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TECH TALENT
TRANSFORMATION

▶ ▶▶ HUMAN CAPITAL

# Navigating the tech talent churn:
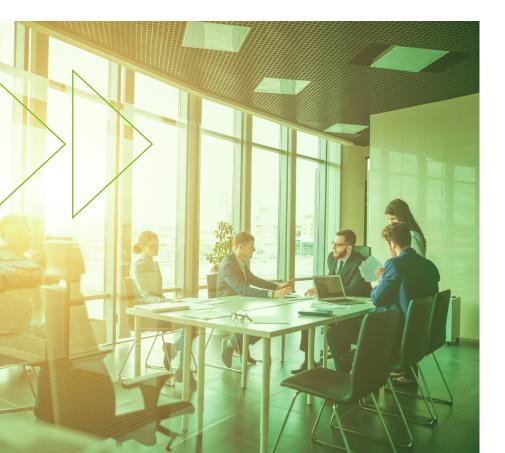# A strategic imperative in the age of AI

**June 2025**

According to World Economic Forum's Future of Jobs Report 2025, 170 million new jobs are expected to be created by 2030.[1] While demand for specialized technical skills remains consistently high, widespread reports about layoffs in the tech industry continue to churn the labor market. The surge in hiring during the pandemic created an increased demand for tech talent, which is now coming back to baselines.[2] At the same time, firms are becoming more efficient due to artificial intelligence (AI) productivity accelerators, resulting in evolving roles and workforce changes.

The demand for tech talent persists as firms prioritize technology investments for growth. Predictions suggest that demand will eventually surpass efficiency gains,[3] potentially rendering these gains redundant if progress on technical road maps is insufficient. This raises the question: Will we ever reach an inflection point where organizations have both sufficient technical talent to meet the demand for completing the work on the road map and sufficient skills to meet the latest evolution in technology?

As organizations seek to integrate an ever-evolving list of technical products and services, they may struggle finding and activating the technical talent needed to achieve their goals. Individuals with expertise in critical areas like security, machine learning, and software architecture are especially difficult to find and retain.[4] A recent Harvard Business Review study found that the half-life of some tech skills is as low as 2.5 years, and advances in AI may accelerate this trend.[5]

This situation presents a unique challenge for organizations. On the one hand, they need to manage costs and adjust to changing economic conditions. On the other, they must secure the specialized talent necessary to drive innovation and remain competitive in a technology-driven world. This delicate balancing act necessitates a strategic approach to talent management that goes beyond traditional methods and presents a new and unique challenge for organizations.  While it would be ideal to view this dual pull as temporary, it is likely that these challenges will continue to evolve over time.

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# The impact of AI on the tech talent landscape

AI is not merely a technological advancement; it is a disruptive and transformative force reshaping the very nature of work. We're seeing massive efficiencies through Generative AI (GenAI), and agentic AI promises further advancements. AI-driven automation is changing the demand for specific technical skills. While certain roles are being displaced by AI, particularly those involving repetitive or rule-based tasks, new opportunities are emerging in AI development, implementation and maintenance.[6]

For example, job postings for roles like database developer, user experience/user interface (UX/UI) designer, and web designer/developer have decreased in recent years, while postings for statisticians, technical analysts and data scientists have significantly increased.[7] This shift highlights the need for individuals to continuously upskill and adapt to the changing demands of the tech job market.

Furthermore, the emergence of low-code/no-code (LCNC) AI tools is democratizing IT by enabling people with limited coding experience to develop applications. This has the potential to broaden the pool of technical talent, allowing organizations to access previously untapped resources.[8] However, it is important to note that LCNC tools do not eliminate the need for deep technical skills. Expertise in areas like system architecture, security and data governance remains essential to help ensure the robust and responsible deployment of AI solutions.[9]

**Tech job postings that have increased ▲ and decreased ▼ in the last three years:**

▲ 21%
**Statistician**

▼ 13%
**Database developer**

▲ 15%
**Technical analyst**

▼ 12%
**UX/UI designer/developer**

▲ 12%
**Data scientist**

▼ 11%
**Software engineer (web)**

▲ 7%
**Information security manager**

▼ 9%
**Web developer**

▲ 7%
**Software engineer (systems)**

▼ 8%
**Digital designer**

Source: Tech job postings in the United States, sourced from Deloitte's analysis of publicly-available labor market data.

