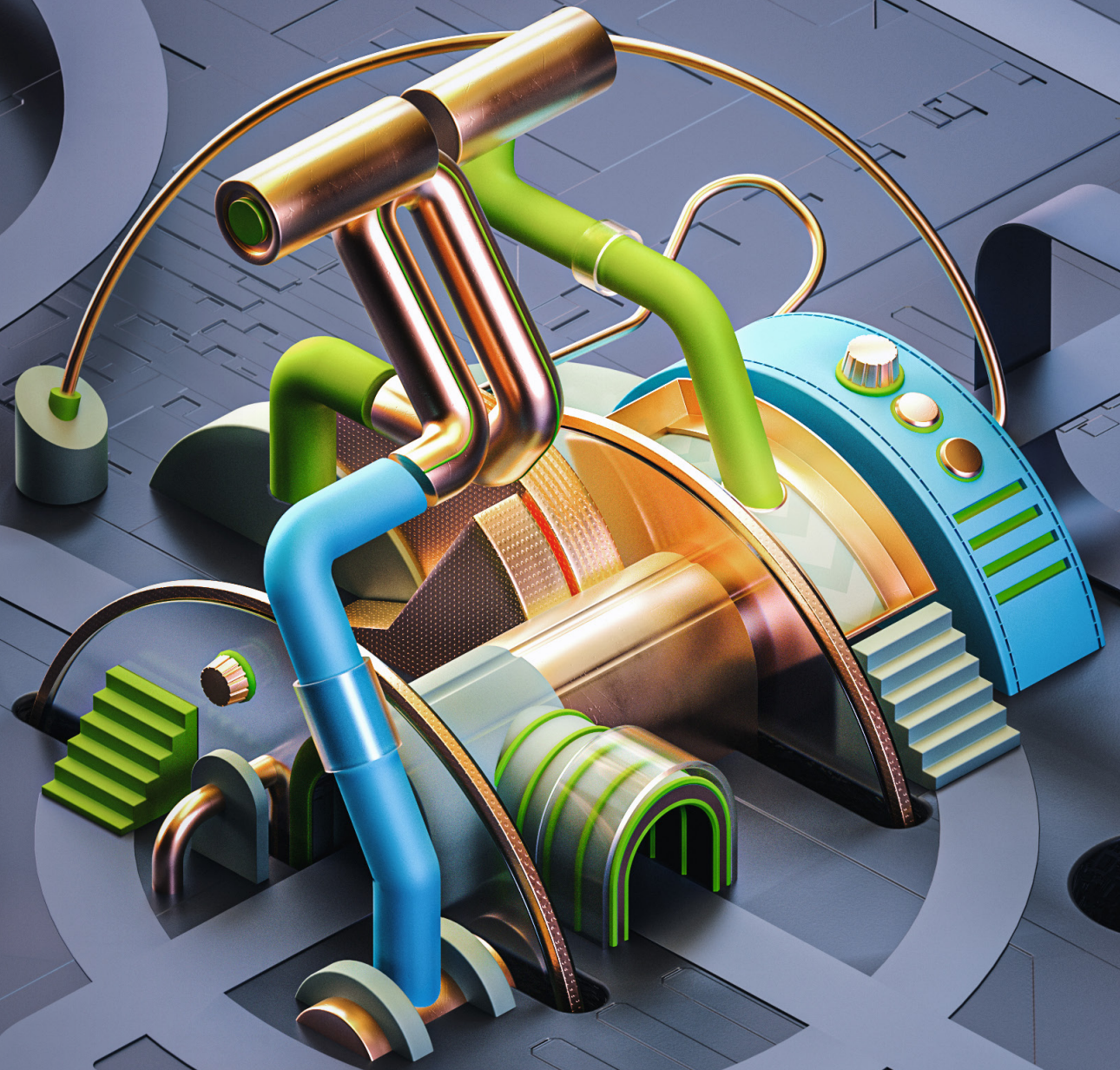


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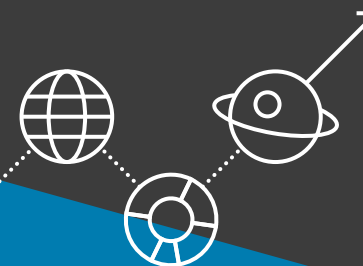
Tech Trends 2021



Strategy, engineered

FUTURE-READY STRATEGY

Strategists are making more clear, timely, and creative choices about where to play and how to win.



