

The CIO challenge: Modern business needs a new kind of tech leader

As technology becomes increasingly important, an organization's success depends on whether the CIO can move from being a functional to a strategic business leader.

by Anusha Dhasarathy, Isha Gill, and Naufal Khan



“There’s no worse time than now to be an average CIO.” These words, uttered by an executive at a recent conference, neatly capture the intense pressure on CIOs. For years, executives have stressed the need for CIOs to move beyond simply managing IT to leveraging technology to create value for the business. This priority is now a requirement. New technologies have been at the center of trends—from mobile-first consumer shopping preferences to the promise of artificial intelligence in critical decision making—that have reshaped the competitive landscape and disrupted business models. For this reason, companies need to be tech forward: technology needs to drive the business.

Despite this pressing need, of the organizations that have pursued digitization, 79 percent of them are still in the early stages of their technology transformation, according to McKinsey’s 2018 IT strategy survey.¹ Legitimate factors are delaying progress, from the scale of the change to the mind-boggling complexity of legacy systems. We believe, however, that one of the biggest issues is that many CIOs have not accepted the degree to which their role needs to expand beyond cost and performance responsibilities in order to transform IT into a core driver of business value.

Three vectors of a holistic transformation

Before understanding the responsibilities of the new CIO, it’s important to understand the nature of tech transformations themselves. In most cases we’ve observed, tech transformations are implemented as a set of disjointed initiatives across IT. That leads promising developments to stall out or underdeliver. We have found that a tech transformation must be holistic to deliver full business value. Creating powerful customer experiences, for example, requires a data architecture to track and make sense of customer behavior. Architecting modular platforms needs revamped approaches to hiring in order to get top-flight engineers.

This reality requires a CIO to first come to terms with the scope of the transformation itself. In our experience, it’s been helpful to think about it along three vectors:

1. Reimagine the role of technology in the organization. This vector includes establishing the role of technology as a business and innovation partner to design a tech-forward business strategy (for example, tech-enabled products and business models), integrate tech management across organizational silos, and deliver excellent user experiences.

2. Reinvent technology delivery. IT needs to change how it functions by embracing agile; improving IT services with next-generation capabilities such as end-to-end automation, platform as a service, and cloud; building small teams around top engineers; and developing flexible tech partnerships.

3. Future-proof the foundation. To keep pace with rapid technological advancements, organizations need to implement a flexible architecture supported by modular platforms, enable data ubiquity, and protect systems through advanced cybersecurity.

Five traits of a transformative CIO

For IT to become a driver of value, the transformative CIO also needs a new set of skills and capabilities that embody a more expansive role. In working on tech transformations with hundreds of CIOs, we have identified five CIO traits that we believe are markers of success.

1. Business leader

To help technology generate business value, the transformative CIO has to understand business strategy. Findings from our 2018 IT strategy survey reveal that companies with top IT organizations are much more likely than others to have the CIO very involved with shaping

¹ “Can IT rise to the digital challenge?” October 2018, McKinsey.com.

Questions for the CIO

- Can I clearly articulate the business's goals?
- Are the most important technology initiatives delivering quantifiable business value to the company?
- What percentage of technology resources is focused on work that drives business goals versus maintenance?

the business strategy and agenda, and strong performance on core IT tasks enables faster progress against a company's digital goals.² CIOs who can make this leap tend to take the following actions.

Learn the business inside and out

The scope of an IT transformation means that CIOs must be prepared to interact with the business in different ways. We have found, for example, that the best CIOs go far beyond meeting with the C-suite or attending strategy meetings. They invest time with functional and business-unit leaders and managers to gain an in-depth understanding of business realities on the ground and go out of their way to develop a nuanced and detailed understanding of customer issues. CIOs do this by continually reviewing customer-satisfaction reports, regularly monitoring customer-care calls, and participating in user forums to hear direct feedback.