# Building a resilient tech talent strategy

To effectively navigate the complexities of the tech talent landscape, organizations could adopt a proactive and holistic approach to talent management. Considering current trends in traditional technical talent strategies could pivot in the following ways:

## ▶▶ *Embrace continuous workforce planning*

The rapid pace of technological advancements underscores the importance of adopting a continuous approach to workforce planning.[10] Organizations that have already moved to quarterly assessments of their talent needs can focus on anticipating future skill requirements and refining their talent acquisition and development strategies accordingly. Greater labor availability suggests this logic is flawed, but the skill sets in demand are shifting in line with technical advancements. AI is now accelerating at a pace that exceeds Moore's law (the law that predicted the number of transistors on an integrated circuit will double every two years and therefore create more powerful, yet cost-effective computing resources). For instance, studies at Deloitte have shown that technical roles such as product managers and engineers are achieving efficiency gains of 40%–70% in as little as six to 12 months.[11] These improvements are modest compared to what the future may hold in the next two, three, or even five years.

There should be greater focus on identifying critical and evolving roles, while forecasting talent gaps relative to evolving business objectives and productivity goals. Addressing these gaps effectively is essential—be it through upskilling, reskilling or external hiring—especially during times of economic uncertainty.[12] Continuous workforce planning can help ensure businesses stay agile and prepared to meet the challenges of a rapidly changing technological landscape.

## ▶▶ *Foster a culture of continuous learning*

To compensate for the decreasing half-life of technical skills, leading organizations are prioritizing continuous learning and development. By providing employees with access to training, workshops and mentorship programs, an organization can help its workforce stay ahead of the technological curve and adapt to evolving job roles.[13] This approach can not only enhance the organization's talent pool, but it can also help build employee engagement and retention.

Technical roles now require a broader and deeper range of skills, which can increase capabilities and reduce costs. Leveraging team talent for faster productivity, such as through DevOps, exemplifies this. For the cost-conscious, investing in reskilling and upskilling can be a more sustainable long-term strategy.

## ▶▶ *Prioritize human capabilities*

While technical skills are undoubtedly essential, human capabilities are crucial for organizational success. Skills like leadership, problem-solving, creativity and communication are increasingly valued in the tech industry, particularly as AI takes on more routine tasks.[14] Fostering a culture that values these skills and providing opportunities for employees to develop them will be key to drive long-term organizational success. Technical leads who can effectively coach, mentor and develop their teams could be well positioned for leadership succession. Additionally, the ability to communicate effectively, bridging technical and business language, is vital for aligning technology goals with C-suite priorities.

## ▶▶ *Leverage talent ecosystems*

To access specialized skills and address fluctuating talent needs, alternative talent models, such as gig work, talent marketplaces and external collaboration can be helpful. These models allow organizations to tap into a broader talent pool, potentially reduce hiring costs and increase workforce agility. Additionally, fostering internal communities of practice can build trust among peer groups, enhance organizational loyalty and improve retention, reducing the cost of maintaining a skilled workforce.[15]

# Conclusion

The rapid advancement of AI can present both challenges and opportunities for organizations. By embracing a strategic, agile approach to talent management, organizations can navigate this landscape and position themselves for long-term success.

**This requires:**

▸▸ *A commitment to continuous workforce planning, promoting a culture of continuous learning*

▸▸ *Prioritizing human capabilities to create business-savvy, socially adept technical leaders*

▸▸ *Leveraging talent ecosystems to minimize skills gaps and maintain forward momentum*

Organizations that successfully adapt to these changing dynamics are better positioned to attract, retain and develop the technical talent they need to thrive in the age of AI.

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# Endnotes

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