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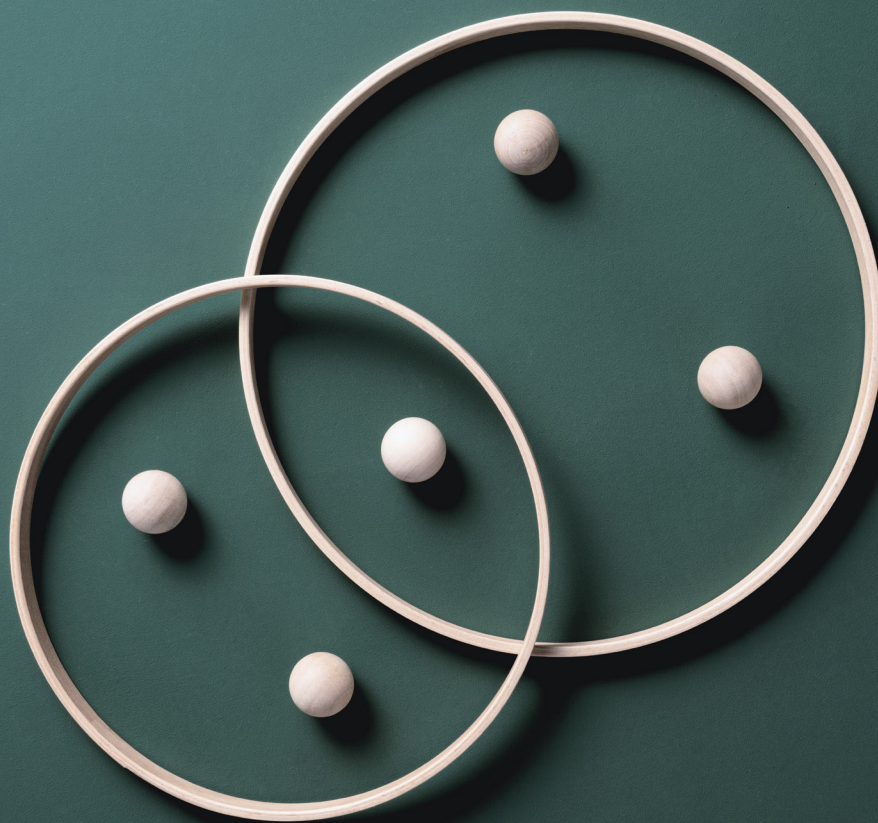
In conversation: The CEO's new technology agenda

Why the technology function needs to play an integral role in business strategy.

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In the past, top business leaders tended to delegate technology and IT priorities to specialists, but that is rapidly changing. In this episode of the *Inside the Strategy Room* podcast, two McKinsey experts, who recently published an article on the topic, explain why technological investments must now be part of strategic planning at the highest corporate levels. Krish Krishnakanthan is a leader in McKinsey's application maintenance and development work across North America, focusing on the high-tech and financial services sectors, and Gayatri Shenai helps clients drive transformative change at the intersection of strategy, digital, and operations. You can listen to the episode on Apple Podcasts, Spotify, or Google Podcasts.

Sean Brown: Why do CEOs need to become more involved in setting the technology agenda?

Gayatri Shenai: In the past few years, CEOs and boards have been talking more about how cybersecurity challenges keep them up at night or how a single production update could wipe out a large part of the IT budget. One CEO told me that most employee complaints he receives are about the lengthy help-desk wait times or poor internet connectivity that cause productivity challenges. Customer service complains about e-commerce latency issues or how unintuitive their product purchase interfaces are. These are just a few examples of how boards and CEOs are increasingly realizing how technology can change the company's performance trajectory.

Sean Brown: Is there sufficient communication and alignment between business leaders and technology teams to ensure IT is addressing the business needs?

Gayatri Shenai: When I ask this of CIOs and their direct reports, I often hear, "It's working really well but we feel a bit underappreciated"—kind of like security agents at airports who only get noticed if the queues are long or dangerous items get through. But when I ask CEOs and business-unit leaders,

they tell me, "I wish we had more agility and, more importantly, I wish I understood what challenges the IT organization faces so I could help solve them." Business leaders do not fully understand IT and why its work takes so long.

Sean Brown: The pandemic has put some of these disconnects at center stage because technology has not only been vital to keeping companies operating but the current crisis has accelerated the move toward digital business models. Has that focused CEO attention on tech issues?

Krish Krishnakanthan: I think COVID-19 has revealed the real caliber of organizations' technology. I mean, the technology revolution is here. Customer preferences have changed and people are more accustomed to technology. It is not just one particular technology driving the change but many of them coming together. You have internet speed accelerating with 5G at the same time as digital design is helping create superior customer experiences. At the same time, changes happening throughout the value chain are creating major business-model disruptions.

With all this, risk grows. For CEOs, it becomes imperative to drive the tech agenda as much as they would drive finance or corporate strategy. One CEO recently told me, "We wouldn't let anybody run the company if they did not understand finance." Technology will be as important in the future, so CEOs need to be as well versed in it as they are in finance or sales.

