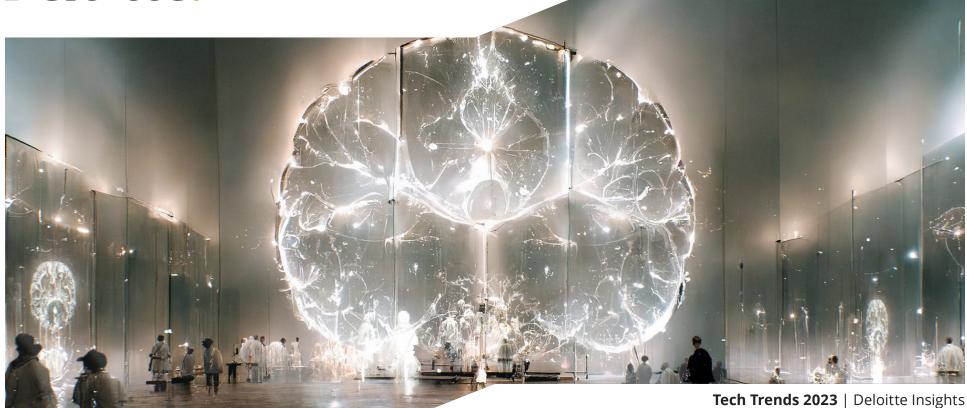
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Peering through the lens of government **Relevance:** readiness scale: How impactful would

Relevance and

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

it be if the government adopted the trend?

Readiness:

How ready is the government to adopt the trend?

The technologies that enhance our organizations and our lives are more powerful (and more essential) than ever before. Forward-thinking governments and organizations understand the technological forces that surround them and look for ways to harness them for the benefit of citizens and constituents alike.

This report provides a government-specific take on Deloitte's Tech Trends 2023 report, spotlighting the accelerating technology trends most likely to cause disruption 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.





For a generation, the connection to the digital world has been mediated through an ever-shrinking series of rectangular screens. Now, as technologists recognize that screens can't keep shrinking forever, the paradigm is shifting again, toward interfaces that take users through the glass and into immersive virtual experiences, including the digital world known as the metaverse. Over the next couple years, tangible, conversational, and virtual interfaces will likely continue to graduate from tech to toy to enterprise tool. While some companies build lucrative business models around the unique capabilities afforded by an "unlimited reality," others provide immersive environments for employees to streamline operations or collaborate and learn. As technology advances further over the next decade, organizations should be ready for reality to move online through expanded ways of interacting with mixed reality.

Trends in action

Governments can benefit by supporting both virtual and physical engagement for constituents as well as employees. For example, adding support for virtual office visits enables the most vulnerable constituents to more easily meet with government employees—a game changer for citizens with disabilities, time or transportation constraints, or any other obstacle to historical ways of interacting with government agencies. For employees, augmented and virtual reality (VR) offer new opportunities as well. VR can provide immersive training, helping inspectors, social workers, and law enforcement be more prepared to safely and effectively act and react in the physical world.



Opening up to Al: Learning to trust our Al colleagues

With AI tools increasingly standardized and commoditized, few businesses may realize true competitive gains from crafting a better algorithm. Instead, what will likely differentiate the truly AI-fueled enterprise from its competition will be how robustly it uses AI throughout its processes. The key element here, which has developed much more slowly than machine learning technology, is trust. As machines encroach on human-like tasks that go beyond basic number crunching and enter the realm of discernment and decision-making via AI, the business world is having to develop a new understanding of what it means to trust machines. Leading organizations are developing AI systems and inserting them into their processes with trust at the core, ensuring that all users understand how these tools work and feel they can rely on them.

Trends in action

Properly managed, Al can provide governments great advantages in terms of efficiency and effectiveness. When Al is used to support automation, it can make operations more efficient, but it is important to think through implementations carefully—improperly or naively configured, it can rapidly replicate poor behavior at scale. For effectiveness, Al can be viewed as a wise, experienced colleague. Consider, for example, Al being the gentle nudge to law enforcement or other employees to take a second look; being the tireless triager of trivial cases; and being the patient phone agent. Forgo perfect—shoot for merely helpful, unbiased Al assistants.













Above the clouds: Taming multicloud chaos

As the number of cloud platforms maintained by the typical enterprise proliferated, so too did operational complexity. With multiple platforms comes multiple security protocols, applications, databases, and governance rules. To simplify multicloud management, some enterprises are beginning to turn to a layer of abstraction and automation that sits above the burgeoning multicloud. Known alternately as metacloud or supercloud, this family of tools and techniques can help cut through the complexity of multicloud environments by providing access to common services such as storage and compute, Al, data, security, operations, governance, and application development and deployment. Metacloud offers a single pane of control for organizations feeling overwhelmed by multicloud complexity, allowing them to synchronize activities across their various cloud platforms.