As one large financial institution set out to build its digital products, the business and technology teams jointly led user listening and feedback panels early and often throughout the development process. Both technology and business leaders made it a priority to attend these panel discussions so that they could effectively guide their teams on developing products that would best address the needs of end customers. The CIO of a B2B technology-services company, meanwhile, meets customers on a regular basis to

get firsthand feedback on both products and the customer's experience of doing business with the company. He uses these perspectives to inform his technology decisions.

Take responsibility for initiatives that generate revenue

CIOs can further develop business acumen by taking responsibility for initiatives that generate business impact, such as building an e-commerce business, or by working with a business-unit leader to launch a digital product and then measure success by business-impact key performance indicators (KPIs), not technology KPIs. Such efforts allow CIOs to build a deep understanding of the business implications of technology, such as customer abandonment because of slow download times on a site or other poor user experiences.

As part of a digital transformation, for instance, the CIO at a large financial institution committed to developing digital products to help the business scale its presence in a new market. While the CIO already understood how to build systems to support financial products, he and his team had limited experience in creating new digital products to sell directly to consumers. So the team created a program built on rapid test-and-learn cycles to identify what mattered to customers and meet those needs. Subordinating tech decisions to customer needs was crucial in allowing the CIO and his team to develop a digital

²"Can IT rise to the digital challenge?" October 2018, McKinsey.com.

offering that succeeded where it mattered: with consumers.

Get on boards

Developing a deeper well of business knowledge often requires CIOs to extend their networks beyond the organization. One of the best ways to do that is by joining the board of another company. A third of the boards of companies within the Fortune 500 today include a former CIO or CTO, and that number continues to increase.³

2. Change agent

A full technology transformation is not about moving to the cloud or embracing new IT solutions. It also involves infusing technology into every strategy discussion and process throughout the organization. Driving a transformation around the three vectors we laid out earlier (reimagining the role of technology, reinventing technology delivery, and future-proofing the foundation) starts with a CIO mind-set that both acknowledges the need for transformative change and commits to a multiyear journey.

Partner with business leaders

Generating support for a transformation among business leaders across the organization requires creating true partnering relationships with them

based on common goals, mutual responsibility, and accountability. According to a McKinsey survey on business technology, in fact, the companies in which IT plays a partner role in digital initiatives are further along in both implementation and achieving business impact.⁴

To kick-start the transformation journey, the CIO of a transportation-and-logistics company made it her first priority to meet with every single business leader to understand their goals and issues and to set expectations on how they could best work together, by clarifying, for example, what the business side could expect to get from IT in a consultant role versus IT as a service provider or partner. This effort to understand what mattered to each leader established trust, and from each of these discussions it became clear that the business wanted a true partnership with technology and understood what it meant. The CIO further built on the relationship with the business by prioritizing initiatives in the tech transformation that addressed business needs and working closely with business leaders to drive progress. This active collaboration ensured that the products and services IT developed were adopted.

³"The digital CIO has arrived," MIT Sloan CIO Symposium, 2016.

⁴"Partnering to shape the future—IT's new imperative," May 2016, McKinsey.com.

Sidebar

Questions for the CIO

- Do leaders in the C-suite have a clear understanding of why a tech transformation is important?
- Do you have partner-level relationships with people in the C-suite in developing the vision and plan for both business and IT?
- Is your tech transformation actively incorporating each of the three vectors of change?
- Do you have a "war room" to manage the transformation that can solve problems as well as track progress?

The CEO's role in making the CIO successful

The stage is set for CIOs both to lead a successful technology transformation and to influence business strategy. They can't do it alone, however. The CEO must create an environment where the CIO can thrive. Here are a few things CEOs can do:

- establish a strategic role for the technology function
- elevate the CIO to report directly to the CEO
- rebalance technology investments and track their business value
- prioritize the development of a world-class tech workforce

Articulate the 'why'

Gaining support for a transformation requires that stakeholders understand that true change will come only from tackling all three transformation vectors in a strategic, interlinked manner. That means not just explaining how this three-pronged approach is better for IT but also clarifying how it drives business goals and how it can be implemented. When considering a shift to cloud, for example, executives tend to understand it first as a cost-saving opportunity. But in helping executives understand the full range of cloud benefits—improved speed to market, better developer productivity, and improved resiliency and disaster recovery—CIOs can help them see how the cloud can unlock new revenue models and services tied to business priorities.

