

# How CTOs Can Overcome Internal Roadblocks

Published 17 January 2024 - ID G00803808 - 7 min read

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Initiatives: [Digital Innovation and Enablement Function](#)

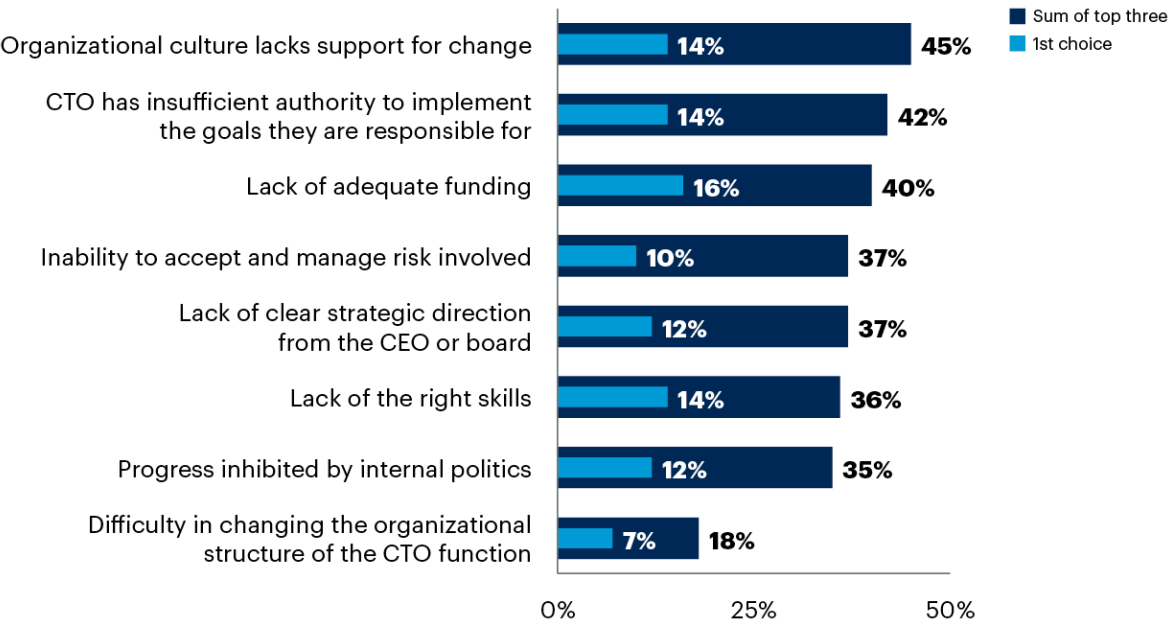
A Gartner survey shows that technology innovation leaders who are CTOs face a diverse range of internal challenges on their road to digital transformation. Many of these, such as demonstrating the value of innovation, demand soft skills and diplomacy as well as technical authority.

## Data Snapshot

Figure 1: Top Internal Roadblocks for CTOs

### Top Internal Roadblocks for CTOs

Percentage of respondents



n = 382, excluding those where CTO does not have any internal roadblocks and not sure; excluding "other"

Q. Now, thinking about the current challenges the CTO at your organization faces, what are the top 3 internal roadblocks that impact the CTO function's ability to meet its current goals?

Source: 2023 Gartner Changing Role of the CTO Function Survey  
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## Data Insights

- Most CTOs face several challenges; no single issue is dominant. However, many issues are related to proving or delivering on the value of innovation.
- Many CTO challenges are associated with complex issues that are only partially under the CTO's direct control, such as culture, lack of authority and funding.
- CTOs who've been appointed for less than five years are more likely to cite internal politics as an inhibitor compared to CTOs with six to 10 years of tenure. We believe that CTOs with longer tenure better understand their organization and become more adept at navigating political challenges.
- CTOs were more likely to cite "inability to manage risk" as an issue, compared to their managers. We speculate that this may be because the managers didn't understand the risks as clearly as the CTOs, who may be closer to the issues.
- The area of least challenge reported by the CTOs we surveyed was in changing the organizational structure of the CTO function. <sup>1</sup> This is likely because the CTO organization is under the direct control of the CTO and can be altered relatively easily.

## What You Need to Do

### Near-Term Actions

**Clarify business strategy.** Many CTO responsibilities demand a clear definition of business goals and strategy. If the business strategy is unclear, the CTO may have to reverse engineer it from whatever information is available. In this case, document those assumptions about the business strategy necessary to achieve key goals such as delivering technology strategy. Validate this document with the business to obtain an agreed-upon foundation for moving forward. **Make the value of the CTO organization explicit to justify funding.** Show how the CTO organization supports the business strategy. Make the link between the CTO deliverables and quantified business goals more explicit by adopting goals and metrics linked to value, such as in innovation and technology strategy. Communicate more widely, and through more channels, to market the value of the CTO organization. Highlight the growing range of opportunities and risks created by business and technology volatility where the CTO can deliver new value. CTOs with a large organization should consider appointing staff specifically to perform communication tasks.

