Pandemic fast-tracks plans for future-ready government

IT leaders across the public sector explain what the COVID-19 pandemic taught them in terms of building agility and advanced capabilities to better serve the mission.

FedScoop Report

here's been a lot of learning during COVID- 19 across the public sector, and a lot of it has come down to organizations quantifying what they didn't have when the crisis struck.

Keeping social service programs running and agencies operable during the shutdown at a massive scale has pushed leaders to find ways to phase out legacy systems faster and implement advanced technology tools to help deliver services more effectively.

"While government modernization efforts have been going on for years, sometimes it takes a crisis to really move it forward with velocity," said Lauren Knausenberger, deputy CIO of the U.S. Air Force.

Knausenberger explained how many government leaders were forced into a situation where they were operating outside the confines of their office and existing infrastructure. Everyone can see the frustration of not having modern working tools and the all see the need for a new way of working.

This event definitely showed organizations what they could and could not do, and many found problems

in their scaling because their vendor contracts did not include the ability to scale almost double or triple to what they had been doing, added Jamie Holcombe, CIO for the U.S. Patent and Trade Office.

"If agencies can modernize and also get their core foundation ahead, that is the best of both worlds," says Holcombe.

Knausenberger, Holcombe and other government leaders shared how the pandemic accelerated plans to implement cloud- and AI-enabled tools in a series of video interviews on <u>building a future-</u> <u>ready government</u>, produced by FedScoop and underwritten by Google Cloud.

Responding to pandemic

If the COVID-19 pandemic revealed anything among federal and state government officials, it was the need for speed and agility.

Brig. Gen. Matt Easley, director of artificial intelligence for the Army Futures Command, recalled how civilian authorities suddenly began requesting support for temporary hospital facilities. In order to predict where the next outbreak might be, his team looked for ways to speed up the deployment of artificial intelligence capabilities.

"With COVID-19, there was an immediate need for army field hospitals and those logistics units to support them — to understand what the situational awareness was, and where the future threat would be to get supplies, personnel and equipment to all those facilities [that needed] support," he explained.

Similarly, officials for the City of Los Angeles needed to get out ahead of citizens' sudden demand for information and testing. Los Angeles CIO Ted Ross retold the story of how his IT staff was tasked to put together an app quickly to make COVID testing





information available to 4 million Angelenos. And the government needed it over a weekend, in time for the mayor's press release.

"As you can imagine, agility is an extremely important conversation. I can't say give us six weeks and we'll be ready to start testing people," expressed Ross. He says that the pandemic required them to put more focus on building out platforms to improve customer and case management in services.

Scalable environments

Nationwide, communities are looking to their government leaders to bring provide essential services during the crisis. In the first months, as the pandemic's impact to businesses and jobs unemployment rose sharply, agency IT teams scrambled to scale their infrastructure to support both citizen needs and to support a remote workforce.

The rapid growth of cloud computing in recent years provided many state and federal agencies a critical safety valve during the crises to scale their operations. But it also provided a window for agencies into the potential of agile, scalable IT



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Guy Cavallo (formerly) SBA

operations and its ability to redefine the future of government.

Like many other states, the State of Illinois was not prepared operationally for the crises, nor from a network perspective, acknowledged Jennifer Ricker, acting assistant secretary at the state's Department of Innovation and Technology.

The crisis fast-forwarded the state's plans to implement virtual machines to support a wider set of options to do remote work. When Illinois sent its employees home, they didn't have a huge number of laptops in stock, but by implementing virtual desktop technology, employees were quickly able to access their office desktops remotely.

The crises also shifted the way the state is building scalability into its IT operations, she explained.

"That played out with a lot of our websites, and some of our new systems, that were hit heavily throughout the pandemic which were not built to scale to the level of volume that we were seeing," she explained. "I think most of our [crisis] planning has really been around the premise that it would be a short-term event."

For agencies like USPTO, that were already convinced of the need for a scalable environment,

the pandemic served as a reminder of the importance of having detailed scalability provisions in their cloud contracts, according to Holcombe. USPTO already had more than 8,000 staffers telecommuting every day. But the agency was able to quickly add another 6,000-7,000 through infrastructure agreements.

The flexibility of the cloud was equally apparent to Guy Cavallo, deputy CIO at the time for the Small Business Administration, and now principal CIO at the Office of Personnel Management. SBA was put in charge of disbursing billions of dollars to businesses impacted by the shutdown.

"[The crisis] absolutely validated the reason why the cloud is a great customer service, because we are able to immediately expand as our user base increases," said Cavallo. "For example, when the president tweeted out the sba.gov web address, we had an 8,000 percent increase [in traffic] within one minute. If that had been an on-premise application, which it was a year earlier, it would have collapsed."

Enabling a remote workforce

Public sector leaders also tapped a variety of cloud-enabled applications and networking capabilities to quickly to mobilize remote workers.

"Because we migrated to a unified communication platform, we could have conversations, meetings and collaborate on documents, and the like," said Roy Varghese, CIO for the National Marine Fisheries Service, a division of the National Oceanic and Atmospheric Administration. Ongoing efforts to implement cloud computing helped the Varghese transition nearly 4,000 employees to work from home almost overnight.

For other organizations, like the Air Force, security concerns were a big impediment to meet remote work needs. Knausenberger says the service can't



perform all its meetings on a virtual platform due to the sensitive nature of the content, and her team had to help expand the number of VPN connections from 10,000 to over 250,000 concurrently.

The investment in collaboration tools is not lost on agency leaders, and some are foreseeing a permanent change to the workforce.

Cavallo shared how most everyone in the SBA can complete 95 percent of their work while teleworking. The office shutdowns also opened the door to hiring skilled individuals outside of the Washington, D.C., area to access broader talent pools.

Chatbots leverage response

Though much of government IT work during the pandemic has been focused on continuity of

operations, leaders are also seeing opportunities to modernize as a result of the crisis. Both demands for online services and remote work capabilities are helping IT leaders get buy-in for projects that may have otherwise fallen lower on the agency budget list.

Ricker shared how in the weeks following the state shutdown, Illinois quickly worked on chatbots and virtual agents for the state's unemployment agency to respond to many of the basic questions that flooded the agency during the first several weeks of the shutdown. Now these capabilities are being and implemented across other citizen service websites.

Local government is prioritizing streamlined bureaucratic processes wherever possible to limit physical touches in government interactions.

The City of Los Angeles implemented CHIP, or City Hall Internet Personality — a conversational Al chatbot — that shows up on the city's website, and some of its applications to answer questions concerning utility payments, traffic tickets or other citizen-facing services.

If there was a common message from all the government leaders interviewed in the Future-Ready Government video series, it was that the ongoing crisis will continue to push organizations to improve digital services faster than many had expected or hoped.

This report was produced by FedScoop | StateScoop and underwritten by Google Cloud.

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