



The 12 biggest issues IT faces today

Economic uncertainty, the need to continually drive business value, and shifting ways of working and leveraging IT continue to reshape the CIO agenda as priorities shift mid-year.

The list of expectations on CIOs continues to lengthen, as they face pressure to seize on new technologies and drive the organization forward while simultaneously improving efficiency, dealing with staffing challenges, and facing a tech skills gap.

Granted, each CIO will have a unique list of priorities and challenges based on enterprise objectives and its industry vertical. But the following 12 issues are ones that CIOs commonly find themselves contending with today.

1. Hardening cybersecurity

Most CIOs not only see cybersecurity as one of their top issues today, a majority name it as their No. 1 concern.

Consider the findings from the 2023 Insight Intelligent Technology Report, an IDC InfoBrief. The survey found that cybersecurity is one of the top challenges facing organizations, with 56% of respondents saying so.

Meanwhile, Lenovo's Global Study of CIOs showed that 66% of CIOs listed cybersecurity/ransomware and 66% listed data privacy/security as top challenges.

"As technology evolves, hackers adjust their methods to new norms, making security threats a constant concern that requires IT leaders and their teams to be vigilant around the clock," says Jeremy Rafuse, vice president of IT and head of digital workplace at software company GoTo.

2. Operationalizing artificial intelligence

Harnessing the power of AI — and particularly generative AI — is also dominating the CIO's agenda, according to multiple sources.

"The No. 1 question these days is, 'How do we leverage generative AI?'" says Thomas Phelps, vice president of corporate strategy and CIO of Laserfiche. "It's being brought up by the executive staff, the board, at trade shows, and in the media; you can't walk anywhere without hearing about generative AI."

Phelps and other tech execs say they're focusing on how to use AI throughout their organizations to not only be more effective and efficient but to be more innovative and transformative, too. But they're additionally tasked with doing so in a secure and ethical manner, necessitating the development of new strategies, practices, and governance policies that for many are still very much in the works.

3. Coping with economic pressures, uncertainty

Although the majority of CIOs have seen their IT budgets increase, they also say they're feeling the pinch of inflation because that extra money isn't covering their higher costs.

For example, the CIO Pulse: 2023 Budgets and Priorities survey from SoftwareOne reports that 93% of the 600 IT leaders it surveyed said their budgets are up, yet 83% also say that they will have to achieve more with less.

That has CIOs looking at how they can drive more efficiency both in their own IT departments as well as throughout their organizations.

In this age of economic uncertainty, there are a lot of questions about whether we are as efficient as we can be and whether we really understand our costs," says Joseph Bruhin, CIO of Breakthru Beverage Group.

Barry Brunsman, a principal at professional services firm KPMG and leader of its Global CIO Center of Excellence, says CIOs are walking a tightrope here: They're focusing on delivering efficiencies so their organizations are prepared if national economies tip into recession (the subject of ongoing speculation that has yet to happen in most places) but at the same time they don't want to scale back on initiatives that could better position their organizations if economies stay steady or strengthen.

"There's kind of a paralysis around what CIOs are going to do," he says.

4. Modernizing at speed

The ever-increasing pace of technology change also has CIOs' full attention.

Joel Schwalbe, CIO of biotech company Transnetyx, says he's focused on continuously reducing technical debt and modernizing his company's tech stack so his IT team can minimize the resources needed for maintaining the environment and instead maximize the time and energy spent on supporting business objectives.

It's a constant challenge, Schwalbe says.

"It's tricky, because as technology continues to evolve, you want to make sure you place your bets in the right area," he says, adding that the goal is to stay on top of modernization and transformation efforts so "you don't get to the point where tech debt is a problem."

Lenovo's Global Study of CIOs gives some insight into this work. It found that 61% of respondents believe that "their business would feel an impact in no more than a few weeks if they halted spending on digital transformation initiatives."

Moreover, 57% said they'd replace half or more of their company's current technology if given the chance to start from scratch and 25% said they'd replace most or all of it.

5. Innovating meaningfully

Of course, as CIOs know, that modernization effort can't just be for the sake of getting new technologies. It must drive business objectives and ultimately transformation.

That's why, Phelps says, he and other CIOs continue to build "an ongoing culture of innovation" within their IT departments and their organizations as a whole.

CIOs are well-positioned to take on the task, Phelps says, because they work across all the functional areas of the enterprise and they are among the best equipped to propose and deliver innovative digital services.

“Everything is now digital, and CIOs have to shape that narrative. That has elevated the role of CIO to be one of a digital leader who can plug into innovative initiatives,” Phelps adds.

Research confirms the emphasis on IT as innovator: In the May 2023 Technology Pulse Poll from professional services firm EY, 94% of surveyed tech executives said that “company-wide innovation will help them come out of the current economic downturn a stronger company than before”; 94% said their company plans to increase investments in IT or emerging technologies over the next year; and 81% said their company plans to make an innovation-related acquisition in the next six months.

