

Make Your Data Future-Ready

Agencies must improve data management to meet the changing demands of cybersecurity, analytics and artificial intelligence. But how do you do that without putting the brakes on innovation? Can updated governance help agencies make better, faster and more informed decisions and operate more efficiently?

During a recent [GovLoop virtual event](#), “Future-Proofing Your Data Without Sacrificing Innovation,” three government data gurus shared their insights on exactly that. Here are highlights from their discussion.

Prepare Your Data

Agencies began collecting data long before today’s requirements emerged. Five years ago, few people had even heard of generative AI, let alone anticipated its data quality needs. Governments now face the task of bringing their existing datasets into compliance with new standards. Here are some ways to do that.

Modernize data governance. Set and enforce policies about access, usability, integrity, retention, compliance and security. The better your data is, the better results you’ll get from AI and analytics.

Break down silos and promote interoperability. Centralize and standardize data and analytic tools. “We’re going to have to provide a cross-functional vocabulary to promote AI readiness, breaking down some of those barriers and having automated pipelines and functional interoperability,” said Jennifer Franks, from GAO.

Consolidate IT infrastructure. Bring the underlying systems together to facilitate uniform data management and operational efficiencies. Often this will mean a greater reliance on the cloud, especially when operations might be widely dispersed.

Speakers

Jennifer Franks, Director of Information Technology and Cybersecurity at the Government Accountability Office

Ryan Palmer, Senior Advisor for the Federal Risk and Authorization Management Program at the U.S. General Services Administration

Greg Carl, Principal Technologist for U.S. Federal at Pure Storage

Don’t Forget Security and Privacy

As agencies centralize data and expand their use of GenAI, protecting privacy becomes more critical. As useful as AI can be, it can expose private, confidential and inappropriate information. And consolidated systems can make a bigger cyber target. To respond to these risks, agencies must:

Secure foundational systems. For example, focus on strong zero-trust architecture. Also, limit access to each dataset to people and applications that really need it. And restrict public-facing chatbots to data relevant to their purpose.

Make use of privacy-enhancing technologies. Tag your data for privacy, sensitivity and other issues. AI can help with that and with enhancing cybersecurity. “It can leverage data insights to give me a better threat response or to give me more proactive choices,” Pure Storage’s Greg Carl said.

Choose security options that are scalable and sustainable. Don’t sacrifice core cyber competencies for speed.



Encourage Your Workforce

As important as data and infrastructure preparation are, innovation isn't possible without people. "Data governance goes hand in hand with preparing the staff ... to start using some of this new tooling, working to ensure that the staff understand how these tools work, the limitations of any tools and how they're being used," said Ryan Palmer at GSA.

Promote experimentation. Help employees become familiar with AI and analytics tools. Give them access to authorized chatbots and other low-lift implementations. Formal and informal learning opportunities can help them gain skills.

Talk about it. Provide channels for staff to share successful use cases and identify which models are suited for specific tasks. Be open to insights from operational staff, not just data scientists.

Aim for augmentation, not replacement. As agencies gain experience with AI, a prediction is proving true: It's taking over repetitive tasks and leaving workers with more time for higher-level work.

Accept the Challenges

The biggest barrier to innovation is that agencies can't risk a disruption in services or systems — but that doesn't mean they have to abandon innovation. Instead, strengthen your systems to support it.

Preserve the essentials. Protect core infrastructure, business operations and critical missions. Don't jeopardize security.

Start with a solid structure. Get your data and systems in order before adding the bells and whistles. "A lot of folks are trying to remodel their house while the foundation's still being built. Well, first you need to finish the rest of your house," Carl said.

Think strategy, not tactics. AI and new technologies require new ways of approaching your operations, not just plugging them into existing processes. The eventual goal is to rebuild workflows with AI as the foundation.

Don't Be Daunted

Preparing data and systems for new technologies may seem like a slog, but agencies can see benefits from the outset. Improved data governance prunes outdated and inaccurate information. Consolidating data and systems reduces duplication of effort. And when you add AI thoughtfully, it can speed routine processes and enable analytics that make programs more effective. Here are some final thoughts to keep in mind.

It's worth the effort. No question, change can be disruptive. But the results will help agencies do more with less. "Don't expect an easy button," said Carl. "But at the end of the day, once you adopt this strategically, from a process perspective, everything else falls in place."

It supports the mission. Data-driven decision-making, cross-agency collaboration and improved efficiency all help employees better serve the public. "We're building out the governance around the data so it can be used more effectively to empower people delivering on any agency's mission," Palmer said.

It's on the way, ready or not. Be ready. AI is no longer optional; it's become integral to everyday life and work, and data is its fuel. Federal and state policies increasingly link the technology to demands for increased efficiency. The public wants quick, accurate responses that AI can help governments provide. In the end, said Franks, "you have to keep up before you're left behind."



[To learn more, watch the full session on demand.](#)