

# How to Elevate Mission Outcomes With AI-Ready Data Strategies

In federal agencies, data fuels every mission, and it's at the heart of rapidly expanding efforts to put artificial intelligence to work. But bringing AI initiatives to life takes time and planning, and it's complicated by the challenges of legacy tech, compliance mandates and the need to keep critical systems up and running.

At a recent [GovLoop event](#), an industry expert, Pure Storage's Principal Technologist for U.S. Federal, Greg Carl, talked about how agencies can maximize the value of AI applications in light of data's exponential growth. Below are insights from the discussion.

## Unprecedented Data Growth

AI feeds on data, and there's more of it than ever.

"The sources of data have grown exponentially, from sensors to real-time tactical data [and] healthcare data," Carl said. That's having an impact: By 2028, the world is expected to be generating some 394 zettabytes annually, he noted.

At the same time, the nature of that data is changing.

"Datasets have evolved from traditional databases to more open datasets, unstructured datasets," he said. "And a lot of the time, those [datasets] are siloed off."

Many agencies continue to handle data in the same old way, by merely adding "boxes in the data center," Carl said. But the exponential growth of data is fast outstripping the effectiveness of that rather limited approach. In order to drive effective AI adoption, agencies must overcome such infrastructure challenges.

If they can get out ahead of the problem, they can take advantage of significant opportunities. "When we talk about AI, now we can do stuff with the data. Now it gets interesting," Carl said.

## Operational Change, Not Just New Technology

In order to reimagine how data can help meet mission in the AI era, agencies must adjust not only the technology stack, but the ways in which they operate. Organizations cannot realize AI's potential "unless the behaviors of managing the data change, unless the strategy around that changes," Carl said. "When agencies choose to operate differently, everything else kind of falls in line."

In practice, that means taking a hard look at operational needs. "Do you want to be able to iterate more quickly?" he said. If that's the priority, "you need to have technology that is transparent for your data."

Maybe that means going to the cloud — but a cloud migration can be complicated by concerns around security, especially when it involves classified material. In such cases, the data may need to stay on premises in a data center, but it still must be handled differently than in the past.

When an agency takes an updated approach, workers are more effective. "They're not spending nights and weekends doing maintenance on stuff they don't have to do anymore," Carl said. They are freed up to focus on forward-looking projects and initiatives.



## Eliminating Technical Debt

With today's high-volume data demands, technologists dealing with storage often are running just to keep up. Funding is lean, yet agencies are asked to deliver more capacity. But as datasets swell from terabytes to petabytes, agencies can be more efficient by eliminating their technical debt and applying data to emerging AI-driven use cases.

For example, the Pure Storage platform can transform an agency's existing storage footprint into a cloud-like platform, without replacing any hardware. Carl described that approach as in-place innovation. The platform delivers up to 80 times the data capacity using existing resources, with no required forklift replacement or costly, complex data migrations. Without moving a single block of storage, "we're at 80 times capacity today in 2025, all in a single box," Carl said.

"We're no longer taking the painful time to migrate the data," he said. The data remains in place, fully functional, "and we can keep it available for value-add back to the mission."

## The Right Partner

With an effective technology partner, agencies have an easier time aligning their data storage with their AI ambitions. And, Carl said, "you can take advantage of some very simple things, getting free hardware and controllers, maintaining descriptions, getting every new innovation for free."

For example, Evergreen//One is Pure Storage's storage-as-a-service solution that provides consumption-based storage without the complexity of traditional infrastructure management. Another Pure Storage offering, Evergreen//Forever, provides traditional storage, along with a subscription to continuous software and hardware upgrades.

The right data storage approach empowers agencies, Carl said, "to modernize, to right-size and become very efficient in their data landscape, but also have available to them the technology innovations they need for the next thing that comes up."

**To learn more, watch the full session on demand.**