### Quantify the value of innovation.

CTOs are frequently responsible for innovation, either by managing innovation teams or running initiatives to create an organizationwide culture of innovation. Explaining the value of innovation will likely contribute to addressing funding issues, authority challenges and political obstruction. Define and monitor innovation metrics to provide the data to quantify innovation value.

**Focus on what's important, and reallocate what isn't.** The 2023 Gartner Changing Role of the CTO Function Survey showed that the typical CTO has a wide range of responsibilities and challenges. This poses two risks. Firstly, some CTOs have responsibility for issues that don't directly contribute to their goals. Secondly, having an overly broad range of responsibilities may result in a reduced focus on what's important. Review your operating model and responsibilities, and attempt to reallocate or deprioritize activities that don't need to be handled by the CTO organization or are difficult to justify in business terms.

## Longer-Term Actions

**Build stronger business relationships to grow your “soft” influence.** Challenges such as driving change and navigating politics tend to be easier for CTOs with a range of “soft” skills and for those who have been in the post long enough to build good personal relationships. However, this process can be accelerated. Build stronger personal and professional relationships with key business peers by increasing communications and face-to-face meetings. Enhance your “soft” executive skills in areas such as relationship building, persuasion, negotiation, diplomacy and communication. Although relationships may take a long time to mature, start fostering them as soon as possible.

**Deliver practical tactics for change along with new strategies.** Change is always difficult for organizations, especially for a CTO whose responsibilities include implementing new technologies and processes. Try to reduce the barriers to change by including practical adoption plans in technology strategies to accelerate change and overcome cultural challenges. Good communication can also help by explaining the justification for change and how new technologies and processes support the business strategy. Also, try to manage the magnitude and frequency of change because too many changes in a short time can be very disruptive, incurring a higher risk of failure.

**Align authority and responsibility.** Identify areas where you have responsibilities but don’t have adequate control over implementation. Lobby to modify the CTO’s metrics, organization and responsibilities to better align power and accountability. Highlight the risks to the organization of inadequate compliance with technology strategy to make the case for the CTO to have greater authority.

**Start a more nuanced conversation about risk.** Our survey showed that CTOs were significantly more likely to cite the inability to manage risk as an issue compared to the CTO’s managers. This suggests that CTOs must do a better job of communicating about risk and risk mitigation. Shift the discussion about technology risk from something that must be eliminated, to something that must be understood and managed. Highlight the fact that different applications and parts of the organization will have different risk appetites. Consider more sophisticated ways to assess and price risk, such as highlighting opportunity cost or using tactics such as options pricing instead of ROI.

**Create the skills foundation for the future.** Addressing skills shortages is a challenge that benefits from long-term planning. A CTO is in a unique position to understand the technical skills that will be required in the future. Build closer links with HR using trendspotting and technology strategy to forecast skills requirements, and create training plans for those skills that are likely to be difficult to source externally.

## What You Need to Know

The CTO role is very challenging for four reasons:

- There are four basic CTO personas, each with somewhat differing responsibilities. These can include digital business innovation, technology innovation and strategy, technology optimization, managing strategic vendors and partnering (see [How Chief Technology Officers Can Deliver Value by Using Our Four Personas](#)).
- A typical CTO has a very broad remit, which results in balancing many goals and objectives — in some cases, too many. CTOs can be expected to deliver improvements in areas as diverse as cybersecurity, operational agility, cost optimization, employee experience and customer experience. However, one of the key differences between the CTO and the staff who report to them is that the CTO not only has to define strategy but also to evangelize and communicate it.
- The CTO role is evolving in response to the volatile technical and commercial conditions that face most organizations. Of the CTOs we surveyed, 52% expected a major to significant change in their role and responsibilities in the next year. CTOs should try to lead change using the recommendations above, rather than just responding to it.
- Technology and business imperatives mean a typical CTO will face new responsibilities; for example, in areas such as AI and sustainability.

From this perspective, it's hardly surprising that the CTOs in our survey faced such a diverse range of challenges and expected the CTO role to change significantly. Most will be required to significantly adapt their skills, organization and strategy.

## Evidence

<sup>1</sup> 2023 Gartner Changing Role of the CTO Function Survey. This study was conducted to understand the CTO function design and how CTOs and their organizations are changing their operating models and enabling digital business model innovation and transformation. The research was conducted online from 15 May through 6 July 2023 among 404 participants from North America (n = 204), Europe (n = 147) and Asia/Pacific (n = 53). Participants were leaders in their organization who were knowledgeable about the roles and responsibilities of the CTO. Respondents were screened for industry, job title, company size (at least \$500 million in annual revenue), knowledge of organizational structure and their reporting level away from the CTO. Industries surveyed include banking/investment services, manufacturing, healthcare providers, insurance, natural resources, government, services, energy, retail, utilities, health payer, communications service provider, transportation, education provider and wholesale.

*Disclaimer: Results of this survey do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.*

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## Recommended by the Authors

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[A CTO's Guide to Build the Right Executive Partnerships](#)

[How Chief Technology Officers Can Deliver Value by Using Our Four Personas](#)

[Use Innovation Metrics to Bring Clarity and Demonstrate Business Value](#)

[How CTOs Can Build a Technology Talent Acquisition Strategy](#)

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