



Federal Agencies Turn to Trusted Cloud Advisors to Accelerate the Mission

Federal IT modernization has been a hot topic for years, but the demands of today's new working world are pushing the pace even further. During the COVID-19 pandemic, agencies rapidly scaled technology efforts in order to adjust and continue the mission. And there seems to be consensus among the major Federal agencies on what has made this possible. Cloud.

The cloud is enabling Federal agencies to accelerate innovation, scalability, and IT modernization efforts. From improving agencies interacting with constituents, enhancing internal applications, and aiding research collaboration, the breadth of government use cases on Amazon Web Services (AWS) is remarkable. Don't just take our word for it – see how several organizations are using cloud.

Innovation No Longer Waiting in the Wings at U.S. Air Force

Cloud allows Federal organizations to move quickly to solve problems, and that need for agility is perhaps nowhere more relevant than in our nation's military and service branches. But in the past, technology would often struggle to keep pace with the demand for innovation. "We've had solutions that have come to us over time that take years to get to our airmen. We need to speed up that cycle," said Colonel

Doug Hayes, Chief Information Officer, Intelligence Surveillance & Reconnaissance, U.S. Air Force. "We need to be able to get the capability that our airmen need to improve our mission — to perform intelligence, surveillance, and reconnaissance — at the speed of need and relevance."

The Air Force is providing that capability through the development of cutting-edge applications to support the warfighter. But those applications must remain secure throughout the development process. The Air Force has turned to DevSecOps to ensure security from the outset.

"We've been able to develop applications at the unclassified level and move those rapidly through cross domains, up to the Secret, as well as Top Secret. And these apps are secure, they were built in a secure environment, and we have no problem accrediting them and allowing them to operate," Hayes said.

Agencies leveraging AWS infrastructure for their applications benefit from superior visibility and control of data, inherited security controls, and compliant environments. AWS supports more security standards and certifications than any other cloud offering, which has allowed for more experimentation and successful innovation.

Collaboration, Cloud, and Cures at the National Institutes of Health (NIH)

Innovation is in the National Institutes of Health's DNA, and NIH has turned to the cloud to accelerate cures, treatments for disease, and improve the quality of life for countless citizens. NIH leverages AWS to make data consistent and accessible, making it easier for the right people to get the right data throughout dispersed research environments.

"It's changing the way we do science," said Andrea Norris, Director, CIT and Chief Information Officer, NIH.

Again, security concerns remain top of mind for government organizations, but Norris highlighted the cloud's ability to create openness while maintaining robust security. "We're leveraging the benefit of cloud technologies to make sure that data is appropriately protected and controlled. We're doing a lot with consistent Identity and Access Management across the research, the national research environment, so that we can make it consistent but easier for the right people to get to the right data."

Examples of innovation in health research abound, but the associated rise in data volume is presenting challenges to these organizations – another reason they are increasingly turning to cloud.

"Today, it costs less than \$1,000 to sequence someone's human genome. That's three million times less than it was 15-20 years ago," Norris said. "How do we deal with that data tsunami, and how do we glean intelligence and knowledge out of it in ways that we could not do before?" Moving datasets into the cloud is revolutionizing the way researchers and scientists operate and share data, and in today's climate amid the need to develop vaccines and cures, that could make all the difference.

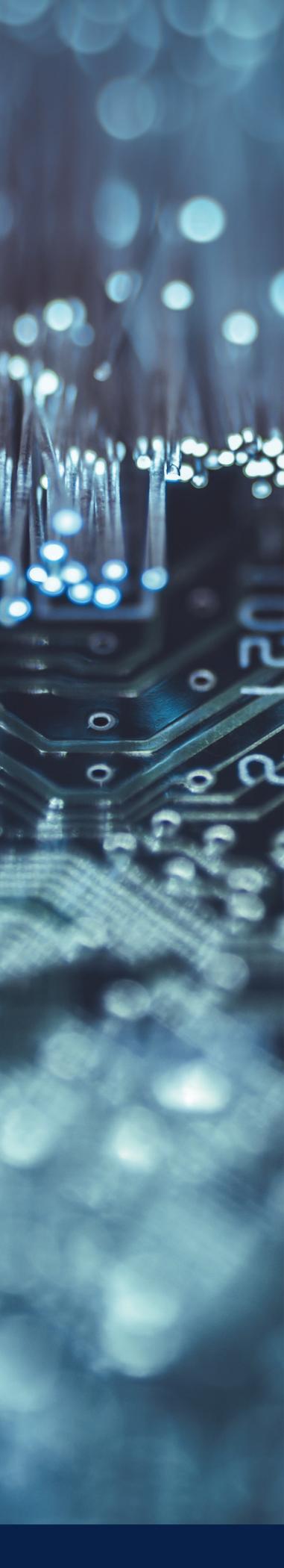
"We've moved these datasets into the cloud, got them better structured, more accessible, and more interoperable—so that we can accelerate that science," Norris said.