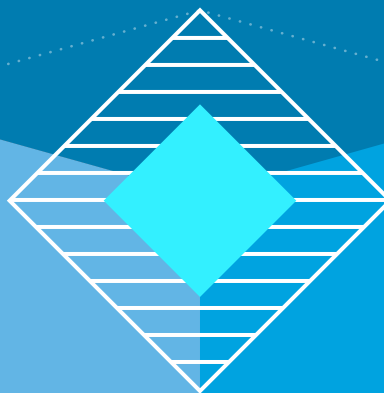
STRATEGY LEADS TECHNOLOGY

As strategy and technology become increasingly intertwined, strategic intent must inform technology choices.



TECH-ENABLED STRATEGY

Use strategy support platforms to identify driving forces, inform choices, and monitor execution and outcomes.



TREND 1

Strategy, engineered

Tech-enabled business strategy, optimized for agility

In a world where technology has emerged as a mighty strategic disruptor, savvy strategists are looking to make more clear, timely, and inspirational choices about future possibilities, continually scanning the horizon for new competitive advantages they can deploy and threats they should avoid. A growing number of organizations are also proactively pursuing novel competitive advantages by joining forces with existing and new ecosystem partners—from government and nonprofit agencies to complementary corporations and even “frenemies”—to envision how their combined offerings could expand where they play and how they win.

Winning in a volatile environment requires an integrated corporate and technology

strategy, enabling organizational nimbleness, scalability, stability, and optionality.¹ The traditional process of strategy development is too infrequent and labor-intensive to enable strategists to sense and seize opportunities as they emerge. A growing number are shifting to a fluid and agile process for formulating, evaluating, and executing corporate and business unit strategies by employing technology tools that continually sense, anticipate, and monitor the effectiveness of their strategic choices and execution.

The result: more timely and smarter choices that could lead to faster adaptation, bolder strategic choices, and sustainable competitive advantage.

Close the technology and business strategy chasm

As business strategy and technology strategy become increasingly intertwined, many corporate executives are finding that their organization’s past technology choices are limiting their strategic options and business agility. To resolve these technology limitations, these executives are finding it necessary to lean in to technology architecture and technology implementation choices to ensure the overall business strategy is supported by clearly aligned technology choices.

Obviously, having a strategy sitting on the shelf isn’t enough—effective execution is critical.

And when asked about their strategic priorities and ability to execute, CSOs with disruptive, digital ambitions lack confidence in their ability to execute. In Deloitte's *2020 CSO Survey*,² most respondents (70%) rated disruptive growth as critical for their companies' success, but only 13% are confident that their company can deliver on this strategic priority.

Having a strategy sitting on the shelf isn't enough—effective execution is critical.

Effective execution requires continually monitoring the underlying strategic choices and assumptions, adjusting as needed. Even though most survey participants say they are seeking disruptive growth, 71% report spending more than three months on a single round of

strategy development. Nearly half (45%) refresh their strategy annually, or even less frequently: every two years (23%) or three years (22%).

Ultimately, strategists should collaborate with tech leaders to confirm that the organization's critical technologies support the organizational strategy—and that the organization's technologists have the right framework and understanding of the corporate strategy to make their day-to-day technology decisions.

Getting from here to there

Agile strategy development and execution doesn't happen in a vacuum—to generate effective results, organizations need foundational elements in place.

Empowered strategy function. Whether it's the CEO, CSO, or other executive, an empowered executive strategy leader is

critical to effective strategy development and execution. In collaboration with the CIO, the strategy leader can help expand and shape the vision of executive leaders and board members. As one executive from a leading oil and gas company said, "The CSO needs to challenge long-held views and get our fellow executives to think about a market environment that is different from the existing one." The successful strategy leader reinforces strategic discipline by looking beyond the organization's daily challenges, aligning key technology choices, and continually scanning the horizon to anticipate emerging challenges.

