possible futures (specifically four) as a lens for making the best decisions in the present.

That doesn't mean the human element in strategic planning will be zapped into oblivion. In fact, it remains a vital component. And in this issue of *CFO Insights*, we'll explore how AI-based innovation can help restore the centrality and value of strategic planning, enabling CFOs and other stakeholders to avoid entrenched thinking, resist dwelling on constraints, and consider a wider universe of strategic options.

Plan lesson

While theories governing corporate strategy have been debated (and sometimes overturned) over the years, real time strategy focuses on modernizing an aspect that has practically been left untouched: methodology. AI techniques, which include machine learning, can import data from an abundance of sources, identify patterns and trends, and supply insights for decision-makers.

In the process, AI-enabled planning upends traditional processes that depend on (and are affected by) human bias. Too often, the authors point out, current strategic

decisions are based on information that is flawed across multiple dimensions (e.g., completeness, accuracy) and end up being unduly influenced by intuition and experience. During the exhaustive process of devising a plan, many assumptions and hypotheses are undeservedly promoted to "facts," especially if they help dim uncertainty. The result: strategic plans that gain consensus, but emerge with a blandness akin to vision statements—and no mechanism for consistent follow-up.

Without alignment among business units as to how each defines success, even companies that have embraced AI can end up stalled on the **AI maturity curve**, unable to progress beyond early victories in cost reductions and productivity gains (see sidebar, "Get smarter at Implementing AI"). In "**Deloitte's State of AI in the Enterprise, 3rd Edition survey**," companies that managed to get beyond the first few AI-related activities were more likely to partake of its deeper advantages (see Figure 1).

In strategic planning, that deeper advantage is a plan that absorbs an abundance of evidence-based information—and offers that necessary mechanism for follow-up. Specifically, AI

pours a fact-based foundation (assessing factors ranging from the company's resources and competencies to the activities of its competitors, markets, customers, and regulators) from which decision-makers can build strategy frameworks. Once implementation begins, AI can monitor selected scenarios and automatically alert management to any significant shifts. Senior management can act on that information at any time, responding promptly to current market or competitive conditions.

Powerful structure

To create AI-based frameworks, the authors of *Real Time Strategy* advise advancing in three phases: think, build, run. The first two weeks are devoted to coming up with a long list of drivers, the important factors that are likely to have an effect on the company's sector. Those form the basis of a series of workshops that distill broader macro-trends into the impact that is likely to be felt in the company's marketplace. In the third workshop, leaders dust off the existing strategy and measure it against four scenarios of the future. Those elements of the plan that are deemed suitable remain as part of the successor plan.

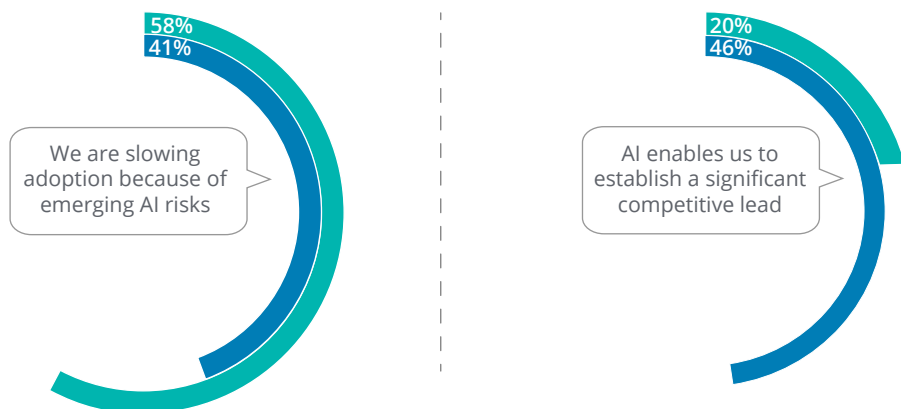
The next phase consists of the steps to build a monitoring system. With input from programmers and data scientists, the outcome should consist of a set of data points that will be used to program the indicators. In the end, algorithms will scan the internet for information, interpret it according to specifications data scientists set, and then push it to a web-based application that CFOs and others can log into. Among other things, the screen will display four numbers—one for each scenario—that rank "realization rates" on a scale of 1% to 100%, revealing how much of that scenario is judged as having crossed over to reality.