Sean Brown: What are the key technology issues CEOs should pay attention to?

Krish Krishnakanthan: There are three foundational elements. One is reimagining the role technology plays. Is it just an order taker or is it paving the path to growth? In past years, CIOs may have been in the boardroom but their role was supporting the business strategy. Now, there is a bigger role for technology-led strategy, meaning if you want to

release technology-based products, you need technology that can enable you to leverage that fully. It's a technology-led business strategy, not a business strategy supported by technology.

The second element is reinventing technology delivery. Gone are the days when business would throw the requirements over the wall and the technology group would in time develop a product that would probably be outdated by the time it was released. Now it is about working jointly with the customer.

The last one is future-proofing the technology foundation. I don't think you can fully future-proof, but it has become essential to make sure the decisions you make today help you advance versus hold you back. What can you do now with respect to the cloud or micro services, for example?

Reimagining the role of technology is largely about the culture of the organization. If your IT organization has an order-taking mindset, telling them, "Now you are going to lead" is a difficult mindset change. It is a long-term effort. Reinventing technology delivery is about the mechanics of how things are done, and future-proofing the foundation requires a lot of capital. So each vector addresses different dimensions of the problem.

Sean Brown: What kinds of decisions do these three dimensions entail for the CEO?

Gayatri Shenai: What Krish just described are the three vectors, and across these vectors there are ten critical levers, which we call plays, that need to be choreographed based on what you are trying to do in your business. I will mention a few that I find companies struggle with the most. The first is having that tech-forward business strategy. Many IT functions struggle to match their priorities to those of the business. Many companies develop their business strategy, and then their technology strategy follows later. That does not work anymore. A tech-forward business strategy, where the technology strategy is integrated into the business strategy, is critical. The clients that do this well integrate the CIO role into the strategic business discussion, so the CIO is no longer a back-office function but a full part of the business-unit and CEO leadership team.

The second one I would call out is user experience and design thinking, or user-centricity. When you ask, "Are you an agile shop?" most organizations will say yes, but when you look under the hood, agility is not really there. Steve Jobs used to quote Henry Ford as saying that if he had asked customers what they wanted, they would have told him they needed a faster horse rather than a car. People often do not know what they want until you show it to them. Design thinking is this concept where you think about the signature moment of delight from a user point of view, not what is easy for your engineering team to design. Then you validate the product with users before bringing it to market, constantly testing, getting feedback, and refining,

'Today, you need a technology-led business strategy, not a business strategy supported by technology.'

—Krish Krishnakanthan

versus the waterfall approach where user comments are gathered and then you don't talk them until the product has shipped and it turns out it does not quite meet their needs.

The third element is engineering excellence with top talent. In pursuit of cost savings, traditional IT has been highly outsourced, to an extent where much of the development and engineering work is done by third-party vendors. That, again, no longer works. Technology functions in successful companies value innovation more than cost savings and assemble top-notch workers to equip themselves for the future. Many companies are recognizing that the engineering culture of small teams made up of high-performance engineers is critical to their growth, so the talent strategy is changing. They are investing in securing these resources—not just recruiting but onboarding and retaining them.

The last one is flexible business-backed architecture. Most incumbents are saddled with a core infrastructure of aging applications. Adding features and functionality is cumbersome, costly, and time- and labor-intensive. These companies need to move to a flexible, scalable software foundation that allows their IT teams to get products to market quickly and efficiently.

Sean Brown: Have you seen the current crisis lead companies to step up action on some of these plays?

Gayatri Shenai: I think the pandemic, to Krish's point, has elevated the technology function a few rungs up the ladder. Working from home started almost instantaneously at most companies, and being able to provide the infrastructure for employees was a Herculean effort, yet most organizations were able to do it. Agile working, or agile at-scale software delivery, has become a bit more fluid during the pandemic because you are working in small teams. Additionally, almost overnight, companies adopted cloud models such as Zoom or Teams, so the move toward next-generation infrastructure has

also been hastened. That's why we call this a technology revolution: every bit of tech-forward business strategy has become more critical. On digital user experience, there has been a five- to seven-year acceleration.

Sean Brown: Which of the three vectors you mentioned do you find CEOs are most focused on these days?

Gayatri Shenai: Many of my clients are reinventing technology delivery and future-proofing more than reimagining technology's role. They start with, how do I reinvent my delivery? How do I ensure that I can move at a faster pace? And how do I create an architecture foundation that allows me to be more agile and improve the credibility of the technology organizations?

Sean Brown: Back in 2019, you surveyed CIOs on the progress they felt their organizations were making on these three vectors and compared that with responses from business leaders. Did you find a big gap between the two sets of responses?