Tech-savvy C-suite. C-suite executives and board members should have a broad understanding of the critical technologies in which the company is, or should be, investing to gain competitive advantage and to build resilience against disruption. Leaders need to be supportive of investing in a portfolio of technology investments, from proofs of

concept to test emerging technologies to major implementations of proven platforms. Moreover, executives need to help challenge the critical assumptions of those implementing the technology to help make sure the implementation will be driving value for the enterprise.

Business-savvy tech leaders. Likewise, IT leaders and technologists should be engaged in strategy development processes and education that gives them a broad understanding of the business and its strategic objectives. As strategic partners, tech leaders can help strategy and business leaders identify and explore emerging technologies that support the strategic vision, with the objective of aligning the organization's technology and corporate strategies. In fact, in a Deloitte–*Wall Street Journal* Intelligence survey, 40% of CEOs said their CIO or tech leader will be the key driver of business strategy—more than the CFO, COO, and CMO combined.³ Further, big technology

bets require the active participation of the CEO/CSO to ensure that the organization's tolerance for risk is honored and well managed.

Aligned technology and partners.

Effective organizations choose their technology platforms and ecosystem partners carefully, aligning their choices and implementation decisions with their strategic goals. When selecting important ecosystem partners, evaluate their long-term motives and agendas to understand whether their objectives and aspirations align with yours. In a worst-case scenario, a platform partner could become a competitive threat after they “learn” your industry.

Collaborative list of strategic assumptions.

Early in the strategy development process, lead strategists, tech leaders, and ecosystem partners should explore and challenge the assumptions for a tech-enabled strategy to be effective. Consider holding the discussion in a neutral environment such as a workshop, where egoless

answers are encouraged and cataloged so they can be used later to flag leading indicators of the strategy's success or failure.

Agile funding. Executing on agile strategies demands a flexible process for planning and funding the technology investments required to implement strategies. For insights into how to finance innovation at the speed of agile, see [Tech Trends 2020: Finance and the future of IT](#).

Next up: Tech-enabled strategy

To compete in an increasingly complex world, not only are the strategies becoming more digital—so is the process of developing and executing strategies and monitoring outcomes. As leaders are forced to consider a wider range of variables and future scenarios, tech-enabled strategy platforms can help strategists think more expansively and precisely about the wide range of future possibilities.

Technology can also help leaders gain insight into seemingly unrelated occurrences that can drive smarter strategic choices on a continual basis. Strategists should evaluate technologies that help empower their imagination by identifying driving forces, informing strategic decisions, and monitoring outcomes. (See figure, “Strategy support technologies” on page 18.)

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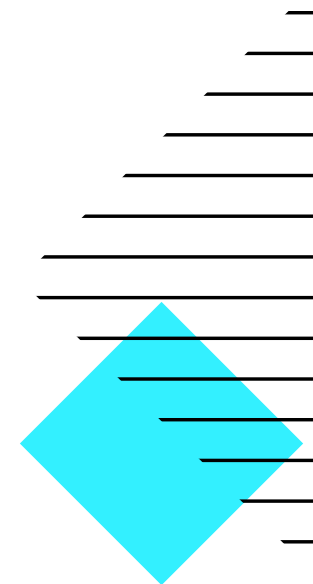
Finally, technology plays an increasingly important role in helping companies translate a strategy into strategic initiatives, facilitate strategy execution, and monitor a strategy’s impact in the marketplace.

The way forward

Strategy development is not a one-and-done exercise but, rather, an ongoing, cyclical process. As technology and business become increasingly intertwined, business strategy drives technology strategy and vice versa. Around and around it goes—to the point where the complexity of known and unknown strategic drivers inside and outside the organization could blow the mind of even the most nimble-brained strategist.

While accelerating technology is a strategic complicator, executives can deploy it to simplify and accelerate smart strategy

development and execution. Leading organizations are engineering their strategic function to be more agile, scalable, and stable, giving them an array of strategic options in their back pocket for whatever the future holds.