Flexibility, the best ability: Reimagining the tech workforce

In the last year, many organizations have been engaged in a heated competition for a limited supply of technology talent. Yet, with technical skills becoming outdated every couple of years, hiring for current needs is not a winning long-term strategy. Rather than competing in scarcity, savvy leaders consider an abundance frame, wherein technology talent can be curated, created, and cultivated. Companies should be prepared to eschew IT orthodoxies and prize flexibility as the best ability. By building a skills-based organization, tapping into creative sources for finding talent, and providing a compelling talent experience, companies can meet their talent goals. In the longer term, organizations should plan to brush up on their humanities as AI technology advances enough to carry out many of the lower-order tasks that IT teams are burdened with today.

Trends in action

As governments move to the cloud, there's a natural explosion of services and uses. This organic growth sometimes means our propensity for operating in siloes finds its way into our cloud practices. Instead of continuing to manually manage everything, take a page from the cloud vendors themselves: automate complexity management. Use commercial off-the-shelf (COTS) tools to manage the details for security, provisioning, rights, and more across all your cloud vendors. Using metacloud tools to reduce complexity means freeing humans to do more mission-aligned activities to better serve constituents.

Trends in action

Governments become even more attractive employers when uncertainty hits. Seize the moment not just to recruit top talent but also to create pipelines to "non-traditional talent" for tomorrow. Whether it's skills-based programs, retraining, or beyond, governments can create a path to attract diverse, skilled, diligent workers today and into the future. Take advantage of the changes to also create an employee experience and culture that rewards individuals for their ability to adapt to change in order to support your organization today and in the future.













Blockchain-powered ecosystems are becoming key not only to developing and monetizing digital assets but also to creating digital trust. As organizations begin to understand blockchain's utility, they're realizing that building stakeholder trust could be one of its primary benefits. From everyday enterprise applications to blockchain-native business models, blockchain-enabled architectures and ecosystems disintermediate trust, placing it not in a single person or organization but distributing it across the community of users. Organizations may be able to cement their credibility by helping reinvent a more decentralized internet, Web3, in which a single, immutable version of the truth is based on public blockchains. In this world, digital natives are increasingly likely to demand higher-quality proof and higher-order truth. Digital ledger technologies and decentralized business models that achieve consensus through code, cryptography, and technology protocols are demonstrating that none of us is as trustworthy as all of us.

Trends in action

As blockchain adoption continues, governments are both users and regulators. As users, governments can use blockchain-powered solutions to automate and reengineer processes with other organizations inside and outside of government, with or without monetary exchange. As regulators, governments can provide policy and regulatory clarity to support national innovation. Stay focused on the promise: blockchain represents the opportunity to enable, reengineer, and automate transactions across and between organizations.



Connect & extend: Mainframe modernization hits its stride

Most businesses today feel that their legacy systems (like mainframes) are performing well on the types of workloads they were originally designed to do. The problem is that the business and technology environment has moved on, leaving business leaders expecting more functionality from their IT systems. Rather than rip and replace legacy core systems, enterprises are increasingly looking to bring them into the modern era by connecting and extending them to emerging technologies. Through tried-and-true approaches to legacy system modernization, businesses are leveraging things like mainframes—and their precious data—to drive digital transformation. Al-powered middleware solutions, advanced microservices applications, and refreshed user interfaces are giving organizations a powerful pairing that takes advantage of the trusted functionality of legacy systems and the expansive capabilities of emerging technologies.

Trends in action

Government's "legacy assets" have kept the mission running for decades and their internal logic keeps organizations humming. Consider using new technologies and techniques that allow for more progressive modernization, enabling incremental service improvements and dramatically reducing migration risk. Design your future operating model and tools, supporting the cloud, security, Al/ML, and more—then look at how to modernize progressively to take better advantage of emerging technologies going forward to support the mission more effectively and efficiently.









Widening the aperture: From infoTech to xTech

Historically, to enterprise audiences, "technology" has served as shorthand for information technology. But separate and distinct from enterprise IT, an extended set of technologies—or xTech—is on the horizon. Rooted in the formal, natural, and social sciences, these academic and research areas are brimming with patent and startup activity, technology maturity and advancements, academic and grant investments, and venture capital funding. And they're attracting the best and brightest talent. We anticipate six emerging technology disciplines to eventually rival IT in their impact on business innovation: space and aeronautical engineering; cellular and biomolecular engineering; brain and nervous system applications and interfaces; climate, sustainability, and the environment; autonomous and precision robotics; and power, energy, and battery technologies.

Trends in action

Governments use, develop, and regulate the many new technologies that are changing our world. Finding the right balance of seizing new opportunities while preserving safety has never been more challenging, or more important. Whether it's the future of space travel and space tech or the future of cells and biology, government must act to apply funding, policy, and more to make sure the future is better and brighter than today.

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