Krish Krishnakanthan: Among IT teams, 56 percent said, "We are redesigning our operating model. We are reimagining the role of technology." But if you ask the non-IT executives, they said, "We are still stuck in the same place." In reinventing technology delivery, there is a similar dichotomy between what IT believes they are doing and what the business feels and experiences. The word *experiences* is critical—it is perception versus reality. The balanced score card may say you have had only one outage all year, but that outage was long enough to wipe out profitability for the entire year, particularly if you are in retail and it is the day before Thanksgiving. The two groups need to work together.

Sean Brown: But, as you said, that collaboration has not typically been effective in the past. What questions should the CEO be asking to make sure the technology efforts advance the strategy?

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–Gayatri Shenai

Krish Krishnakanthan: Around the role of technology, the questions would be: How are technology decisions made at all levels? And how are we maximizing the value of technology investments? In many organizations, the squeaky wheel gets the grease, in the sense that the people who are louder get more of the budget, rather than saying, "We need to be investing in these five areas." The advanced organizations divide the budget into three buckets: what we need to run the business, what we need to make positive NPV [net present value] projects that are profitable, and where we will make strategic bets. Those bets may be 5 to 10 percent of your budget, but it is necessary, as in all R&D, to make some bets on your future that could enable you to leapfrog your competition.

On technology delivery, the question you need to ask is, how do we build a more engineering-oriented organization? And on future-proofing the foundation, I would ask, how much attention are we paying to security? Another question is around AI: we apply AI to decision making for the business but what percentage of the technology decisions are AI-based?

If you push forward across these vectors, you will move the IT organization from being a service provider to the business to playing a central role

in strategy and innovation. Siloed business and IT teams will move to an integrated business and digital team that can deliver things quickly, and you will go from a focus on easy-to-build products to customer-centric products.

Sean Brown: As you mentioned earlier, some companies are venturing on transformations of their technology infrastructure to set their businesses up for future growth. Some of these transitions can be quite tricky, particularly large-scale migrations to the cloud. Can you share any tips for how to do that effectively?

Krish Krishnakanthan: A move to the cloud is complicated by several factors. One is the difficult economics of cloud itself. If you just "lift it and shift it," you will not see much economic benefit aside from maybe improved reliability. To take full advantage of cloud benefits, you typically would have to re-architect your applications, and that requires investment. I am starting to see the cloud play an important role at my client organizations, but only a small percentage have migrated.

Gayatri Shenai: I find many companies that have undertaken a cloud journey are struggling because they did not do the work on the business-case side to understand the value that would get unlocked

and how they would migrate their applications. Many are in the early parts of the journey, piloting and finding things are working well, but the move from a pilot within a small group to scaling enterprise-wide is a big milestone.

Sean Brown: How have those who have made these transitions successfully managed the process?

Gayatri Shenai: It might be helpful to share some examples. One global pharmaceutical company had managed to keep IT costs down historically but was struggling to deliver technology solutions to market at the right pace. The CEO launched an assessment to understand the maturity of the IT and digital function based on a comparison to best-in-class companies and the industry standards. The CEO ultimately determined that five plays were critical. The team lined up each of the technology plays against their strategies and priorities to see which would make the most difference on these battlegrounds. Then they looked at which technology plays in combination would make the most difference to the overall business strategy. I love this example for a couple of reasons. One, it shows how a CEO can influence and shape a lighthouse project, because this became the harbinger for the rest of the organization on how they operate. The second thing is that they focused on just five plays to avoid biting off more than they could chew, and they picked from all three vectors, which is a prominent feature of winning recipes.

Another example is an organization that is close to the end of a five-year journey. This company pulled each of the levers at different points in its transformation, covering the whole gamut over those five years. What was interesting is the scale of the effort. Krish mentioned that not many organizations have made extensive migrations to the cloud. This is one of the exceptions: 85 percent of their new applications have moved to the cloud. The CEO has played a core role in moving from pilot to actually scaling the effort.

One more example is the CEO I mentioned at the start of this conversation, who recognized that IT was traditionally seen as expensive, ineffective, and delivering unclear business value. He was very tactical in the steps he took. First, he made IT a strategic role in the organization by inviting the CIO onto his leadership team and ensuring the CIO was learning first-hand about the business units' aspirations so he could better recommend how technology could support those aspirations. While that allowed for an exchange of ideas, it also signaled that the CEO valued cross-collaboration between the IT organization and his business unit leadership teams, which had a trickle-down effect in encouraging collaboration. The CEO also invested in a world-class technology workforce, having realized that many of the interesting technologies were not being done by in-house staff. He made it a priority to tell employees in town halls, "We will strengthen the technology function and assemble an in-house cohort of skilled technology workers."

Sean Brown: Do you think the elevation and expansion of the CIO role will become a broader trend given technology's growing role?

Gayatri Shenai: That comes back to the mindset point. This client not only elevated the role of the CIO but made IT a board-level discussion topic. Traditionally, that does not happen. Today, IT has to be part of the business strategy, not separate from it. Your business strategy is enabled and delivered through technology, and bringing that lens is more a mindset shift than a change in tactics.

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