Have an integrated plan that highlights risks and dependencies beyond IT

Large IT initiatives have always required detailed planning, but business-oriented CIOs ensure that transformation plans account for dependencies outside of IT, such as marketing campaigns or legal implications. They approach planning as a dynamic process rather than something static,

which allows transformation teams to better remove roadblocks and to allocate people and spend when and where they are needed. To actively manage this process, such CIOs also put in place a “war room,” a dedicated team that ensures transformation initiatives are delivering value by actively tracking progress and helping to break through root-cause issues.

This was the approach taken in a large global retailer's digital and technology transformation. The CIO set up a transformation war-room team that worked jointly from the beginning with leaders outside the IT function, including marketing, operations, sales, and e-commerce. Together, they created detailed work plans. This detailed early planning revealed which systems needed to be upgraded and when. The war-room team actively tracked progress and quickly escalated issues for speedy resolution. The results were clear: a fivefold jump in digital sales, and project delivery four times faster than projects of similar scope had previously taken.

Questions for the CIO

- Are the top people in IT really stars in their field?
- Do you rely exclusively on HR to find your talent?
- Do you have a clear view of the talent you need in the next three years—and a plan to develop it?
- What percentage of the best people you hire are still with you two years later?

3. Talent scout

Nearly half of respondents to McKinsey's 2018 IT strategy survey cite skill gaps on traditional teams as the top obstacle to a successful digital transformation.⁵ So CIOs need to focus not just on recruiting top people but also on retaining them. Two solutions have proven effective.

Reimagine how to attract tech stars

Companies can reap tremendous benefits from outsourcing. In the oil and gas industry, for example, the outsourcing of application development grew 50 percent between 2014 and 2018.⁶ But that needs to change, especially around the most crucial capabilities. CIOs who want to reinvent tech's role need tech stars, particularly the best engineers. By hiring the best tech people, we've seen companies reduce their technology costs by as much as 30 percent while maintaining or improving their productivity.⁷ CIOs need to move quickly. In just 18 months, one CIO at a transportation-and-logistics company radically reshaped its talent profile. All the direct reports and approximately 50 percent of tech employees were new, and 80 percent had transitioned to different roles.

The head of technology and analytics at a large retail organization set up a talent war room to hire data scientists and engineers. As part of this effort, the war-room team revamped recruitment and onboarding processes by using different talent sources, such as HackerRank and General Assembly, and by updating candidate screenings and interviews with appropriate assessments of technical and other skills, such as coding and collaboration. In addition, they led weekly check-ins to track the talent funnel and adjust the process as needed.

Build up internal talent

Getting good people doesn't matter if you can't keep them. Top CIOs, therefore, develop diverse career paths so that top talent can advance in their own areas of strength—for example, by letting a top-notch software engineer advance while continuing to code design software rather than forcing her to manage others in order to succeed.

Retraining the existing tech workforce also needs to be an important element of this platform. The CIO of a large consumer company made

⁵"Can IT rise to the digital challenge?" October 2018, McKinsey.com.

⁶Dhingra, Sverre Fjeldstad, Natalya Katsap, and Richard Ward, "A new mandate for the oil and gas chief information officer," November 2019, McKinsey.com.

⁷Klemens Hjartar, Peter Jacobs, Eric Lamarre, and Lars Vinter, "It's time to reset the IT talent model: Foster an engineering culture of smaller teams of better engineers to maximize productivity," forthcoming in *Sloan Management Review*.

