Midsize Enterprise CIOs Carefully Embrace Business Technologists

CIO Research Team
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Initiatives: Midsize Enterprise IT Leadership

This summary of survey results provides insights on CIOs in midsize organizations. It shows how they perceive the benefits and risks resulting from the growing prevalence of business technologists and how the CIO’s posture toward these employees changes an organization’s staffing plans for 2021.

Overview

Key Findings

- Seventy percent of CIOs at midsize enterprises believe business technologists provide a high benefit to their enterprises.
- Sixty-three percent of CIOs at midsize enterprises believe business technologists generate high risk to their enterprises.
- CIOs citing both high risks and high benefits from business technologists represent 38% of survey respondents, indicating that a large share of CIOs operate in a position of cautious acceptance.
- CIOs who see high benefits from business technologists prioritize different skills when hiring new IT staff or developing existing IT staff.

Recommendations

While every organization’s unique context will inform how it acts on the growing prevalence of business technologists, midsize enterprise CIOs should consider the following actions:

- Talk to business leaders in your organization to anticipate where their teams would benefit from more advanced technology and more direct participation in the management of that technology.
- Discuss business teams’ midterm digital objectives to better calibrate their involvement in technology efforts related to their initiatives.

- Share governance with business technologists to balance business value needs and IT security needs.

- Help business leaders plan for changes in skills or IT support that their teams might need by developing a long-term vision for how different types of technology work might benefit the enterprise over the next three years.

**Data Insights**

While 70% of CIOs at midsize enterprises believe business technologists provide a high benefit to their enterprises, 63% believe business technologists generate high risk to their enterprises. Thirty-eight percent of our survey respondents cite both high risks and high benefits from business technologists, which indicates a general cautious acceptance among CIOs. Still, demand for technology surges ahead while small IT teams at midsize enterprises struggle to keep up.

Sixty-seven percent of CIOs in midsize enterprises acknowledge that business technologists provide much-needed capacity for enterprises to pursue their digital initiatives (see Figure 1). CIOs should carefully embrace business technologists to support business outcomes while also containing risk.
Responsibility, however, manifests in different ways. For many business leaders, it primarily means more active involvement in decision-making processes. In addition, nearly 58% of business leaders say they are responsible for the operations of a technology system, either in collaboration with their IT departments (44%) or independently (14%).

Business leaders’ priorities are reflected in their staffing decisions. A large share of employees outside IT now undertake some degree of technology creation, customization or configuration in their day-to-day work (see Figure 2).
What Are “Business Technologists”?

This report uses the term “business technologists” to encompass a wide range of employees who modify, customize or configure their own analytics, process automation or solutions as part of their day-to-day work.

Business technologists’ tasks range from simple (such as creating a new report) to complex (such as developing new software). And the extent to which their roles formally reflect their responsibility for technology work varies considerably. (For example, finance analysts may spend most of their day on technology work). However, these roles will typically not include responsibility for deploying and maintaining enterprise technology foundations.

We have heard CIOs use terms including “business technologist,” “technologist outside IT,” “technology producer outside IT” and “citizen developer.” All these terms are valid and reflect some aspect of the growing prevalence of technology work outside IT.
Meet Vivek, a Business Technologist

Vivek is an employee on his company’s finance team. Early in his career, he worked as a software engineer for a payment-processing company and has since worked as a project manager for several small technology projects. In most areas, he looks like a typical, though well-informed, end user. He creates new reports using the company’s analytics platform and has customized a number of automated alerts. When it comes to finance automation, however, he’s made himself familiar with robotic process automation (RPA) and is exploring how he can automate some of the more error-prone processes his team deals with day to day.

His involvement in technology work ranges from the simple (such as developing new reports) to the complex (such as assessing the viability of RPA). His role doesn’t carry a formal technology title, but he (and his manager) see working with technology this way as a standard feature of future finance employees’ day-to-day work. Vivek works regularly with a couple of individuals from the IT team, who provide advice and consult on thinking through challenging decisions that may impact the security or integration of his efforts.