The prospect of watching the future take shape at the touch of a button may sound like a space-age version of a kid's toy that offers generic-sounding predictions. Can AI really create a living strategic plan? "It is decidedly so," as the toy might put it. To get accustomed to the idea, however,

Figure 1: Actively managing AI risk reduces obstacles to adoption—and leads to greater competitive advantage

Companies that practice more than three AI risk management activities—and align them with broader risk management efforts—are less likely to slow adoption due to emerging AI risks and more likely to achieve competitive advantage

■ Risk management leaders ■ Risk management dabblers



Source: Deloitte, State of AI in the Enterprise, 3rd Edition, 2020.

CFOs may want to start asking the following questions about the effectiveness of their existing strategic planning processes:

- **What's the quality of our data?** As CFOs who have embarked on digital transformations can confirm, the technology's output is only as useful as the quality of the data it is fed. Assessing the data's integrity becomes a priority when it's going to drive decision-making (see "[Mastering data for better insights—and competitive advantage](#)," *CFO Insights*, January 2021).
- **Do we have all the data we need?** Some executives may assume that gathering all the data inside their business—drawn from their enterprise resource planning (ERP), customer relationship management (CRM), and other systems—is sufficient for populating a plan. But external factors, ranging from a weather front to a nearby construction project, can derail plans.
- **What kind of baggage are you, and others, carrying?** An AI-based system can help neutralize internal political influence on decision-making. Cases that are clearly based on facts tend to reduce the tension that can dominate when, for example, people feel that their assumptions are being challenged. The aim should be to get others engaged—just not in a political way.
- **How agile is the business?** Any doubt as to how chaotic customers can behave was likely erased last year; forecasts that were accurate in March were irrelevant by May. CFOs using adaptive technology might have seen their predictive models changing as, for instance, a flour shortage began. AI-based plans enable organizations to react fast to unexpected twists. (For more on agile, see "[The agile advantage: Moving transformations from unknowns to outcomes](#)," *CFO Insights*, May 2021.)
- **How much influence should you have?** Armed with the kind of useful data upon which the company's future depends, CFOs can expect to have much more—and better—interactions with various top decision-makers.

Harness the humans

The insights AI produces can inform the company's approach to value creation and serve to fortify its competitive advantage.

Still, as outlined in *Real Time Strategy*, AI only comprises half of the innovation the authors suggest bringing to strategic planning; the rest results from aggregating the combined intelligence of internal and external stakeholders (i.e., the humans) to solidify the strategic plan. While such a crowd-sourced approach may sound burdensome, it offers visible benefits, including the following:

- **Saving time.** Unless your company is currently tapping out its strategy on a software template, the real-time strategy approach may shorten the timeline to coming up with a strategic plan. Building a model that incorporates AI-supplied insights on trends that will likely affect your market, sorting through the "known known" and "known unknown" risks, and

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building scenarios requires no more than six weeks, according to the authors. Creating a monitoring system for those scenarios, capable of alerting CFOs and other executives of potential strategy-disrupting developments, takes another six weeks.

- Triggering high-level strategy discussions.** Given the combined intensity and intellect brought to bear on the process, CFOs may use the resulting plan to initiate high-level discussions about strategy with the board. Having constructed a manageable number of plausible scenarios about the future—usually no more than four—and collecting the board’s insight as to which scenario will most likely come to pass opens the door to weighing critical issues, such as risk appetite.