Strategy support technologies

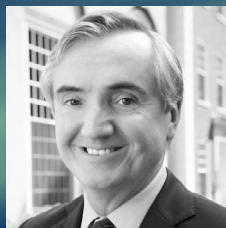
Advanced strategic platforms equipped with advanced analytics, automation, and AI, including natural language processing and machine learning, can help leaders think more expansively and precisely about the wide range of future possibilities.

OBJECTIVE	DESCRIPTION	KEY CONSIDERATIONS	EXAMPLE
Identify strategic forces	Trend-sensing technologies continually scan the environment, collecting, analyzing, and clustering leading indicators that challenge or confirm strategic assumptions to facilitate quick responses.	<ul style="list-style-type: none"> • External: Changes in society, technology, politics, economy, environment, and regulations • Business: Shifts in industry dynamics, customer expectations, competitor moves, and stakeholder behaviors, attitudes, and emotions • Organizational: Trends in products/services, operations, asset base, costs, and branding 	The US Department of Homeland Security uses automated tools that scan news articles, patent filings, and more to identify emerging technologies that might disrupt or improve the process of securing the United States.
Inform strategic choices	Dynamic scenario tools and simulators help leaders identify threats and opportunities, quickly test potential outcomes of strategic choices, and prioritize critical uncertainties.	<ul style="list-style-type: none"> • Create alternate long-term scenarios to identify threats and opportunities • Develop simulations to test various strategic choices • Enhance human understanding and insight to determine potential implications, critical unknowns, and strategic responses 	Three health care organizations (provider, plan, plan/provider) developed an agent-based model to simulate how competitive value-driven care dynamics could evolve, giving each organization new insights into where to play and how to win.
Monitor execution and outcomes	Analytics technologies continually track internal and external outcomes to inform ongoing leadership discussions and decisions regarding the organization's performance against the strategy.	<ul style="list-style-type: none"> • Are we honoring our strategic choices? • What's working? What's not working? What adjustments are needed? • Is our strategy and its associated commitments generating the projected value? 	Deloitte uses AI-based sensing to monitor the trajectory of two important uncertainties that affect the firm's strategy: degree of regulation and technological/automation impact on professional services.

MY TAKE

Joseph Fuller

Professor of
management practice,
Harvard Business School



One thing I know about strategy: It's the assumptions that kill you, not your competitors.

Over the past 30 years, I've urged corporate strategists to identify and rigorously test key assumptions about their strategy, as well as their assumptions about the technology that will support it. Strategists should know exactly what assumptions they are making about their strategy and the supporting technology—and the competitive results they expect.

Corporate strategy has never been easy, but technological advances have made strategy development even more complex. Technology choices used to be binary: Either a software or hardware choice goes live or it doesn't. Today, the choices are more nuanced and intertwined. For example, in the 1960s, airline strategists were deciding, "Do I buy a jet or stick with propeller aircraft?" But in recent years, the technology choices have become much more numerous and intricate: *What tech will I use to manage pricing? Flight crew?*

Maintenance scheduling? Route assignments? Once implemented, these technology decisions are baked into everyday operations and are difficult to change. Until recently, it's likely that the airlines assumed that business travel would remain relatively stable. As we've seen this year, when a key assumption turns out to be wrong, the strategy can quickly unravel.

Of course, the outcome of any important strategic choice is inherently unknowable. You're never going to reduce the gray area to zero, but you can install controls that warn you that an important assumption is under question or, in fact, invalid. One way to do this is to ask the right questions. No one expects CEOs and CSOs to keep up with all the latest technologies, but they should know enough to ask the hard questions: *How will this technology interact with our strategic assumptions? What problem will it solve, or what uncertainty will be reduced? What advantage will we gain from it?*

And just as important: *What assumptions about the technology itself must be true for these results to materialize?* Too often, leaders and technologists succumb to magical thinking—if we invest in this technology, it will solve all these other problems. Instead, effective strategic leaders don't accept the promised benefits at face value—they carefully probe the logic behind the proposals, searching for disconfirming data, to make sure the technology team has carefully thought through their assumptions about how the technology will advance the strategy without taking on inadvertent risk.

Everyone has access to similar technologies—but it's how you use them that makes the competitive difference.

