Deloitte.

IT, Amplified

Al's Expanding Role in Enterprise Tech

Discover Deloitte's Tech Trends 2025!

Over the years, Deloitte's Tech Trends reports have highlighted IT's evolving role—from enabling digital transformation to driving AI-powered reinvention. Previous editions explored cloud modernization, intelligent automation, and the shift toward autonomous IT operations, paving the way for this year's focus on AI's deep integration into IT functions. Our "IT, Amplified" chapter in 2025 builds on these foundations, showing how AI is not just optimizing IT but expanding its influence and making it a central force in shaping the AI-first enterprise.

The role of IT is undergoing a profound shift as artificial intelligence (AI) transforms it from a support function into a central driver of innovation and business strategy. Deloitte highlights how AI is redefining IT across five key dimensions: engineering, talent, financial operations (FinOps), infrastructure, and cybersecurity, enabling organizations to better navigate the complexities of the AI era.

Al is revolutionizing software engineering by automating coding, testing, and debugging. This reduces inefficiencies and allows developers to focus on innovation and design. Companies like Google report that 25% of their new code is Al-generated, significantly accelerating development cycles. Engineering teams are increasingly becoming orchestrators of functionality rather than coders, using Al tools to align technical outputs with business outcomes.

"Al can help make the work of engineering teams more efficient, allowing for the reallocation of capacity, thereby unleashing creativity and creating more value from developers", says András Szathmáry, Director at Deloitte Technology Strategy & Transformation CE.

Talent management is another critical area. The rapid adoption of AI has intensified demand for professionals skilled in machine learning, security, and software architecture, creating hiring gaps. AI is stepping in to fill this void, not only by automating routine tasks but also by supporting upskilling efforts. For example, AI-generated personalized learning paths and virtual tutors are enabling workers to quickly adapt to emerging technologies. Organizations like Bayer are already leveraging generative AI to create e-learning materials, streamlining the reskilling process.

On the financial front, applying AI to FinOps can help justify investments and manage the runaway costs of the cloud era. With researchers predicting significant growth in IT spending over the next few years, AI-powered financial tools can provide real-time cost analysis and resource optimization to help organizations effectively manage spending as they scale their operations. These innovations ensure that increasing resource demands do not lead to unsustainable financial practices.

In infrastructure, AI is enabling "autonomic" systems, which function similarly to the human body's autonomic nervous system. These systems self-monitor, detect anomalies, and take corrective action without human intervention. Predictive maintenance and automated resource allocation reduce downtime and improve efficiency. Companies like eBay are already leveraging generative AI to enhance their IT infrastructure, underscoring AI's potential to transform operations.

However, as AI enhances IT capabilities, it also introduces new cybersecurity risks. Generative AI expands attack surfaces, enabling threats such as deepfakes and prompt injection attacks. In response, organizations are turning to AI-driven cybersecurity tools for real-time threat detection and automated incident responses. Blockchain-based solutions for verifying data authenticity are also gaining traction, ensuring robust security in increasingly digitized ecosystems.

The evolving IT landscape requires visionary leadership. CIOs must now align IT priorities with broader business objectives, fostering collaboration and driving ethical AI adoption. According to Deloitte, over 60% of CIOs now report directly to their CEOs, reflecting IT's growing strategic importance. Leaders must focus on developing guiding principles for AI integration while fostering a culture of innovation and adaptability.

As AI becomes embedded in every facet of the enterprise, IT is poised to transition from a cost center to a competitive differentiator, while its role may shift from building and maintaining to orchestrating and innovating. By embracing this transformation, IT leaders can unlock unprecedented opportunities for efficiency, agility, and growth, positioning their organizations for success in the AI-driven future.

"It's becoming even more important for tech leaders to stay on top of trends, carefully choose what to focus on, and adopt best practices – and it doesn't seem to be slowing down in the coming decades", András Szathmáry adds.

Explore Deloitte's 16th annual Tech Trends report and discover the latest trends: <u>Tech Trends 2025 | Deloitte</u> Insights

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities (collectively, the "Deloitte organization"). DTTL (also referred to as "Deloitte Global") and each of its member firms and related entities are legally separate and independent entities, which cannot obligate or bind each other in respect of third parties. DTTL and each DTTL member firm and related entity is liable only for its own acts and omissions, and not those of each other. DTTL does not provide services to clients. Please see www. deloitte.com/aboutto learn more.

This communication contains general information only, and none of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms or their related entities (collectively, the "Deloitte organization") is, by means of this communication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser. No representations, warranties or undertakings (express or implied) are given as to the accuracy or completeness of the information in this communication, and none of DTTL, its member firms, related entities, employees or agents shall be liable or responsible for any loss or damage whatsoever arising directly or indirectly in connection with any person relying on this communication. DTL and each of its member firms, and their related entities, are legally separate and independent entities.