

Skills shortages are among the toughest challenges that organizations face now. To stay competitive, enterprises must refuel efforts to attract, train, and retain the best IT talent.

Skills Forward: Staying Competitive Amid the Worsening IT Talent Shortage

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Introduction

Shortages have long challenged enterprises and the CIOs who keep them humming. But now, thanks to the ever-accelerating pace of technology, the IT skills shortage is more serious than ever. And it is fast becoming worse.

Consider the fact that, this year, two-thirds of global enterprises saw revenue, quality, and competitiveness decline as a result of the skills shortage. Most reported declines in revenue of up to 20%. By 2025, IDC predicts that more than 90% of enterprises will be impacted, costing \$6.5 trillion in product delays, quality issues, customer satisfaction, and missed revenue goals.

Further complicating the coming storm is the transforming nature of work itself. Now that hybrid work is here to stay, wherever-whenever-whomever training is a strategic imperative. Hybrid work gives organizations access to wider, more diverse talent sources, but organizations must also find ways to deliver consistent training experiences that are at once educational, engaging, and evocative. This paper discusses the scope of the worsening IT skills shortage and the actions that enterprises might take to stay competitive.

AT A GLANCE

KEY STAT

By 2025, more than 90% of organizations worldwide will experience negative impacts of the IT skills shortage, costing \$6.5 trillion in product delays, reduced customer satisfaction, loss of competitiveness, and missed revenue goals.

WHAT'S IMPORTANT

Compounding IT skills challenges, artificial intelligence (AI) and machine learning (ML) roles will be among those hardest to fill this year and in the foreseeable future.

Situation Overview

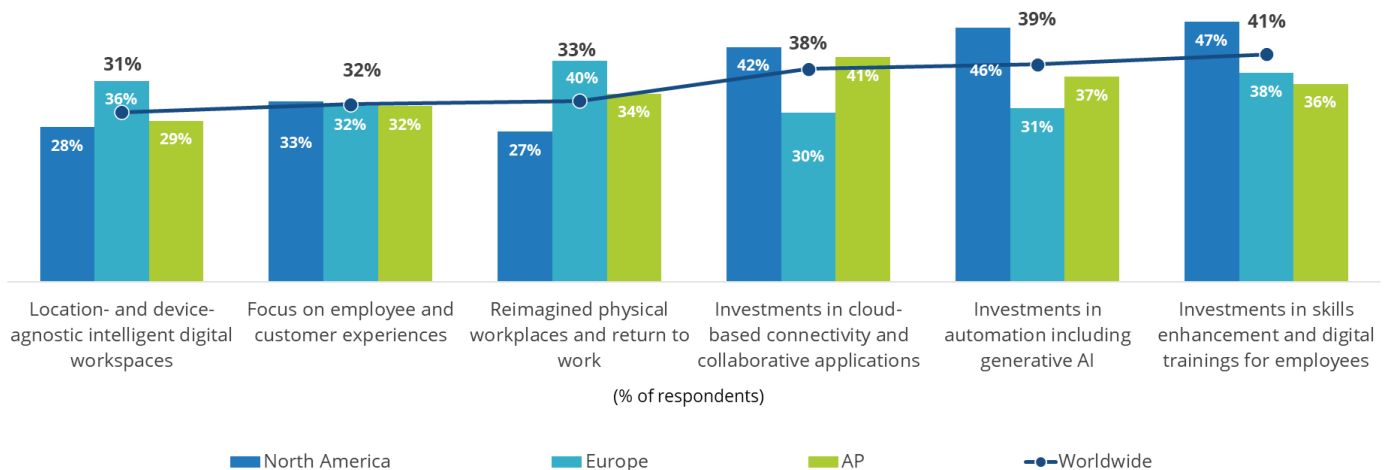
The IT industry is one of the fastest-growing sectors in the world, with constant developments in emerging technologies. Across all sectors, technology is critical to every organization's ability to compete. After all, every company in every sector these days delivers value to customers and partners via digital means. Such constant tech change requires a continuous and substantial investment in training and development.

However, the skills, roles, and technologies that power organizations are moving targets. To stay competitive, IT leaders must not only attract, hire, train, and retain professionals with the right skills but also keep staffers up to date as technologies and the skills required to use them morph and change. All along, they need to constantly be on the alert for new roles and skills that support new technologies in the future.

Organizations with the right people and skills in place are fleetier and more resilient. That agility gives them the wherewithal to leverage the tech tools they need to identify and solve business problems. Not surprisingly, IDC research indicates that about two-fifths (41%) of global organizations say that investments in skills and digital training of employees will be their most enduring technology investment in 2023 and 2024 (see Figure 1), even outpacing pressing investments in generative AI solutions such as OpenAI's ChatGPT and Google's Bard.