Questions for the CIO

- Do you meet or speak with IT employees who are on the front lines at least once a week?
- Do you have a way to accurately measure and track people's attitudes across the IT department?
- Are your top engineers happy with their work?
- How often do you publicly celebrate success and support noble failures?

digital and analytics upskilling one of the company's key strategic priorities, launching an enterprise-wide program, in tandem with HR's learning team. The program invested in an online learning portal to create personalized online learning experiences based on an employee's goals and learning needs. These were supplemented by other programs, including in-person training, top management immersion sessions, and the cultivation of an in-house expert network that people could tap on specific topics.

4. Culture revolutionary

An effective talent strategy requires a culture that supports talent.

Build a true engineering community

Pay matters, of course, but top people want to go where they're valued. One way to create that kind of environment is to provide engineers with more autonomy by reducing the number of managers and often-bureaucratic processes, such as time-consuming reports and multiple rounds of approval.

Creating ways for cohorts of similar skill sets to get together can be a powerful way to share best practices and foster a sense of community. The CIO of a software company

established various community-building and knowledge-sharing efforts—hackathons, “dev days,” tech spotlights, brown-bag lunches—where product managers, developers, data engineers, and architects could meet on a weekly basis to share details about their projects and bring up ideas or issues for discussion. The CIO attended and actively participated.

Model and support true collaboration

Promoting collaboration across technology teams and between the business and technology is one of the most crucial prerequisites for a successful transformation. Top-quartile IT organizations are more likely to have an integrated or fully digital operating model, according to McKinsey's 2018 IT strategy survey.⁸

In practice, CIOs can enable collaboration if they're willing to relinquish some control. One CIO at a financial-services firm realized that for his people to increase their impact, they had to be more closely tied to business teams. So he embedded them into cross-functional teams aligned around specific products, relying on informal networks of guilds and chapters to provide guidance and light oversight. The most effective

⁸“Can IT rise to the digital challenge?” October 2018, McKinsey.com.

Questions for the CIO

- Do the questions about technology that leaders in the C-suite ask reflect a true understanding of the impact of tech decisions?
- When you explain the ramifications of tech decisions, do leaders really understand you?
- How often do company leaders reach out to you for substantive guidance about how tech can improve their business?

CIOs ensure this level of collaboration is the norm within IT itself as well. This is particularly important around cybersecurity. IT can radically reduce cycle times and maintain effective security by incorporating security early into development and working closely with the cybersecurity team on an ongoing basis.

5. Tech translator

In the past, IT transformations have often proven expensive, time consuming, and short on value, and this has made some companies leery of undertaking them again. To address this issue and build trust, the best CIOs play an active role in educating leaders about technologies and their applications for the business.

Make the business implications of tech decisions clear

Many tech decisions don't get sufficient business scrutiny beyond cost and high-level strategy discussions. Transformative CIOs don't settle for that kind of interaction, articulating instead how a proposed solution solves the underlying business problem, what alternative approaches exist, and the pros and cons of each. The CEO

of a B2B technology-services company found this level of insight so important that he asked the CIO to present periodically to the board on technology-led business models.

This role was particularly important when a retail giant was looking to acquire an analytics company. The CIO and his leadership team were involved from the very beginning in determining the data and analytics capabilities needed to fulfill the company's business strategy. They performed deep-dive technical assessments, system and data-platform compatibility reviews, and tests of vendor capabilities. The CIO ran a pilot with a business unit and operations team for three months to determine whether the final vendor could deliver on its capabilities. At the end of the process, the business was able to make an informed decision.

These skills are the tools that enable a CIO's ability to transform IT. And in an increasingly tech-driven business landscape, they position CIOs as legitimate contenders to lead businesses as well.

Anusha Dhasarathy is a partner in McKinsey's Chicago office, where **Isha Gill** is an associate partner and **Naufal Khan** is a senior partner.