

Tech Trends 2025 | Deloitte Insights

Peering through the lens of government

The technologies that enhance our organizations and our lives are more powerful and essential than ever before. Forward-thinking governments and organizations chart upcoming technological changes and look for ways to utilize them for the benefit of citizens, constituents, and employees alike.

This report provides a government-specific take on Deloitte's Tech Trends 2025 report, spotlighting the accelerating technology trends most likely to cause disruption in enterprise IT over the next 18-24 months. We explore which trends may be most relevant for governments and how ready governments are to take advantage of them.

Learn how governments can harness new opportunities in emerging technologies to transform their organizations.

Relevance and readiness scale:

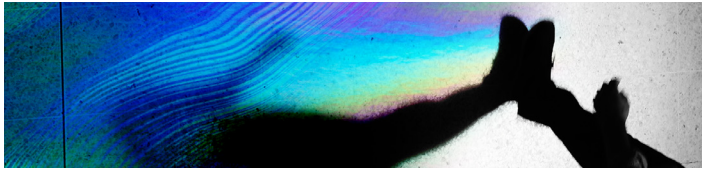
We looked at each trend and assigned a value from one (low) and five (high) based on the trend's relevance and readiness of government adoption.

READINESS:

How ready is the government to adopt the trend?

RELEVANCE:

How impactful would it be if the government adopted the trend?



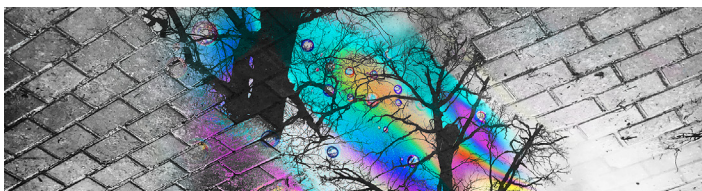
Spatial computing takes center stage

Exciting new use cases can reshape industries

Spatial computing continues to spark enterprise interest because of its ability to break down information silos and create more natural ways for government employees and the public to interact with information. We're already seeing enterprises find success with use cases like advanced simulations that allow organizations to test different scenarios to see how various conditions will impact their operations. With a stronger focus on effectively managing spatial data, organizations will drive more cutting-edge applications. In the coming years, advancements in AI could lead to seamless spatial computing experiences and improved interoperability, ultimately enabling AI agents to anticipate and proactively meet users' needs.

Trends in action

Being able to interact with information in a spatial context creates many possible opportunities for governments, from urban planning to emergency response to environment monitoring and much more. Moving beyond simple data visualizations, organizations can create immersive experiences to explore and visualize data in new ways. Urban planners could visualize the changes to city planning in near real time. The National Park Service could create immersive educational experiences of the parks, blending history, science, and wonder. Leaders should prioritize high-quality experiences over just mediocre ones.



What's next for AI?

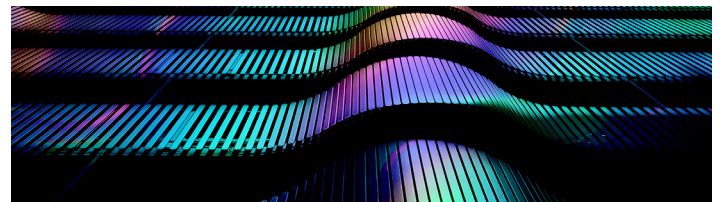
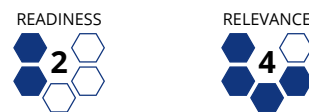
Enterprises move beyond a one-size-fits-all approach

To take advantage of the burgeoning excitement around Generative AI, many organizations have already adopted large language models (LLMs)—the best option for many use cases. But some are already looking ahead. Despite their general applicability, LLMs may not be the most efficient choice for all types of organizational needs. Enterprises are now considering small language models (SLMs) and

open-source options for the ability to train such models on smaller, more accurate data sets. Together with multimodal models and AI-based simulations, these new types of AI are building a future where enterprises can find the right type of AI for each task. This includes AI that can not only answer questions, but also complete burdensome administrative tasks. In the years to come, a focus on execution may usher in a new era of "agentic AI," arming government employees with copilots capable of boosting efficiency and delivering enhanced impact on the lives of constituents.

Trends in action

Given the rate of advancement in Generative AI technologies, government leaders should continually evaluate where employees and constituents gain the most benefits from increased adoption. They should balance the implications of cost against response quality and speed against risk. And, as we see the potential of agentic AI, in which agents can act on behalf of humans, evaluating the implications on the skills of the workforce is even more important. Today, AI can help social workers scan volumes of reports, help speed hiring processes, and help perform routine constituent services while keeping a human in the loop. The value proposition for AI remains robust, but government leaders should be strategic to maximize ROI.



Hardware is eating the world

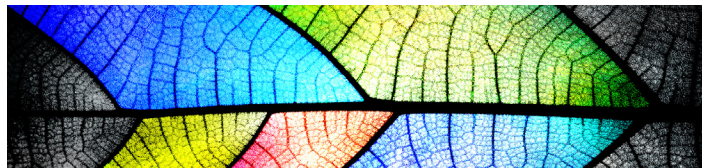
The promise of AI depends on more than software

After years of software dominance, hardware is reclaiming the spotlight. As AI demands specialized computing resources, companies are turning to advanced chips to power AI workloads. In addition, personal computers embedded with AI chips are poised to supercharge knowledge workers by providing access to offline AI models while "future-proofing" technology infrastructure, reducing cloud computing costs, and enhancing data privacy. Although AI's increased energy demands pose sustainability challenges, advancements in energy sources and efficiency are making AI hardware more accessible. Looking forward, AI's continued integration into devices could revolutionize the Internet of Things and robotics, transforming industries like health care through smarter, more autonomous devices.

