AI Adoption at Federal Agencies Requires a Strategic Approach to Data, Workforce

Thundercat Technology and NetApp go over key strategies for federal agencies looking to adopt AI.

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The White House wants federal agencies to “embrace” artificial intelligence in government services according to the February 2020 update to its American Artificial Intelligence Initiative, and many agencies are strategizing the best ways for adopting the technology in their processes.

For AI to make the most impact in the federal government, government agencies should “start with a good problem where AI can make a significant difference,” said NetApp Chief Technology Officer Kirk Kern.
“Find a problem that cannot be solved by traditional analytics or model-based simulations,” Kern said in a video interview. “What we're seeing is there's a tremendous increase in processing power in these GPU architectures, and that increase in processing power gives us a tremendous amount of capability to advance the science around AI.”

Some examples of problems AI can solve for the government are workforce optimization and modernization, improving data research capabilities, preventing fraud and waste, and forecasting federal supply chain shortages.

The Department of Veterans Affairs recently launched an AI program and is exploring ways to leverage their AI data sets for a variety of use cases.

“I think you'd be hard pressed to find an area where AI and machine learning is not making an impact [in government],” said Kurt Steege, CTO for Thundercat Technology.

When most people hear the phrase “artificial intelligence,” they think of “sci-fi warnings and machines taking over the world and losing jobs,” Steege said. But that's not what AI is about. Many AI-based tools focus on simplifying and optimizing IT processes and then incorporate human interaction to run them.

Training an AI-ready workforce is another focus of the White House’s 2020 update.

“I think there's a huge opportunity for institutions and kids to learn the skill sets needed to run these types of environments at scale,” Steege said.

The White House notes the federal government needs to invest in more research and development for AI so that federal agencies and the private sector can ramp up AI adoption. Kern said the federal government could face challenges when transitioning operations to AI applications and encounter “unpredictable costs.”

The federal government’s cloud strategy offers useful guidance for procurement and security when transitioning operations to the cloud, Kern noted, adding that government agencies should keep in mind that AI will have a profound impact on cloud-based operations.
“AI will have a larger impact on the modernization of IT and cloud consumption,” he said. “As you move quickly from project to program, it's going to require policy changes so AI systems can operate at the right level in the right systems. It's going to require multiple changes to make AI a common entity operating in government agencies.”

At an AI summit last year, Federal CIO Suzette Kent emphasized the importance of data to AI success, and said investing in data collection would be the biggest hurdle for federal agencies.

To accelerate AI adoption, federal agencies will need to allow access to copious amounts of data and be willing to work with open-source software to customize AI solutions for their individual needs, Steege said.

Thundercat and NetApp have partnered to help federal agencies get started with AI adoption. Some of the AI solutions they’re working on are serverless computing, scientific data processing and image recognition.

“Thundercat has partnered with NetApp to develop replicated storage and AI solutions for agencies, and is talking with folks right now about the storage components for large HPC and AI solutions out there,” said Steege.