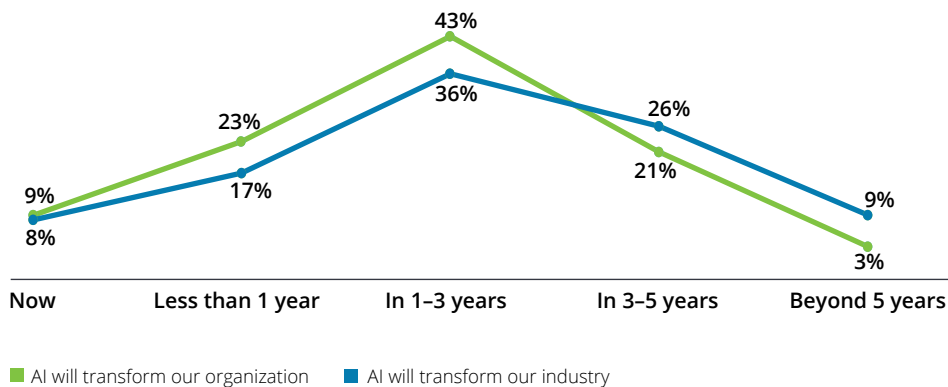
- The plan’s expiration date: never.** As long as the scenarios are continuously being adapted, the strategy is not likely to grow stale. Indicators based on custom-made algorithms, using natural language processing (NLP), can scan for any changes affecting crucial strategic assumptions. Other indicators are closer to plug-and-play trackers, monitoring competitors, brand perceptions, and regulation based on the company’s name or industry.

- Building in-house capabilities.** In the course of creating scenarios and building a monitoring system, some employees may display an aptitude—or express an interest—in taking on roles as data scientists. Over time, what started as AI 101 may turn into a career path.

Of course, there is no guarantee that AI-enabled scenario planning can produce a full and flawless rendering of the future. Even predictable trends can converge in unexpected ways—and the unexpected won’t be rendered extinct any time soon. But sometimes humans would rather be wrong than contend with ambiguity. Decisions based on reducing uncertainty can actually increase vulnerability. AI may fall short, but it will learn from its mistakes. Unlike humans, it has no choice.

Figure 2. Artificial intelligence will drive real change

Both organizations and industries are poised for transformation in the near future.



Note: Percentages may not total 100% due to a small number of respondents who answered “Don’t know.”
 Source: Deloitte, *State of AI in the Enterprise*, 3rd Edition, 2020.

Getting smarter at implementing AI

Organizations moving strategically toward transformation can be positioned to seize near-exponential benefits by leveraging AI—and those that are just trying to keep up may be left behind. But how should you move forward? A “fast-follower” approach, where competitors set the pace, leads to hard lessons about what it takes to transform into an AI-fueled organization. “Buy it when you need it” does not typically work with AI. To be successful on your own journey on the [AI maturity curve](#), keep the following steps in mind:

- Bring everyone to the table.** Develop a data governance model with the right representation (not just the technologists and scientists). As an ecosystem and in the spirit of the governance council, work collectively to identify and solve discrete problems and seize evident opportunities.
- Develop active sensing at scale.** The capacity to respond quickly to change is a competitive advantage. The COVID-19 pandemic reinforced the mandate for enterprise agility, and AI-based sensing is a key component in the ability to parse signals from noise in the data. Look for ways to use AI to pivot in the face of changing customer sentiments, supply chains, market channels, and throughout the integrated partner ecosystem.
- Move out of the lab and into the world.** Look for opportunities to connect AI to use cases then index the value realized on the outcomes. This is important not just for driving AI effectiveness, but also for verifying the reason for the endeavor. It helps stakeholders better intellectualize the potential, enabling the culture of the the organization to begin a shift toward an AI-inspired, transformative mindset.
- Recognize the urgency.** For every instance where legacy systems and structures cause stakeholders to conclude, “we can’t do that,” there is another organization with the opposite view. As with the cloud before it, AI is no longer a frontier economy where the first mover wins. Today, all businesses have access to the AI arena and are charged with differentiating on the use cases that matter and the value advantage they deliver.

End notes

- 1 Julia Fioretti, "EU to invest 1.5 billion euros in AI to catch up with US, Asia," Reuters, April 25, 2018.
- 2 Frank Becker, Florian Klein, and Andreas Schühly, *Real Time Strategy: When Strategic Foresight Meets Artificial Intelligence* (Emerald Publishing Limited, 2020).

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