As assumptions multiply and tangle, the human brain needs help to anticipate outcomes and make course corrections. New technology tools can help strategists experiment with strategic theories, test the assumptions' validity and likely outcomes. Rapid simulation and experimentation can provide a quick, early read on possible outcomes while avoiding implementation risk. During execution, technologies can continually monitor the assumptions' validity in real time, providing insights that strategists can use to quickly and confidently course correct if needed. Additionally, sensing technologies can function as an early warning system to alert strategists when assumptions are being challenged.

Many of these strategy support technologies incorporate cognitive AI, which helps take the human ego out of the equation when decisions don't work out as anticipated. It's human nature to overlook or discount

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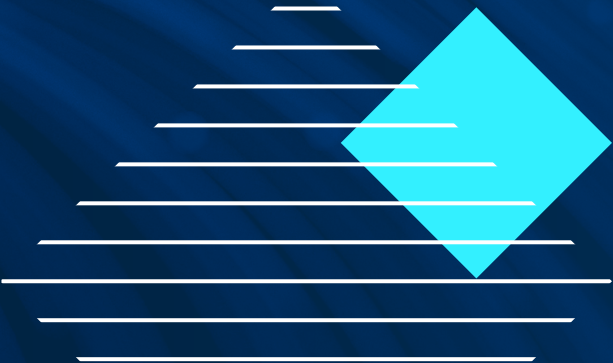
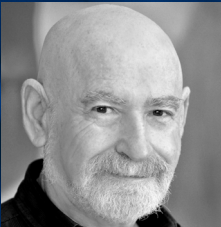
data that doesn't support our beliefs, but a machine has no ego, which allows it to be objective. Plus, a machine can quickly pinpoint one exception out of thousands and identify subtle—but crucial—patterns and connections that could overturn a strategy. These capabilities significantly improve the odds that a human strategist will recognize a strategic flaw and fix it before it's too late.

In the end, though, the strategist's capabilities are more important than the technology she uses. I often tell my MBA students about a NASCAR experiment that gave each driver the same vehicle and pit crew. The researchers found that even when drivers have the same "tools," some perform better than others, simply because of their innate abilities and experiences. So, my advice to strategists is that everyone has access to similar technologies—but it's how you use them that makes the competitive difference.

MY TAKE

Peter Schwartz

Senior vice president
of strategic planning,
Salesforce



I've been working with scenario planning since the early 1980s and have even written several books on the topic, so the skills I've developed over the years are particularly useful now.

This pandemic is the biggest crisis the world has seen in nearly a century, and it's important that leaders recognize that the old normal is gone forever. It's up to leaders to figure out a new future—otherwise, it will be determined for them.

The pandemic has accelerated the pace of technological change, so when I think about technology and strategy, it is in the context of a malleable world of possibilities that didn't exist before. Because there are so many unknowns during the pandemic, we temporarily

shortened our planning horizon at Salesforce to nine-month scenarios to inform our strategic choices about the technology that will be needed in this new world and how we could tackle even bigger problems.

We are also working to harness the strategic thinking of our 50,000-plus employees. We've pivoted from the centralized communications cascade we used before the pandemic to a hyperdistributed enablement of strategic thinking. We gave every employee a copy of our near-term scenarios and asked them to consider: *How do you need to operate and adapt to this environment? How are you going to help your customers do this, too?*

Of course, we don't send them off without context. Every Wednesday, we have an all-hands call to keep our people up to date. We gave them a playbook that provides guidance for how to think about running their part of the company and how to interact with customers

during this transition. But we didn't provide specific actions they should take—instead, we suggested the questions they should be asking themselves in this new environment.

Moreover, to succeed in an accelerating world where strategies and tactics are merging, leaders need to know what's going on. The ability to capture and display information for decision-making becomes hyperrelevant when you need to move this fast. Quickly adjusting strategy and tactics requires real-time data and sophisticated tools to create scenarios and forecasts.

For example, we're helping health agencies in California and Hawaii, as well as our own global organization, anticipate where the COVID-19 virus could spread next. We're using a mobile survey tool that follows cell phone movement without capturing personally identifiable information. When many cell phones move from a coronavirus hot spot to another area,

the tool alerts local health organizations to give them time to prepare.

