Helping Government Jump Start AI

The Federal government took important steps forward with artificial intelligence (AI) technology policy in 2019 with the AI Executive Order, the DoD AI strategy, and the OPEN Government Act. With that said, however, weaving AI into our Federal DNA means integrating with (often aging) agency infrastructure and rethinking how we solve problems and deliver services.

MeriTalk connected with Rob Davies, Executive Vice President of Operations at ViON, and Anthony Robbins, Vice President, North America Public Sector at NVIDIA, to discuss what's needed as agencies work to operationalize and jump start AI.

MeriTalk: What's your background, and what drew you to AI in government?

Rob Davies, Executive Vice President of Operations, ViON

Rob Davies: I've supported Federal IT for 25 years. In that time, AI has grown from an aspirational idea to a vital aspect of IT transformation that is improving security, enabling modern and responsive citizen services, and helping agencies reduce costs.

Anthony Robbins: I started my career at Silicon Graphics 25 years ago working with the processing platform GPU critical for AI. I joined NVIDIA two years ago because I saw the opportunity for AI to serve the government's mission.

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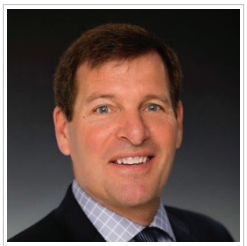
> ***–Rob Davies, EVP of Operations, ViON***

MeriTalk: Where do you see AI today in the Federal space? And, where do you think it's going in the next three to five years?



Anthony Robbins, Vice President, North America Public Sector, NVIDIA

AR: AI will touch every agency and there will be no exceptions. There is a lot of momentum. In February, the President signed the AI Executive Order. DoD CIO Dana Deasy says AI is one of his top five priorities, and there are reports that suggest the Department of Defense has 600 AI projects underway today. DARPA is focused on AI. Across government, we're moving faster than almost anyone forecasted.

RD: My grandfather taught me to never confuse the urgent for the important. But, right now, AI in government is both. Today, many infrastructures have been force-fit – and mis-fit – into the AI space. However, with the proper tools and infrastructure improvements, AI truly does inspire the art of the possible. The use cases in the Federal government are fascinating. Our biggest problems will be solved with AI – we can improve our cyber defenses; reduce fraud, waste, and abuse; and improve disaster relief delivery, as a few examples. There are even companies exploring the potential to fight wildfires with AI, by predicting where fires are most likely to start.

MeriTalk: AI is a vast and complex concept, especially when many agencies are handicapped by legacy infrastructure. Can you break down what agencies need to move on beyond the exploratory phase?

RD: You can't talk about AI without talking about the underlying infrastructure. We hear a lot about the edge when we talk about AI, but that can be misleading. We need to have data strategies around data centers, the cloud, and the edge. It's not one of those areas, it's all of those areas.

AR: Agreed – agencies need to pick a solid use case and get started now. On a technical level, AI training and inference consumes massive compute power and memory, even for basic operations. Agencies will need purpose-built, AI-capable infrastructures that enable data architects and scientists to access massively parallel, all-flash performance, slashing time-to-insight.

MeriTalk: And what about beyond the technology?

RD: As you get started, you'll inevitably need to build a resourcing model to address workforce availability. Pick partners you can trust that can act as a resource, not just on day one, but five or even ten years from now when you're continuing to scale the initial foundation. You don't need all of the expertise in government; leverage your partners and put your resources to more effective use by dedicating your government personnel to inherently manage government functions. From there, fail – or succeed – fast, and keep changing until you find what works. We can't afford to come in second in this race. We have the capability to help agencies jump start their AI initiatives with AIaaS – to test and scale over time, and learn and prove theories with better outcome visibility.

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AR: Very true. This isn't a technology challenge. This is a transformation challenge. That's harder than the technology aspect alone. I like to think of AI as a giant team sport. The Federal government can't make progress at the speed and scale we need on their own. Agencies need to rely on partners, like ViON, and platforms, like NVIDIA. They need to build relationships with universities, systems integrators, and the entire innovation community. We all need to come together to play the best game of ball we've ever played in support of the biggest technology transformation we've ever known.

We've got to hold ourselves accountable for doing our best work now. I've grown tired of the studies and the conversation. It's time for us to move on the greatest transformation of our careers.

MeriTalk: Once agencies have developed a strong proof of concept, how do you see them jump starting AI programs and navigating through the procurement process to operationalize more quickly?

AR: It's all about the data. Luckily, our government is the largest producer of data in the world and we need that foundation to feed any AI algorithm. Agencies have access to a lot of data with ease of access and data that is formatted for use which is essential for AI. As part of a strategic AI program, a data assessment is necessary. Agencies without any of those three elements need to sort it out. Fast.

One thing I'd like to see is more non-critical data available outside of the government. Agencies may not have the technological capabilities or workforce available today, but universities, startups, and contractors can do good work with that data on behalf of the government. Partnerships are key.

RD: Yes, data is key to ensuring the capability is sustainable. The other half of the equation is the funding. You will need both to sustain the program in production and operation. I've seen many agencies invest in very successful, non-sustainable programs. We recommend bringing all the stakeholders in early in the development process to confirm the problems, costs, etc. Incorporate that feedback on the front-end so you can avoid wasting resources or exposing your agency to risk.

In the case of AI, agencies can quickly stand up an AI environment in an as-a-Service model and scale as needed to build out the platform. Now, agency IT leaders can get the technology, test it, determine if it's sustainable, and get rid of it if it isn't.

There is so much potential, real and ready to implement today. We all need to stay focused on how we can work together to solve problems, share what we learn, and ultimately transform government. I think we're all excited for what's ahead.