Space and the Human Race: NASA and Census' Unique Research Needs

Beyond NIH and healthcare organizations, AWS is providing rocket fuel for a whole host of research needs across the Federal enterprise. The National Aeronautics and Space Administration (NASA) is leveraging AWS to process, store, and analyze vast amounts of data, and its moonshot research efforts are being realized through collaborative effort.

"I think everybody could imagine the need for science users and the need for NASA scientists to collaborate with external partners," said Joseph Foster, Cloud Computing Program Manager at the NASA Goddard Space Flight Center.





Foster noted the benefits of containers, big data processing, visualization, and more as technologies fueling external partner collaboration with conglomerate researchers across the world.

A more terrestrial research example is the United States Census Bureau, which deployed AWS cloud to help interact with constituents better, determine citizen needs more effectively, and improve service delivery. The Census Bureau was looking for a solution to reduce respondent burden and handle the terabytes of citizen data collected. AWS provided Census with the platform and infrastructure that could handle the vast amount of data being generated from its surveys, and likewise reduce the amount of outreach Census needed to compile the necessary information.

Hundreds of millions of U.S. citizens just completed the decennial census in 2020, and know what it's like to have the Census Bureau knocking on their doors. Utilizing AWS allowed Census to break down the data silos and reduce respondent fatigue, improving its relationship with its constituents while compiling data that will improve citizen services for years to come.

Cloud Meets Citizen Service at The Department of Veterans Affairs

Across all these examples, that is perhaps the unifying factor – how technology is allowing public servants to improve the lives of citizens. At the Department of Veterans Affairs (VA), the ultimate mission is the care and service of those who have borne the battle. And so the VA has exciting plans to offer veterans more individualized support at scale, bringing care closer to their fingertips, and easier to access.

VA has already improved constituent services and application performance after deploying the AWS cloud. “We’re approaching 3.5 petabytes already into AWS...We’re trying things like using artificial intelligence (AI) for chatbots on our IT service desk, and we’re considering using things like machine learning (ML) to help with medical diagnosis by interpreting images,” said David Catanoso, Director of Enterprise Cloud Solutions Office, VA.

“The cloud has helped the VA innovate on behalf of its stakeholders and improve cost-efficiency for our applications. Beyond that, we’re building an enterprise cloud to provide a common landing area, making it easier to migrate applications, achieve cost savings, and unleash innovation,” Catanoso also noted.

Importance of Trusted Partnerships in the Cloud

With the myriad benefits – and potential new pathways – for agencies in the cloud, navigating the complexity of potential changes requires a trusted partner. Like clouds blanketing the sky, agencies must understand that cloud computing is still a blanket term. Drilling down on your agency’s specific needs goes beyond just selecting

infrastructure. Maximizing the benefits that cloud can provide your agency, your customers, and your constituents, requires deep knowledge of what workloads belong in the cloud, and what services will best advance your mission.

Since 2011, DLT and Amazon Web Services (AWS), have partnered together to provide cloud solutions to the Public Sector, and DLT is the organization that Federal agencies have constantly turned to in order to navigate the transition. DLT's AWS-certified technical experts provide architectural and technical direction in the selection of appropriate cloud solutions, as well as dedicated professional services for installation, configuration, training, and ongoing support.

By leveraging the AWS Cloud, agencies can reduce costs, improve service delivery, and increase productivity across the entire organization. By leveraging DLT, agencies know they're partnering with a trusted leader, with more than 15 cloud contract vehicles to accelerate your procurement path.

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