There is a wide range of technology production activities that employees outside IT can undertake. In fact, most business technologists are involved in activities beyond development work. For example, 45% are involved in maintaining the capabilities they created, and 43% personally drive the adoption of such capabilities (see Figure 3).
Business leaders’ deliberate shift of focus toward technology, combined with employees’ personal interest in developing technology skills, is significantly influencing CIO thinking. To understand how CIOs in midsize firms perceive the growing impact of technologists outside IT, we asked CIOs in midsize firms to what extent they see both benefits and risks from emerging business technologists (see Figure 4).
CIO Perceptions of Business Technologists Largely Positive

<table>
<thead>
<tr>
<th>Perception</th>
<th>Somewhat Disagree/Disagree</th>
<th>Neither</th>
<th>Somewhat Agree/Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increases the Need for Collaboration Between IT and the Rest of the Business (n = 57)</td>
<td>2%</td>
<td>96%</td>
<td>2%</td>
</tr>
<tr>
<td>Requires IT Employees to Spend More Time Advising Business Teams (n = 59)</td>
<td>10%</td>
<td>90%</td>
<td>10%</td>
</tr>
<tr>
<td>Makes IT Leaders Rethink How We Organize IT Teams (n = 59)</td>
<td>5%</td>
<td>86%</td>
<td>5%</td>
</tr>
<tr>
<td>Improves the Enterprise’s Operations (n = 85)</td>
<td>14%</td>
<td>15%</td>
<td>71%</td>
</tr>
<tr>
<td>Provides Necessary Capacity for Digital Initiatives (n = 85)</td>
<td>14%</td>
<td>19%</td>
<td>67%</td>
</tr>
<tr>
<td>Changes the Skills Needed for IT Employees (n = 59)</td>
<td>15%</td>
<td>19%</td>
<td>66%</td>
</tr>
<tr>
<td>Increases Competition for Critical Technology Talents (n = 85)</td>
<td>20%</td>
<td>22%</td>
<td>58%</td>
</tr>
<tr>
<td>Exposes the Enterprise to Unnecessary Risks (n = 85)</td>
<td>32%</td>
<td>15%</td>
<td>53%</td>
</tr>
<tr>
<td>Is Generally Embraced by IT Employees (n = 84)</td>
<td>46%</td>
<td>17%</td>
<td>37%</td>
</tr>
<tr>
<td>Reduces the Need for IT to Hire New Employees (n = 85)</td>
<td>52%</td>
<td>16%</td>
<td>32%</td>
</tr>
</tbody>
</table>

n = 57 to 85 MSE CIOs, excluding “not applicable”

Q: To what extent do you disagree or agree with the following statements...
Source: 2021 Gartner CIO Talent Planning Survey
Note: “Technology producers outside of IT” refers to business-hired employees with technology expertise who report outside of the IT organizations

There are three main take-aways from the data about CIOs’ perceptions of business technologists:

- CIOs see capacity, not efficiency, as the benefit.
- Business technologists introduce benefits and risks.
- CIOs expect IT employees’ jobs to change.

CIOs See Capacity, Not Efficiency, as the Benefit

A large majority of CIOs believe business technologists provide the enterprise with the capacity it needs to act on its digital ambitions. However, they also believe this isn’t just a transfer of work from IT to business teams:
- Sixty-seven percent of CIOs believe business technologists give their firms the necessary capacity for digital initiatives.

- Seventy-one percent of CIOs believe business technologists help improve their enterprises’ operations.

- Only 32% of CIOs believe business technologists reduce the need for IT to hire new employees.

In combination, these three insights point to an overall increase in hiring technology talent throughout enterprise. Business technologists will work on process automation, analytics and customer experience initiatives, while IT staff will work on the platforms and enterprise systems that enable business technologists to undertake this work safely and efficiently. In many organizations, there is a strong sense that business technologists will create more demand for IT’s support and innovation, not less.

**Business Technologists Introduce Benefits and Risks**

While midsize CIOs overall report that business technologists bring benefits to their enterprises, most also believe they introduce risks to their enterprises. Roughly a third of CIOs report that business technologists are low in benefits and low in risks for their organizations (see Figure 5).
This combination of perceived risks and benefits is a reasonable position for CIOs to take. While business technologists can help their firms advance their digital business objectives, CIOs will need to find the right ways to both enable and secure the work of those business technologists.