6. Ensuring IT's value proposition

Just as innovation must bring tangible returns to the enterprise, so too are CIOs expected to work with their business colleagues to calculate the value proposition of tech initiatives.

As Bruhin explains, CIOs today must have — and instill in their partners who come requesting new technologies — a “benefits realization mentality.”

“There’s a focus on the value it’s going to generate for the organization,” he adds.

7. Driving data insights

Speaking of value, CIOs are also looking at how to maximize all the data-related investments they’ve made in recent years.

CIO’s 2023 State of the CIO survey found that 34% of IT leaders list leveraging data as a major tech initiative, putting it second on the list of priorities — just behind security and risk management.

And EY’s Technology Pulse Poll found that 62% of surveyed tech execs have prioritized big data and analytics investments.

But where past years’ investments focused on building solid data infrastructure, CIOs are now spending on technologies and training to help people throughout their organizations use data.

“We’re seeing a shift in spending to technologies that drive the democratization of data and analytics — and we are expecting that spend will dramatically increase,” Brunsman says, adding that, although many

organizations have data specialists generating insights from the vast troves of data they've accumulated, they now want to get to a place where everyone in their organization can get value out of data.

8. Transforming to meet regulatory requirements

CIOs are also still working with their executive peers to manage their data, says Ray Velez, global CTO with the digital consultancy Publicis Sapient.

Granted, many CIOs have been working with their chief data officers, chief marketing officers and other C-suite leaders on this topic for years. But, as Velez points out, the rules and regulations around data evolve.

As a result, Velez says he sees “a lot of focus on modernizing the customer data stack” and adopting emerging technologies that allow organizations to meet regulatory requirements such as offering a customer opt-out capability while still enabling organizations to access and use the data needed to deliver personalized customer service and insights to decision-makers.

“CIOs need to be able to supply things like consent management and work with others to create and transform how customer data is used, stored and the communication of the value proposition,” Velez adds.

9. Democratizing tech development

CIOs are not only putting data into the hands of workers throughout their organizations; they're increasingly putting software development tools there, too.

Research firm IDC expects sales of low-code/no-code platforms to grow at a rapid clip — 13.9% annually — through 2026.

Jamie Smith, CIO at the University of Phoenix, believes enabling non-IT workers to create some of their own capabilities is a “force multiplier” that benefits the entire organization by enabling workers closest to business processes and customers to create the digital experiences they want and need to get their work done.

10. Acquiring and retaining talent

Global business consulting firm Protiviti surveyed 1,304 C-level executives and directors to understand the top risks they face. The top of their list? The ability to attract and retain top talent in a tightening labor market, which they see as limiting their ability to achieve operational targets.

Although many functional leaders experience challenges finding and keeping talent, CIOs are among the most taxed in this regard.

"The global talent shortage has burdened the job market, and researchers expect this issue to worsen, with 85 million jobs forecasted to be unfilled by 2030 due to a lack of skilled workers," Rafuse says. "With tech advancement accelerating by the day, it's possible the problem gets worse before it gets better. IT departments need to be able to keep up with constant updates, new operating systems, and emerging threats, or understaffed teams risk falling behind."

He continues: "With so much competition for top talent and laid-off workers from Big Tech firms, companies need to be creative in how they set themselves apart. CIOs and IT leaders should also constantly explore methods to invest in the internal upskilling of their current staff in order to attract and maintain talent."

11. Preparing IT teams for the future

CIOs have to think not only about their teams today, but their teams of tomorrow, too.

IT workers must keep pace with evolving technologies to ensure they can deliver and support the tools and capabilities their organizations will need to be successful. Moreover, technologists want to learn new skills, with multiple studies showing that they'll switch jobs if they feel like they're stagnating in their current role. (In one recent survey, 47% of responding tech workers said they're considering leaving their current job to grow their skills.)

"Skilled IT labor is going to continue to be difficult to find in the future, so CIOs more than ever are going to have to look at opportunities for their staff to upskill," says Matt Deneroff, vice president of technology talent solutions at staffing firm Robert Half.

12. Creating a hybrid work environment that works for everyone

CIOs say they themselves also must learn to work in new ways as the world shifts, particularly when it comes to supporting a hybrid workforce across their organization as well as leading their own teams in this new workplace model.

"Equipping employees with the tools and support they need to do their jobs, no matter where they are, needs to be a top priority for IT teams," Rafuse says.

But at the same time Rafuse says CIOs, himself included, should consider what that means for IT staffers.

"[The] IT manager must balance this flexibility with a good life/work balance. Just because IT teams can always be on, doesn't mean they should if you want to keep good talent around for the long term," he says, noting that "businesses should strive for quality over quantity by streamlining the number of technologies and software they are using thus reducing the burden on IT. This will create a more positive and functional virtual working environment for employees, while reducing cross-department friction and IT team burnout."