Trends in action

As AI and advanced computing capabilities grow in capability and

scale to edge devices, government leaders should strategically consider when, and how, to deploy specialized hardware to support systems, data centers, and end users. The cost/performance ratio of new technologies needs to be carefully evaluated, and leaders may find that taking advantage of less widely available capabilities requires workloads to run in cloud. In either case, the decisions will be costly. Deploying AI-enabled hardware to remote areas like research stations, forestry operations, or emergency response zones may provide essential local computing power where internet connectivity is unreliable. Through careful analysis and decision-making, government agencies can enhance hardware investments to support mission-critical functions.

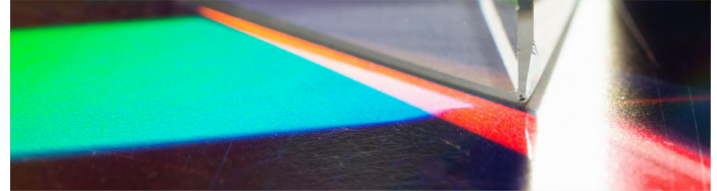


IT, amplified AI elevates the reach (and remit) of the tech function

After years of progressing toward lean IT and everything-as-a-service offerings, AI is sparking a shift away from virtualization and austere budgets. Long viewed as the lighthouse of digital transformation throughout the enterprise, the IT function is now taking on AI transformation. Because of Generative AI's applicability to writing code, testing software, and augmenting tech talent in general, forward-thinking technology leaders are using the current moment as a once-in-a-blue-moon opportunity to transform IT across five pillars: infrastructure, engineering, finance operations, talent, and innovation. As both traditional and Generative AI capabilities grow, every phase of tech delivery could see a shift from human in charge to human in the loop. Such a move could eventually return IT to a new form of lean IT, leveraging citizen developers and AI-driven automation.

Trends in action

The new trends in AI transformation allow government IT leaders the opportunity to "lead from the front." By incorporating AI tools into current operations, practicing "digital transformation" inside of IT itself, and fostering a culture of experimentation, technology leaders can seize the moment to reboot, streamline, and accelerate IT operations. New AI-augmented tools may empower nontechnical users to perform increasingly sophisticated tasks such as developing custom applications. By articulating a vision, fostering a technology-savvy culture, and communicating the opportunities and potential risks of AI, technology leaders can position to be enablers and critical partners to achieving their agencies' missions.



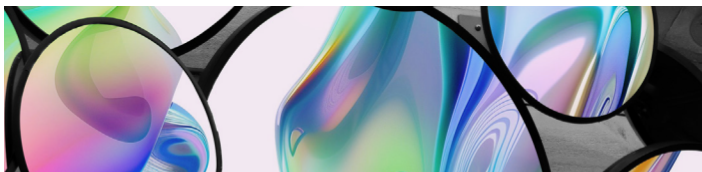
The new math Solving cryptography in an age of quantum

In their response to Y2K, organizations saw a looming risk and addressed it promptly. Today, IT faces a new challenge, and it will have to respond in a similarly proactive manner. Experts predict that quantum computers, which could mature within five to 20 years, will have significant implications for cybersecurity because of their ability to break existing encryption methods and digital signatures. This poses a risk to the integrity and authenticity of data and communications. Despite the uncertainty of the quantum computer timeline, inaction on post-quantum encryption is not an option. Emerging encryption standards offer a path to mitigation. Updating encryption practices is fairly straightforward—but it's a lengthy process, so organizations should act now to stay ahead of potential threats. And while they're at it, they can consider tackling broader issues surrounding cyber hygiene and cryptographic agility.

Trends in action

Future quantum computers could threaten the security of encrypted data and transactional integrity. Given the volume and nature of information stored and processed by government organizations, preparing for the transitions that will be required to better secure data and transactions is an imperative, not a nice to have. Agencies should assess their current posture, identify the sources of the most sensitive or vulnerable data, and use modernizations and transformation programs to upgrade their encryption and cybersecurity practices. Steps taken today will help ease the burden of steps that need to be taken in the future to address a constantly shifting threat landscape.





The intelligent core AI changes everything for the core

Core systems providers have invested heavily in AI, rebuilding their offerings and capabilities around an AI-fueled or AI-first model. The integration of AI into core enterprise systems represents a significant shift in how organizations operate and leverage technology for competitive advantage. This transformation is about automating routine tasks and fundamentally rethinking and redesigning processes to be more intelligent, efficient, and predictive. It requires careful planning due to integration complexity, strategic investment in technology and skills, and a robust governance framework to ensure smooth operations. But beware of the automation paradox: The more complexity is added to a system, the more vital human workers become. Adding AI to core systems may simplify the user experience, but it will make them more complex at an architectural level. Deep technical skills are still critical for managing AI in core systems.

Trends in action

Government agencies often find themselves with legacy systems built to serve the needs of yesteryear, but poorly suited for the changing, dynamic nature of today's constituent expectations. Using new tools, based on AI/machine learning and Generative AI, are increasingly enabling the possibility of "modernizing in place" so as to not disrupt critical operations. Today, AI can answer routine questions accurately and accelerate the processing of standardized forms, even if they contain large volumes of text. Investing in the technology—and the talent to manage it—is increasingly become a governmental imperative.



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Authors

For questions regarding GovTech Trends 2025, please contact:

SCOTT BUCHHOLZ

Government & Public Services CTO

Deloitte Consulting LLP

sbuchholz@deloitte.com

+1 571 814 7110

ⓧ @scott_buchholz



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