A CENTER FOR DIGITAL GOVERNMENT ISSUE BRIEF | WORKDAY

# Emerging Trends in State and Local Government IT for 2024

# Innovation and disruption have always been part of the government technology landscape. But the pace of change is escalating rapidly.

Analysts, former government officials and other thought leaders at the Center for Digital Government (CDG) constantly track the pulse of change in state and local government.

They have identified **five emerging trends** that will impact organizations in 2024. Preparing for these trends will help you harness innovation for the benefit of your employees and the constituents you serve.

# **Trend #1:** Getting Real on Artificial Intelligence

If AI is not on your roadmap for the year ahead, it should be. Constituents expect the personalization and convenience it offers. Internal teams rely on it to make data-based decisions, automate business processes and improve worker productivity. In addition, major cloud services providers make AI adoption easier by incorporating AI and lowcode/no-code development into their customer relationship management (CRM), enterprise resource planning (ERP) and workflow automation solutions.

Many government organizations have been reaping the benefits of AI, machine learning (ML), robotic process automation (RPA) and other AIbased solutions for several years.

The state of Ohio, for example, uses AI for chatbots on its state website, Ohio.gov, and for predicting fraud in unemployment insurance.<sup>1</sup> Utah established an AI Center of Excellence five years ago and plans to implement an AI-driven recommendation engine that uses individuals' demographics to make more personalized suggestions to them.<sup>2</sup>

Generative AI applications like ChatGPT, Bard and DALL-E caught many people by surprise in late 2022. They make AI accessible and easy to use for practically anyone, and they support a broad variety of use cases. Generative AI is likely to revolutionize content creation for everything from forms, policies and communications to workflow processes, case management and procurement. At the same time, it raises legitimate concerns about more advanced cyberattacks, copyright infringement, bias and data privacy. Moving into 2024, assess where AI (and AI-infused cloud services) can help meet near- and long-term goals and priorities. Train business staff on basic AI and ML concepts, skills and risks. Even though generative AI is not quite ready for government operations, get prepared. Train staff, establish guidelines and implement ways to monitor its use.

Cities like Boston, Seattle and San Jose have proactively published generative AI guidelines that address data privacy, ethical use, transparency and more. Use their guidelines as a starting point for your own jurisdiction.

Finally, consider budgeting for a cloud-based generative AI platform that integrates your organization's data sets into large language models without compromising privacy.

# Trend #2: Redefining Identity

In today's dispersed IT ecosystem, identity is the new security perimeter.

A Zero-Trust approach — based on the strategy of "never trust, always verify" — is still the de facto standard for protecting against a range of threats. However, your 2024 identity and access management (IAM) arsenal should also include tools to limit what cybercriminals can do if they manage to compromise a user's identity and breach your network.

Incorporate context-aware solutions that base access decisions on real-time data about the user, their device, their environment and their behavior. In addition, use privileged access management (PAM) tools. PAM applies principles of least privilege so authorized users can only access the resources needed to do their jobs. Identity ownership will be an important theme in 2024. Many industry leaders are promoting authentication standards that reduce reliance on passwords. Some vendors are developing their own identity standards, while others are championing decentralized identity, which is built on blockchains.

"Decentralization is a little more complex to implement than centralized identity, but it gives users more control over their identity and will likely make identity theft more difficult," says CDG Senior Fellow Dave Fletcher.

Ultimately, governments need to strengthen utilization of both centralized and decentralized identity. "Certain cases require control and authority over a central repository of identities. At the same time, decentralized identity tokens such as driver's licenses and birth certificates can be used beyond interactions with the state — for example, to obtain a passport or prove a person is old enough to consume alcohol," says Fletcher.

At least 13 states, including Colorado, Utah, Oklahoma, Georgia and Maryland, have rolled out mobile driver's licenses (mDLs), and at least 16 more have announced plans to do so or pilot projects.<sup>3</sup> "Everyone wants to talk about AI and other innovations, but if your house isn't in order, you're not going to get any benefit from the more exciting things."

Dustin Haisler, Chief Innovation Officer, e.Republic

An mDL will ultimately allow residents to have a single identity across all state services.

As the ownership conversation unfolds, questions about interoperability, legal requirements and identity acceptance across jurisdictions will surface. In the meantime, become familiar with the concepts and get involved with consortiums such as the Decentralized Identity Foundation.

# Trend #3: Unsexy Tech

To embrace the innovations of the future, agencies have to get their ducks in a row. That means focusing on under-the-hood details such as data management.

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# AI Terms, Defined

## Artificial intelligence (AI)

A branch of computer science concerned with the creation of systems that can reason, learn and act autonomously to perform tasks.

#### **Generative AI** Type of machine

learning that uses the data and patterns it is trained on to generate new content such as text, images, video and code.

# Large language model (LLM)

An Al algorithm that uses machine learning and massive volumes of data to understand, generate and predict content. LLMs are a type of generative Al that have been designed to generate text-based content.

# Machine learning (ML)

A subset of AI that focuses on the development of algorithms that can learn from historical data to predict outcomes. ML allows models to learn on their own, without requiring someone to program each step.