FIGURE 1: *Enduring Work Practices and Technology Investments*

Q In the face of current market disruptions (economy, skills, climate change, etc.), which of these work practices and technology investments are most likely to endure in 2023 and 2024?



n= 1,014 (North America: 374; Europe: 220; and AP: 420)

Source: IDC's Future Enterprise Resiliency and Spending Survey, Wave 5, June 2023

The following are related observations from recent IDC research:

- » In June 2023, nearly one-quarter (24%) of leaders from global organizations said that staff and labor shortages are preventing effective use of technology. This was one of their top concerns related to their organizations' technology strategies and budgets (source: IDC's *Future Enterprise Resiliency and Spending Survey, Wave 5*, June 2023; n = 1,014). They have good reason to worry, as over 81% of IT executives surveyed in 2022 told IDC that they were experiencing IT skills–related digital transformation delays of 3–10 months (source: IDC's *Global IT Skills Survey*, November 2022).
- » AI and ML roles are among those hardest to fill in 2023 (source: IDC's *Future Enterprise Resiliency and Spending Survey, Wave 5*, June 2023; n = 1,014). Other difficult roles to fill, according to IDC's 2022 *Global IT Skills Survey*, include positions in cybersecurity, cloud development, and ITSM.
- » IT leaders report to IDC that it is taking, on average, three months longer to fill vacant IT positions in 2023 than it did in 2022 (source: IDC's *Global IT Skills Survey*, November 2022). Given that it is easier to train from within the organization than it is to hire from outside, enterprises are increasingly turning to upskilling strategies. In June 2023, nearly one-third (31%) of global organizations said that they are increasing investments in upskilling current employees to offset IT skills shortages.
- » Overwhelmingly, for the first time, IT professionals told IDC in 2022 that the presence of a clear career path means more career satisfaction. A robust IT skilling initiative that ties business goals to employee career goals is, therefore, a powerful way to retain and grow employees.

A Robust IT Skilling Initiative

The benefits of a robust IT skilling initiative are myriad. It ensures that organizations remain competitive and ready to take advantage of new technological opportunities as they present themselves. A skilled workforce fosters enterprise innovation. And it increases productivity and efficiency for leaders, managers, and professionals alike. In fact, in IDC's June 2023 *Future Enterprise Resiliency and Spending Survey, Wave 5*, 41% of organizations told IDC that IT training and development is the most important investment for improving employee experience and productivity across their workforces.

Other benefits include faster mastery of skills and new technologies. According to IDC research, teams that get at least 30 hours of training per employee are able to hit up to 90% of AI/ML, hybrid multicloud, and ITSM project success goals.

Plus, a strong IT training and development initiative gives employees an important superpower: enthusiasm. When employees understand the role that their work plays in their own success and that of the company, they are more fired up to learn more. Understanding the tools that success depends on is powerful. And it is critical for organizations to provide a culture of learning that pervades every level of the organization.

The bottom line is that an organization with the right people and skills in place will be able to leverage powerful tools to efficiently identify and solve business problems and will thus have greater organizational agility. Helping employees reach full productivity levels faster saves time and money. Moreover, continuous investment in employee learning is a sound business strategy. Companies that do so enjoy greater retention and less voluntary turnover.

Essential Guidance

Organizations that do not invest in robust IT skilling initiatives do so at their peril. In a 2022 survey, IT leaders said that skills shortages lead to delays in product releases (45%), difficulties in meeting quality objectives (44%), difficulties in reaching revenue growth goals (40%), loss of business to competitors (39%), and loss of revenue overall (38%). Organizations should take the following steps now to get powerful IT skilling initiatives up and running:

- » **Get executive buy-in.** Communicate the value of skilling, training, and certifications to leadership. Organizations need more than just lip service. Rather, organizations must buy into and invest in the people, time, and money needed to make a successful IT skilling program.
- » **Conduct a skills inventory.** Use resources to assess the state of skills throughout the organization. Try to figure out what the delta is between the skills needed and the skills that exist across departments and among all employees. Then project that delta six months, one year, and even two years into the future.
- » **Mix it up.** In the past few years, IT course options have dramatically improved. Organizations can employ a mix of short- and long-form courses in an array of modalities, from self-paced video and virtually led courses to peer learning to podcasts to experiential labs to sandboxes to games to journeys to challenges.
- » **Upskill and reskill whenever possible.** Hiring is hard; it is also expensive. The best IT skilling initiatives look to nurture existing staff with serious reskilling and upskilling programs. Don't overlook the value of homegrown talent.
- » **Leverage generative AI tools to improve training.** In a June 2023 survey, 23% of IT leaders told IDC that they expect to utilize generative AI to operationalize and personalize IT training for reskilling and upskilling. They are at the vanguard. Join them.

Conclusion

To stay competitive amid the worsening skills crunch, organizations must act immediately. They need well-resourced initiatives to attract, cultivate, and retain the best talent. They must figure out how best to skill and reskill their current staff. Along the way, they need to carefully watch the changing landscape of skills in the organization. They must not only assess the skills gaps they have now but also predict and prepare for the skills and personnel they might need one, two, and even three years down the road.

Moreover, organizations must be able to offer workers engaging learning experiences, regardless of where and when the employee works. The content might come in the form of self-paced videos or podcasts or via more traditional (virtual or physical) classrooms. But the material must be relevant with the right depth and length, and it must be reinforced in the flow of work and/or through hands-on labs, sandboxes, quests, and even games.

In short, organizations need to invent — and continually reinvent — a corporate culture of continuous learning, one in which employees' career paths, goals, and skills are aligned with the business goals of the organization. That's where the magic happens.

In these rapidly changing times, technology is critical to business success. Greater team skills overall will lead to more resilience in the face of changing conditions and a greater value realization for technology investments.

About the Analysts



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As a research director at IDC, Gina Smith, Ph.D., produces research in the IT education and skills sector. A former technology journalist and author, Gina is the New York Times bestselling author of Apple Cofounder Steve Wozniak's biography *iWoz: How I Invented the Personal Computer and Had Fun Doing It* (W.W. Norton & Company, 2007).



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