CIOs report that IT employees may be even more concerned about business technologists. More than half of CIOs at midsize enterprises believe their teams do not embrace business technologists. Given the close collaboration required between IT and business technologists, CIOs should give their teams opportunities to collaborate closely with business technologists. This will help ensure their teams’ skepticism does not undermine critical relationships or damage business teams’ nascent efforts to develop their own technology skills.
The CIO at Glenmede (a midsize U.S. wealth management firm) assigned one to two IT staff members to act as part-time consultants for each business area that was interested in taking on more responsibility for technology work. This assignment, typically requiring a couple of hours a week, gave IT employees the opportunity to contribute directly to business teams’ thinking and decisions. Giving IT staff these opportunities helped reassure them that business teams took their newfound responsibilities seriously and helped them understand that changes to IT’s role would be positive.

**CIOs Expect IT Employees’ Jobs to Change**

As IT support for business technologists gradually increases, CIOs believe the nature of IT employees’ day-to-day work will change in substantive ways. Significant majorities of midsize CIOs believe the increasing prevalence of business technologists:

- Makes IT leaders reconsider how they organize IT teams
- Changes the skills needed by IT employees
- Requires IT to spend more time advising business teams

Accordingly, CIOs who see high benefits from business technologists are more likely to invest in staff members who support the following technologies:

- Analytics platforms (for example, Power BI and Tableau)
- Business workflow automation
- Customer interaction automation
- Data platforms (for example, data lakes)
- Enterprise systems (for example, ERP)

These technologies give business technologists the tools necessary to customize, modify or even build their own solutions more safely and efficiently. As the number of business technologists rises, demand for IT to support these technologists is also likely to rise. This has made hiring to support these technologies a priority for CIOs who see benefits from business technologists.
Conclusion: CIOs Must Start Thinking About Upskilling and Hiring

Overall, CIOs in midsize firms see business technologists as both a source of benefits and risks — showing a sort of cautious embrace of business technologists’ potential.

While CIOs perceive business technologists as essential to provide the capacity their firms need to pursue digital initiatives, our survey respondents indicate this does not come at the expense of jobs in IT. As the number of business technologists grows, demand for IT support will also likely grow. The skills needed by IT staff to provision, coach and provide support to business technologists may shift from the skills needed today, so CIOs and business leaders must start thinking about upskilling, training and hiring today.

Evidence

Data cited in this report mainly comes from three sources:

1. 2021 Gartner Reimagining Technology Work Survey. It was conducted via an online panel in March among over 6,000 employees across functions, levels, industries and geographies. The survey examined the extent to which employees outside IT were involved in customizing and building analytics or technology solutions, the types of activities they performed, the teams and structures they worked in and the types of support they received. Twenty-nine percent of the total sample were employees of midsize enterprises.

2. 2020 Gartner Digital Friction Survey. We surveyed almost 5,000 employees — across functions, levels, industries and geographies — to assess the analytics and technology activities in their jobs and the reasons for performing those activities.

3. 2021 Gartner CIO Planning Survey. It was administered between November and December 2020 among 184 CIOs in North America, EMEA and APAC across industries, functions and company sizes. Eighty-eight CIOs were from midsize enterprises. Respondents were recruited via an external online panel and the Research Circle — a Gartner-managed panel of senior IT leaders. The survey aimed to provide peer-level metrics related to IT talent planning. The survey also assessed how CIOs’ talent plans for 2021 have shaped up as businesses responded to longer-term trends that may have been accelerated by the COVID-19 pandemic and the technology production work that occurs outside IT.

Document Revision History

Midsize Enterprise CIOs Carefully Embrace Business Technologists - 2 June 2021
Recommended by the Author

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Democratize and Distribute Technology Work Across the Entire Enterprise to Accelerate Digital Business
An Update on CIO Talent Plans for 2021
Case Study: Enabling Distributed Digital Decision Making (Glenmede)
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