It's up to leaders to figure out a new future—otherwise, it will be determined for them.

Another example was the design and launch of Work.com in early May 2020. This new product helps businesses and communities get back to work safely. We accomplished in one month what would normally take a year. When you move this quickly, the organization's operational cadence must accelerate as well. During every good scenario exercise, leaders identify the leading indicators of potential problems. Our senior executives, especially Marc Benioff, are very familiar with these indicators and frequently question operational leaders to head off problems before they

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can materialize. If something is supposed to happen and doesn't, it's noticed very quickly.

In times of crisis, business leaders have a different role than in ordinary times. In terms of strategy and tactics, it's insufficient to consider only how we can help our businesses. We need to step up and help deal with the crisis itself. *How can we help our community and society? How can we help the world deal with this crisis?* By engaging all of our people in bottom-up, independent thinking and innovation, we can do our part to help design the world's new future.

EXECUTIVE PERSPECTIVES



STRATEGY // The playbook for using technology to create competitive advantage is changing from, “Who owns the best tech?” to, “Who uses technology the best?” As a result, CEOs are realizing that their collaboration with IT needs to go a level deeper to understand whether and how their tech is providing an advantage. Strategy executives should find the right balance of education, control, and delegation when making decisions about technology adoption or implementation. In understanding what’s possible within the bounds of their organization’s tech stack, CEOs can develop an overall strategy that plays to their strengths or allows time for needed investments. As strategy becomes more dynamic in the coming months, CEOs would be wise to remember that their responses to trends will be only as good as their organizational technology permits.



FINANCE // Finance leaders are playing a larger role in strategy, with some even wearing both lead strategist and CFO hats. These leaders are drawing a fine line with technology-enabled strategy by making it dynamic without pivoting constantly. As capabilities such as market sensing and constant monitoring point to new directions, CFOs can actively manage the capital allocation available for such experimentation. This means placing some limits on the options available to the CEO, while helping to identify strategies that can generate robust profit streams in the future. Ultimately, the finance team may be responsible for communicating its decisions to the public in a way that emphasizes purposeful experimentation and profit potential, especially at a time when analysts and investors are highly attuned to uncertainty.



RISK // The COVID-19 pandemic has forced many companies to dramatically change their strategies or adopt more dynamic approaches to the annual planning cycle. Chief risk officers (CROs) should consider updating their organization’s risk profiles around key assets (cyber, brand, core technology systems, etc.) to match changing strategies. For example, companies that relied heavily on brick-and-mortar business models require new risk profiles as they shift more to e-commerce. Going forward, strategy may become even more agile and dynamic, bolstered by market sensing and new technology capabilities. Moreover, an organization’s demonstrated ability to manage risk amid uncertainty and disruption could become a strategic differentiator. CROs can decide which kind of leader they will be: one who manages risk by using governance to slow down adoption of new technologies, or one who optimizes risk in new technologies to deliver stronger business outcomes.

ARE YOU READY?

KEY QUESTIONS



1 Does your technology limit your organization’s strategic options? If so, how can that be addressed?

2 How can strategy and tech leaders work better to understand the strategic plan as well as the opportunities and constraints of your technology architecture?

3 What assumptions must hold true for your strategy? How do you monitor these and make timely adjustments when needed?

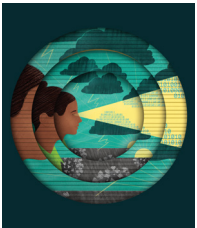
LEARN MORE



2020 Chief Strategy Officer Survey
Learn how corporate strategy leaders are evolving to navigate uncertainty and change strategic planning.



Uncovering the connection between digital maturity and financial performance
Gain insights into the key “digital pivots” that can affect financial performance.



A case of acute disruption
See how lessons of digital transformation can prepare an organization’s response to sudden and severe disruptions.



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If you're looking for fresh ideas to address your challenges,
let's talk.*

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3. Khalid Kark et al., “*Survey: CIOs are CEOs’ top strategic partner*,” *Deloitte CIO Journal on the Wall Street Journal*, May 22, 2020.

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