### Robotic process automation (RPA)

A type of software that automates simple rules-based (i.e., "if/ then") tasks. When integrated with AI, it can automate more complex tasks. not going to get any benefit from the more exciting things," says Dustin Haisler, chief innovation officer for e.Republic. "You need to do the basics first and consider the order of operations."

#### Start with data governance and management.

Develop a comprehensive data inventory and identify gaps in data. Correct errors, inconsistencies and redundancies. Standardize the way you collect, name and store data to make it easier to share and integrate.

Arizona, Pennsylvania and Minnesota adopted the Global Justice XML Data Model to help standardize their data for easier data sharing.<sup>4</sup>

"Organizations should have a way to measure data quality with metrics — for example, error ratios — and then monitor the data quality over time to see where they're improving or need to improve," says Fletcher.

**Simplify data integration.** Use tools that provide a unified view of data and allow you to easily ingest, consolidate and transform structured and unstructured data for use. Have mechanisms for keeping data up-to-date and integrated across the enterprise.

**Establish a data management platform.** You'll be able to manage data more effectively, including tasks like data storage, data processing and data analytics.

# Trend #4: Resilience as the Goal

It's time to rethink cybersecurity goals and strategies. Increasingly, managing and mitigating inevitable breaches is more practical than trying to prevent all attacks.

"It's impossible to secure everything 100%," Haisler says. "Cybersecurity has to pivot from 'We're going to build our wall even bigger this year' to 'Someone's coming over the wall, so we need to mitigate risk when they do."

A multifaceted approach that includes resilience enables you to adapt to, recover from and minimize the impact of an attack. It's essential for data protection, regulatory compliance, service and business continuity and controlling costs related to breaches and attacks.

#### Understand your entire cybersecurity ecosystem.

Have single-pane visibility into on-premises and cloud environments, as well as Internet of Things (IoT) devices and other endpoints. Investigate your partners' solutions and supply chains.

**Identify what's needed to maintain regulatory compliance.** Depending on your organization's function, this could include laws related to data availability, privacy, protection and sharing.

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Dave Fletcher, Senior Fellow, Center for Digital Government

#### Implement and test a business continuity plan.

Rank data and other resources according to their criticality and how soon you need them back in operation.

"This way, you'll know how to prioritize if you have a multifaceted attack. You don't want to wait until an attack happens to do that," says Fletcher.

Deploy privileged access management (PAM).

Along with other Zero Trust Network Access (ZTNA) controls, PAM helps prevent access to data and systems even if someone uses a compromised identity to breach your perimeter.

# Trend #5: Putting the "You" in UX

"In the user experience community, we're seeing a shift in focus from usability to desirability, where people actually enjoy engaging with their government," says Fletcher.

Desirability focuses on the entire user experience within a single session and across interactions over time. It's important for both internal employee experiences and constituent experiences.

The simpler the experience, the better. Set the following goals for 2024.

**Self-service.** Enable users to do as much as they can on their own. Give business users autonomy to pull data and conduct analytics without involving IT. Provide call center agents with real-time chatbot help so they don't have to escalate service tickets. Allow constituents to apply for unemployment insurance, pay taxes or get information on whatever channel they want.

**One-stop shops.** Digitize as many services as possible. Integrate systems and data so users can initiate and complete transactions, applications and other business in as few steps as possible. Be sure users can submit documents, make payments and obtain answers without having to log in elsewhere.

**Human-centered design.** Base information architecture on the way a user would intuitively seek or use information and services — not on your organizational structure. Use clear language and avoid jargon. Bring services to users: For example, let shoppers obtain a fishing license from the government as they're buying fishing equipment from a retailer.

"The government experience can't just be putting things online and making them mobile friendly," says Haisler. "It's got to move experiences closer to where people are and what they're doing as opposed to expecting them to come to your website."

# **Embracing the Future**

There's never been a better time to embrace emerging technologies. Most states and local government are currently on stable financial footing. As-a-service models and other cloud technologies reduce the cost and complexity of deploying and managing solutions. A new generation of workers is eager for modern technologies. And constituents of almost all ages, incomes and abilities have adopted devices and connectivity solutions that enable them to easily use digital services.

Prepare now rather than be disrupted later. Collaborate with other government agencies, industry partners and non-governmental organizations. Create a foundation for experimentation and innovation. Measure progress frequently and adapt as needed. Finally, commit to eliminating technical debt so you can free up personnel and money to meet your goals for the future.

<sup>1</sup> https://papers.govtech.com/10-Big-Ideas-from-States-in-Data-AI-Cybersecurity-and-More-142072.html

<sup>2</sup> CDG interview with former Utah CIO and CDG Senior Fellow Dave Fletcher. November 2023.

<sup>3</sup> https://idscan.net/mobile-drivers-licenses-mdl-state-adoption/

<sup>4</sup> https://bja.ojp.gov/sites/g/files/xyckuh186/files/media/document/global\_justice\_xml\_data\_model\_overview.pdf



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